

**UNITED STATES**  
**SECURITIES AND EXCHANGE COMMISSION**  
Washington, D.C. 20549  
**FORM 10-K**

(Mark One)

☒ **ANNUAL REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934**

For the fiscal year ended December 31, 2021

OR

☐ **TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934**

For the transition period from \_\_\_\_\_ to \_\_\_\_\_

Commission File Number: 001-34756

**Tesla, Inc.**

(Exact name of registrant as specified in its charter)

**Delaware**  
(State or other jurisdiction of  
incorporation or organization)

**91-2197729**  
(I.R.S. Employer  
Identification No.)

**13101 Tesla Road**  
**Austin, Texas**  
(Address of principal executive offices)

**78725**  
(Zip Code)

**(512) 516-8177**

(Registrant's telephone number, including area code)

**Securities registered pursuant to Section 12(b) of the Act:**

Title of each class	Trading Symbol(s)	Name of each exchange on which registered
Common stock	TSLA	The Nasdaq Global Select Market

**Securities registered pursuant to Section 12(g) of the Act:**  
**None**

Indicate by check mark whether the registrant is a well-known seasoned issuer, as defined in Rule 405 of the Securities Act. Yes ☒ No ☐

Indicate by check mark if the registrant is not required to file reports pursuant to Section 13 or 15(d) of the Act. Yes ☐ No ☒

Indicate by check mark whether the registrant (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 ("Exchange Act") during the preceding 12 months (or for such shorter period that the registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days. Yes ☒ No ☐

Indicate by check mark whether the registrant has submitted electronically every Interactive Data File required to be submitted pursuant to Rule 405 of Regulation S-T (§232.405 of this chapter) during the preceding 12 months (or for such shorter period that the registrant was required to submit such files). Yes ☒ No ☐

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, a smaller reporting company, or an emerging growth company. See the definitions of "large accelerated filer," "accelerated filer," "smaller reporting company" and "emerging growth company" in Rule 12b-2 of the Exchange Act:

Large accelerated filer ☒

Accelerated filer ☐

Non-accelerated filer ☐

Smaller reporting company ☐

Emerging growth company ☐

If an emerging growth company, indicate by check mark if the registrant has elected not to use the extended transition period for complying with any new or revised financial accounting standards provided pursuant to Section 13(a) of the Exchange Act. ☐

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Indicate by check mark whether the Registrant has filed a report on and attestation to its management's assessment of the effectiveness of its internal control over financial reporting under Section 404(b) of the Sarbanes-Oxley Act (15 U.S.C. 7262(b)) by the registered public accounting firm that prepared or issued its audit report. ☒

Indicate by check mark whether the registrant is a shell company (as defined in Rule 12b-2 of the Exchange Act). Yes ☐ No ☒

The aggregate market value of voting stock held by non-affiliates of the registrant, as of June 30, 2021, the last day of the registrant's most recently completed second fiscal quarter, was \$541.28 billion (based on the closing price for shares of the registrant's Common Stock as reported by the NASDAQ Global Select Market on June 30, 2021). Shares of Common Stock held by each executive officer, director, and holder of 5% or more of the outstanding Common Stock have been excluded in that such persons may be deemed to be affiliates. This determination of affiliate status is not necessarily a conclusive determination for other purposes.

As of January 31, 2022, there were 1,033,507,611 shares of the registrant's common stock outstanding.

#### **DOCUMENTS INCORPORATED BY REFERENCE**

Portions of the registrant's Proxy Statement for the 2022 Annual Meeting of Stockholders are incorporated herein by reference in Part III of this Annual Report on Form 10-K to the extent stated herein. Such proxy statement will be filed with the Securities and Exchange Commission within 120 days of the registrant's fiscal year ended December 31, 2021.

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TESLA, INC.

ANNUAL REPORT ON FORM 10-K FOR THE YEAR ENDED DECEMBER 31, 2021

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## Forward-Looking Statements

*The discussions in this Annual Report on Form 10-K contain forward-looking statements reflecting our current expectations that involve risks and uncertainties. These forward-looking statements include, but are not limited to, statements concerning any potential future impact of the coronavirus disease ("COVID-19") pandemic on our business, supply chain constraints, our strategy, competition, future operations and production capacity, future financial position, future revenues, projected costs, profitability, expected cost reductions, capital adequacy, expectations regarding demand and acceptance for our technologies, growth opportunities and trends in the market in which we operate, prospects and plans and objectives of management. The words "anticipates," "believes," "could," "estimates," "expects," "intends," "may," "plans," "projects," "will," "would" and similar expressions are intended to identify forward-looking statements, although not all forward-looking statements contain these identifying words. We may not actually achieve the plans, intentions or expectations disclosed in our forward-looking statements and you should not place undue reliance on our forward-looking statements. Actual results or events could differ materially from the plans, intentions and expectations disclosed in the forward-looking statements that we make. These forward-looking statements involve risks and uncertainties that could cause our actual results to differ materially from those in the forward-looking statements, including, without limitation, the risks set forth in Part I, Item 1A, "Risk Factors" in this Annual Report on Form 10-K and in our other filings with the Securities and Exchange Commission (the "SEC"). We do not assume any obligation to update any forward-looking statements.*

## **PART I**

### **ITEM 1. BUSINESS**

#### **Overview**

We design, develop, manufacture, sell and lease high-performance fully electric vehicles and energy generation and storage systems, and offer services related to our products. We generally sell our products directly to customers, including through our website and retail locations. We also continue to grow our customer-facing infrastructure through a global network of vehicle service centers, Mobile Service technicians, body shops, Supercharger stations and Destination Chargers to accelerate the widespread adoption of our products. We emphasize performance, attractive styling and the safety of our users and workforce in the design and manufacture of our products and are continuing to develop full self-driving technology for improved safety. We also strive to lower the cost of ownership for our customers through continuous efforts to reduce manufacturing costs and by offering financial and other services tailored to our products. Our mission to accelerate the world's transition to sustainable energy, engineering expertise, vertically integrated business model and focus on user experience differentiate us from other companies.

#### **Segment Information**

We operate as two reportable segments: (i) automotive and (ii) energy generation and storage.

The automotive segment includes the design, development, manufacturing, sales and leasing of electric vehicles as well as sales of automotive regulatory credits. Additionally, the automotive segment is also comprised of services and other, which includes non-warranty after-sales vehicle services, sales of used vehicles, retail merchandise, sales by our acquired subsidiaries to third party customers and vehicle insurance revenue. The energy generation and storage segment includes the design, manufacture, installation, sales and leasing of solar energy generation and energy storage products and related services and sales of solar energy systems incentives.

#### **Our Products and Services**

##### **Automotive**

###### ***Model 3***

Model 3 is a four-door mid-size sedan that we designed for manufacturability with a base price for mass-market appeal. We currently manufacture Model 3 at the Fremont Factory and at Gigafactory Shanghai.

###### ***Model Y***

Model Y is a compact sport utility vehicle ("SUV") built on the Model 3 platform with seating for up to seven adults. We currently manufacture Model Y at the Fremont Factory and at Gigafactory Shanghai.

###### ***Model S and Model X***

Model S is a four-door full-size sedan and Model X is a mid-size SUV with seating for up to seven adults. Model S and Model X feature the highest performance characteristics and longest ranges that we offer in a sedan and SUV, respectively, and we manufacture both models at the Fremont Factory. In 2021, we began delivering new versions of the Model S and Model X, which offer higher performance and range.

###### ***Future Consumer and Commercial Electric Vehicles***

We have also announced several planned electric vehicles to address additional vehicle markets, including specialized consumer electric vehicles in Cybertruck and the new Tesla Roadster and a commercial electric vehicle in Tesla Semi. We plan to continue leveraging developments in our proprietary Full Self-Driving ("FSD"), battery cell and other technologies.

##### **Energy Generation and Storage**

###### ***Energy Storage Products***

Powerwall and Megapack are our lithium-ion battery energy storage products. Powerwall is designed to store energy at a home or small commercial facility. Megapack is an energy storage solution for commercial, industrial, utility and energy generation customers, multiple of which may be grouped together to form larger installations of gigawatt hours ("GWh") or greater capacity.

We also continue to develop software capabilities for remotely controlling and dispatching our energy storage systems across a wide range of markets and applications, including through our real-time energy control and optimization platforms.



### ***Solar Energy Offerings***

We sell retrofit solar energy systems to customers and channel partners and also make them available through power purchase agreement (“PPA”) arrangements. We purchase most of the components for our retrofit solar energy systems from multiple sources to ensure competitive pricing and adequate supply. We also design and manufacture certain components for our solar energy products.

We sell our Solar Roof, which combines premium glass roof tiles with energy generation, directly to customers, as well as through channel customers. We continue to improve our installation capability and efficiency, including through collaboration with real estate developers and builders on new homes.

## **Technology**

### **Automotive**

#### ***Battery and Powertrain***

Our core vehicle technology competencies include powertrain engineering and manufacturing and our ability to design vehicles that utilize the unique advantages of an electric powertrain. We have designed our proprietary powertrain systems to be adaptable, efficient, reliable and cost-effective while withstanding the rigors of an automotive environment. We offer dual motor powertrain vehicles, which use two electric motors to maximize traction and performance in an all-wheel drive configuration, as well as vehicle powertrain technology featuring three electric motors for further increased performance in certain versions of Model S and Model X.

Among other things, we maintain extensive testing and R&D capabilities for battery cells, packs and systems, and have built an expansive body of knowledge on lithium-ion cell chemistry types and performance characteristics. In order to enable a greater supply of cells for our products with higher energy density at lower costs, we are currently using our expertise to develop a new proprietary lithium-ion battery cell and improved manufacturing processes.

#### ***Vehicle Control and Infotainment Software***

The performance and safety systems of our vehicles and their battery packs require sophisticated control software. Control systems in our vehicles optimize performance, customize vehicle behavior, manage charging and control all infotainment functions. We develop almost all of this software, including most of the user interfaces, internally and update our vehicles’ software regularly through over-the-air updates.

#### ***Self-Driving Development***

We have expertise in developing technologies, systems and software to enable self-driving vehicles using primarily vision-based sensors. Our FSD Computer runs our neural networks in our vehicles, and we are also developing additional computer hardware to better enable the massive amounts of field data captured by our vehicles to continually train and improve these neural networks for real-world performance.

Currently, we offer in our vehicles certain advanced driver assist systems under our Autopilot and FSD options. Although at present the driver is ultimately responsible for controlling the vehicle, our systems provide safety and convenience functionality that relieves drivers of the most tedious and potentially dangerous aspects of road travel much like the system that airplane pilots use, when conditions permit. As with other vehicle systems, we improve these functions in our vehicles over time through over-the-air updates.

We intend to establish in the future an autonomous Tesla ride-hailing network, which we expect would also allow us to access a new customer base even as modes of transportation evolve.

## **Energy Generation and Storage**

#### ***Energy Storage Products***

We leverage many of the component-level technologies from our vehicles in our energy storage products. By taking a modular approach to the design of battery systems, we can optimize manufacturing capacity of our energy storage products. Additionally, our expertise in power electronics enables our battery systems to interconnect with electricity grids while providing fast-acting systems for power injection and absorption. We have also developed software to remotely control and dispatch our energy storage systems.

#### ***Solar Energy Systems***



We have engineered Solar Roof over numerous iterations to combine aesthetic appeal and durability with power generation. The efficiency of our solar energy products is aided by our own solar inverter, which also incorporates our power electronics technologies. We designed both products to integrate with Powerwall.

## **Design and Engineering**

### **Automotive**

We have established significant in-house capabilities in the design and test engineering of electric vehicles and their components and systems. Our team has core competencies in computer aided design as well as durability, strength and crash test simulations, which reduces the product development time of new models. Additionally, our team has expertise in selecting and working with a range of materials for our vehicles to balance performance, cost and durability in ways that are best suited for our vehicles' target demographics and utility. We have also used our capabilities to achieve complex engineering feats in stamping, casting and thermal systems, and are currently developing designs that integrate batteries directly with vehicle body structures without separate battery packs to optimize manufacturability, weight, range and cost characteristics.

We are also expanding our manufacturing operations globally while taking action to localize our vehicle designs and production for particular markets, including country-specific market demands and factory optimizations for local workforces. As we increase our capabilities, particularly in the areas of automation, die-making and line-building, we are also making strides in the simulations modeling these capabilities prior to construction.

### **Energy Generation and Storage**

Our expertise in electrical, mechanical, civil and software engineering allows us to design and manufacture our energy generation and storage products and components. We also employ our design and engineering expertise to customize solutions including our energy storage products, solar energy systems and/or Solar Roof for customers to meet their specific needs. We have developed software that simplifies and expedites the design process, as well as mounting hardware that facilitates solar panel installation.

## **Sales and Marketing**

Historically, we have been able to generate significant media coverage of our company and our products, and we believe we will continue to do so. Such media coverage and word of mouth are the current primary drivers of our sales leads and have helped us achieve sales without traditional advertising and at relatively low marketing costs.

### **Automotive**

#### ***Direct Sales***

Our vehicle sales channels currently include our website and an international network of company-owned stores. In some jurisdictions, we also have galleries to educate and inform customers about our products, but such locations do not actually transact in the sale of vehicles. We believe this infrastructure enables us to better control costs of inventory, manage warranty service and pricing, educate consumers about electric vehicles, maintain and strengthen the Tesla brand and obtain rapid customer feedback.

We reevaluate our sales strategy both globally and at a location-by-location level from time to time to optimize our current sales channels. Sales of vehicles in the automobile industry tend to be cyclical in many markets, which may expose us to volatility from time to time.

#### ***Used Vehicle Sales***

Our used vehicle business supports new vehicle sales by integrating the trade-in of a customer's existing Tesla or non-Tesla vehicle with the sale of a new or used Tesla vehicle. The Tesla and non-Tesla vehicles we acquire as trade-ins are subsequently remarketed, either directly by us or through third parties. We also remarket used Tesla vehicles acquired from other sources including lease returns.

#### ***Public Charging***

We have a growing global network of Tesla Superchargers, which are our industrial grade, high-speed vehicle chargers. Where possible, we co-locate Superchargers with our solar and energy storage systems to reduce costs and promote renewable power. Supercharger stations are typically placed along well-traveled routes and in and around dense city centers to allow vehicle owners the ability to enjoy quick, reliable and ubiquitous charging with convenient, minimal stops. Use of the Supercharger network either requires payment of a fee or is free under certain sales programs.

We also work with a wide variety of hospitality, retail and public destinations, as well as businesses with commuting employees, to offer additional charging options for our customers. These Destination Charging and workplace locations deploy Tesla Wall Connectors to provide charging to Tesla vehicle owners who patronize or are

employed at their businesses. We also work with single-family homeowners and multi-family residential entities to deploy home charging solutions.

### ***In-App Upgrades***

As our vehicles are capable of being updated remotely over-the-air, our customers may purchase additional paid options and features through the Tesla app or through the in-vehicle user interface. We expect that this functionality will also allow us to offer certain options and features on a subscription basis in the future.

### **Energy Generation and Storage**

We market and sell our solar and energy storage products to residential, commercial and industrial customers and utilities through a variety of channels. We emphasize simplicity, standardization and accessibility to make it easy and cost-effective for customers to adopt clean energy, while reducing our customer acquisition costs.

In the U.S., we offer residential solar and energy storage products directly through our website, stores and galleries, as well as through our network of channel partners. Outside of the U.S., we use our international sales organization and a network of channel partners to market and sell these products for the residential market. We also sell Powerwall directly to utilities. In the case of products sold to utilities or channel partners, such partners typically sell the product to residential customers and manage the installation in customer homes.

We sell our commercial and utility-scale energy storage systems to customers through our U.S. and international sales organization and our channel partner network. In certain jurisdictions, we also sell installed solar energy systems (with or without energy storage) to commercial customers through PPA transactions.

### **Service and Warranty**

#### **Automotive**

##### ***Service***

We provide service for our electric vehicles at our company-owned service locations and through Tesla Mobile Service technicians who perform work remotely at customers' homes or other locations. Performing vehicle service ourselves provides us with the capability to identify problems and implement solutions and improvements faster, and optimize logistics and inventory better, than traditional automobile manufacturers and their dealer networks. The connectivity of our vehicles also allows us to diagnose and remedy many problems remotely and proactively.

##### ***Vehicle Limited Warranties and Extended Service Plans***

We provide a manufacturer's limited warranty on all new and used Tesla vehicles we sell, which may include separate limited warranties on certain components, specific types of damage or battery capacity retention. We also currently offer extended service plans that provide coverage beyond the new vehicle limited warranties for certain models in specified regions.

### **Energy Generation and Storage**

We provide service and repairs to our energy product customers, including under warranty where applicable. We generally provide manufacturer's limited warranties with our energy storage product and offer certain extended limited warranties that are available at the time of purchase of the system. If we install a system, we also provide certain limited warranties on our installation workmanship. As part of our energy storage system contracts, we may provide the customer with performance guarantees that commit that the underlying system will meet or exceed the minimum energy performance requirements specified in the contract.

For retrofit solar energy systems, we provide separate limited warranties for workmanship and against roof leaks, and for Solar Roof, we also provide limited warranties for defects and weatherization. For components not manufactured by us, we generally pass-through the applicable manufacturers' warranties. As part of our solar energy system contracts, we may provide the customer with performance guarantees that commit that the underlying system will meet or exceed the minimum energy generation requirements specified in the contract.

### **Financial Services**

#### **Automotive**

##### ***Purchase Financing and Leases***

We offer leasing and/or loan financing arrangements for our vehicles in certain jurisdictions in North America, Europe and Asia ourselves and through various financial institutions. Under certain of such programs, we have provided resale value guarantees or buyback guarantees that may obligate us to repurchase the subject vehicles at pre-determined values.

## ***Insurance***

In August 2019, we launched an insurance product designed for our customers in California. In 2021, we launched our insurance product using real-time driving behavior in select states, which offers rates that are often better than other alternatives and promotes safer driving. Our insurance products are currently available in Arizona, California, Illinois, Ohio and Texas and we plan to expand the markets in which we offer insurance products, as part of our ongoing effort to decrease the total cost of ownership for our customers.

## **Energy Generation and Storage**

We currently offer certain loan and PPA options to residential or commercial customers who pair energy storage systems with solar energy systems. We offer certain financing options to our solar customers, which enable the customer to purchase and own a solar energy system, Solar Roof or integrated solar and Powerwall system. Our solar PPAs, offered to commercial customers, charges a fee per kilowatt-hour based on the amount of electricity produced by our solar energy systems.

## **Manufacturing**

### **Manufacturing Facilities in the Bay Area, California**

We manufacture and test our vehicles at our manufacturing facilities in the Bay Area in California, including the Fremont Factory and other local manufacturing facilities. We also manufacture and develop certain parts and components that are critical to our intellectual property and quality standards, such as Model S and Model X battery packs and our proprietary lithium-ion battery cells, at these locations.

### **Gigafactory Nevada near Reno, Nevada**

Our battery material, cell, module and battery pack production for Model 3, Model Y and our energy products are manufactured in one location at Gigafactory Nevada. In addition, we manufacture vehicle drive units and energy storage components there. Gigafactory Nevada allows us to access high volumes of lithium-ion battery cells manufactured by our partner Panasonic there while achieving a significant reduction in the cost of our battery packs. We continue to invest in Gigafactory Nevada to achieve additional output there.

### **Gigafactory New York in Buffalo, New York**

We use Gigafactory New York for the development and production of our Solar Roof and other solar products and components, energy storage components and Supercharger components and for other functions.

### **Gigafactory Shanghai in China**

We established Gigafactory Shanghai to increase the affordability of our vehicles for customers in local markets by reducing transportation and manufacturing costs and eliminating the impact of unfavorable tariffs. We continue to increase the degree of localized procurement and manufacturing there. Gigafactory Shanghai is representative of our plan to iteratively improve our manufacturing operations as we establish new factories, as we implemented the learnings from our Model 3 and Model Y ramp at the Fremont Factory to commence and ramp our production at Gigafactory Shanghai quickly and cost-effectively.

### **Other Manufacturing**

Generally, we continue to expand production capacity at our existing facilities. We also intend to further increase cost-competitiveness in our significant markets by strategically adding local manufacturing, including at Gigafactory Berlin in Germany and Gigafactory Texas in Austin, Texas, which will begin production in 2022.

### **Supply Chain**

Our products use thousands of purchased parts that are sourced from hundreds of suppliers across the world. We have developed close relationships with vendors of key parts such as battery cells, electronics and complex vehicle assemblies. Certain components purchased from these suppliers are shared or are similar across many product lines, allowing us to take advantage of pricing efficiencies from economies of scale.

As is the case for most automotive companies, most of our procured components and systems are sourced from single suppliers. Where multiple sources are available for certain key components, we work to qualify multiple suppliers for them where it is sensible to do so in order to minimize production risks owing to disruptions in their

supply. We also mitigate risk by maintaining safety stock for key parts and assemblies and die banks for components with lengthy procurement lead times.

Our products use various raw materials including aluminum, steel, cobalt, lithium, nickel and copper. Pricing for these materials is governed by market conditions and may fluctuate due to various factors outside of our control, such as supply and demand and market speculation. We strive to execute long-term supply contracts for such materials at competitive pricing when feasible, and we currently believe that we have adequate access to raw materials supplies in order to meet the needs of our operations.

### **Governmental Programs, Incentives and Regulations**

Globally, both the operation of our business by us and the ownership of our products by our customers are impacted by various government programs, incentives and other arrangements. Our business and products are also subject to numerous governmental regulations that vary among jurisdictions.

#### **Programs and Incentives**

##### ***California Alternative Energy and Advanced Transportation Financing Authority Tax Incentives***

We have agreements with the California Alternative Energy and Advanced Transportation Financing Authority that provide multi-year sales tax exclusions on purchases of manufacturing equipment that will be used for specific purposes, including the expansion and ongoing development of electric vehicles and powertrain production in California, thus reducing our cost basis in the related assets in our consolidated financial statements included elsewhere in this Annual Report on Form 10-K.

##### ***Gigafactory Nevada—Nevada Tax Incentives***

In connection with the construction of Gigafactory Nevada, we entered into agreements with the State of Nevada and Storey County in Nevada that provide abatements for specified taxes, discounts to the base tariff energy rates and transferable tax credits in consideration of capital investment and hiring targets that were met at Gigafactory Nevada. These incentives are available until June 2024 or June 2034, depending on the incentive and primarily offset related costs in our consolidated financial statements included elsewhere in this Annual Report on Form 10-K.

##### ***Gigafactory New York—New York State Investment and Lease***

We have a lease through the Research Foundation for the State University of New York (the “SUNY Foundation”) with respect to Gigafactory New York. Under the lease and a related research and development agreement, we are continuing to designate further buildouts at the facility. We are required to comply with certain covenants, including hiring and cumulative investment targets. This incentive offsets the related lease costs of the facility in our consolidated financial statements included elsewhere in this Annual Report on Form 10-K.

As we temporarily suspended most of our manufacturing operations at Gigafactory New York pursuant to a New York State executive order issued in March 2020 as a result of the COVID-19 pandemic, we were granted a deferral of our obligation to be compliant with our applicable targets through December 31, 2021 in an amendment memorialized in August 2021. As of December 31, 2021, we are in excess of such targets relating to investments and personnel in the State of New York and Buffalo.

##### ***Gigafactory Shanghai—Land Use Rights and Economic Benefits***

We have an agreement with the local government of Shanghai for land use rights at Gigafactory Shanghai. Under the terms of the arrangement, we are required to meet a cumulative capital expenditure target and an annual tax revenue target starting at the end of 2023. In addition, the Shanghai government has granted to our Gigafactory Shanghai subsidiary certain incentives to be used in connection with eligible capital investments at Gigafactory Shanghai. These incentives offset the related costs of our facilities in our consolidated financial statements included elsewhere in this Annual Report on Form 10-K. Finally, the Shanghai government granted a beneficial corporate income tax rate of 15% to certain eligible enterprises, which is lower than the 25% statutory corporate income tax rate in China. Our Gigafactory Shanghai subsidiary was granted this lower rate for 2019 through 2023. This lower tax rate reduces the income tax provision in our consolidated financial statements included elsewhere in this Annual Report on Form 10-K.

##### ***Gigafactory Texas – Tax Incentives***

In connection with the construction of Gigafactory Texas, we entered into a 20-year agreement with Travis County in Texas pursuant to which we would receive grant funding equal to 70-80% of property taxes paid by us to Travis County and a separate 10-year agreement with the Del Valle Independent School District in Texas pursuant to which a portion of the taxable value of our property would be capped at a specified amount, in each case subject to our meeting certain minimum economic development metrics through our construction and operations at Gigafactory

Texas. These incentives will offset the related costs in our consolidated financial statements included elsewhere in this Annual Report on Form 10-K.



### ***Automotive Regulatory Credits***

We earn tradable credits in the operation of our business under various regulations related to zero-emission vehicles (“ZEVs”), greenhouse gas, fuel economy and clean fuel. We sell these credits to other regulated entities who can use the credits to comply with emission standards and other regulatory requirements. Sales of these credits are recognized within automotive regulatory credits revenue in our consolidated financial statements included elsewhere in this Annual Report on Form 10-K.

### ***Energy Storage System Incentives and Policies***

While the regulatory regime for energy storage projects is still under development, there are various policies, incentives and financial mechanisms at the federal, state and local levels that support the adoption of energy storage.

For example, energy storage systems that are charged using solar energy may be eligible for the solar energy-related U.S. federal tax credits described below. The Federal Energy Regulatory Commission (“FERC”) has also taken steps to enable the participation of energy storage in wholesale energy markets. In addition, California and a number of other states have adopted procurement targets for energy storage, and behind-the-meter energy storage systems qualify for funding under the California Self Generation Incentive Program. Our customers primarily benefit directly under these programs. In certain instances our customers may transfer such credits to us as contract consideration. In such transactions they are included as a component of energy generation and storage revenues in our consolidated financial statements included elsewhere in this Annual Report on Form 10-K.

### ***Solar Energy System Incentives and Policies***

U.S. federal, state and local governments have established various policies, incentives and financial mechanisms to reduce the cost of solar energy and to accelerate the adoption of solar energy. These incentives include tax credits, cash grants, tax abatements and rebates.

In particular, Sections 48 and 25D of the U.S. Internal Revenue Code currently provide a tax credit of 26% of qualified commercial or residential expenditures for solar energy systems, which may be claimed by our customers for systems they purchase, or by us for arrangements where we own the systems. These tax credits are primarily for the direct benefit of our customers and are currently scheduled to decline and/or expire in 2023 and beyond.

## **Regulations**

### ***Vehicle Safety and Testing***

In the U.S., our vehicles are subject to regulation by the National Highway Traffic Safety Administration (“NHTSA”), including all applicable Federal Motor Vehicle Safety Standards (“FMVSS”) and the NHTSA bumper standard. Numerous FMVSS apply to our vehicles, such as crash-worthiness and occupant protection requirements. While our current vehicles fully comply and we expect that our vehicles in the future will fully comply with all applicable FMVSS with limited or no exemptions, FMVSS are subject to change from time to time. As a manufacturer, we must self-certify that our vehicles meet all applicable FMVSS and the NHTSA bumper standard, or otherwise are exempt, before the vehicles may be imported or sold in the U.S.

We are also required to comply with other federal laws administered by NHTSA, including the CAFE standards, Theft Prevention Act requirements, labeling requirements and other information provided to customers in writing, Early Warning Reporting requirements regarding warranty claims, field reports, death and injury reports and foreign recalls and additional requirements for cooperating with compliance and safety investigations and recall reporting. The U.S. Automobile Information and Disclosure Act also requires manufacturers of motor vehicles to disclose certain information regarding the manufacturer’s suggested retail price, optional equipment and pricing. In addition, federal law requires inclusion of fuel economy ratings, as determined by the U.S. Department of Transportation and the Environmental Protection Agency (the “EPA”), and New Car Assessment Program ratings as determined by NHTSA, if available.

Our vehicles sold outside of the U.S. are subject to similar foreign compliance, safety, environmental and other regulations. Many of those regulations are different from those applicable in the U.S. and may require redesign and/or retesting. Some of those regulations impact or prevent the rollout of new vehicle features. Additionally, the European Union established new rules regarding additional compliance oversight that commenced in 2020.

### ***Self-Driving Vehicles***

Generally, laws pertaining to self-driving vehicles are evolving globally, and in some cases may create restrictions on features that we develop. While there are currently no federal U.S. regulations specifically pertaining to self-driving vehicles or self-driving equipment, NHTSA has published recommended guidelines on self-driving

vehicles, and retains the authority to investigate and/or take action on the safety of any vehicle, equipment or features operating on public roads. Certain U.S. states also have legal restrictions on the operation, registration or licensure of self-driving vehicles, and many other states are considering them. This regulatory patchwork increases the legal complexity with respect to self-driving vehicles in the U.S.

In markets that follow the regulations of the United Nations Economic Commission for Europe, some requirements restrict the design of advanced driver-assistance or self-driving features, which can compromise or prevent their use entirely. Other applicable laws, both current and proposed, may hinder the path and timeline to introducing self-driving vehicles for sale and use in the markets where they apply.

Other key markets, including China, continue to consider self-driving regulation. Any implemented regulations may differ materially from those in the U.S. and Europe, which may further increase the legal complexity of self-driving vehicles and limit or prevent certain features.

#### ***Automobile Manufacturer and Dealer Regulation***

In the U.S., state laws regulate the manufacture, distribution, sale and service of automobiles, and generally require motor vehicle manufacturers and dealers to be licensed in order to sell vehicles directly to residents. Certain states have asserted that the laws in such states do not permit automobile manufacturers to be licensed as dealers or to act in the capacity of a dealer, or that they otherwise restrict a manufacturer's ability to deliver or service vehicles. To sell vehicles to residents of states where we are not licensed as a dealer, we generally conduct the sale out of the state. In certain such states, we have opened "galleries" that serve an educational purpose and where the title transfer may not occur.

Some automobile dealer trade associations have both challenged the legality of our operations in court and used administrative and legislative processes to attempt to prohibit or limit our ability to operate existing stores or expand to new locations. Certain dealer associations have also actively lobbied state licensing agencies and legislators to interpret existing laws or enact new laws in ways not favorable to our ownership and operation of our own retail and service locations. We expect such challenges to continue, and we intend to actively fight any such efforts.

#### ***Battery Safety and Testing***

Our battery packs are subject to various U.S. and international regulations that govern transport of "dangerous goods," defined to include lithium-ion batteries, which may present a risk in transportation. We conduct testing to demonstrate our compliance with such regulations.

We use lithium-ion cells in our high voltage battery packs in our vehicles and energy storage products. The use, storage and disposal of our battery packs are regulated under existing laws and are the subject of ongoing regulatory changes that may add additional requirements in the future. We have agreements with third party battery recycling companies to recycle our battery packs and we are also piloting our own recycling technology.

#### ***Solar Energy—General***

We are subject to certain state and federal regulations applicable to solar and battery storage providers and sellers of electricity. To operate our systems, we enter into standard interconnection agreements with applicable utilities. Sales of electricity and non-sale equipment leases by third parties, such as our leases and PPAs, have faced regulatory challenges in some states and jurisdictions.

#### ***Solar Energy—Net Metering***

Most states in the U.S. make net energy metering, or net metering, available to solar customers. Net metering typically allows solar customers to interconnect their solar energy systems to the utility grid and offset their utility electricity purchases by receiving a bill credit for excess energy generated by their solar energy system that is exported to the grid. In certain jurisdictions, regulators or utilities have reduced or eliminated the benefit available under net metering or have proposed to do so.

### **Competition**

#### **Automotive**

The worldwide automotive market is highly competitive and we expect it will become even more competitive in the future as we introduce additional vehicles in a broader cross-section of the passenger and commercial vehicle market and expand our vehicles' capabilities.

We believe that our vehicles compete in the market both based on their traditional segment classification as well as based on their propulsion technology. For example, Model S and Model X compete primarily with premium sedans and premium SUVs and Model 3 and Model Y compete with small to medium-sized sedans and compact SUVs, which are extremely competitive markets. Competing products typically include internal combustion vehicles from more established automobile manufacturers; however, many established and new automobile manufacturers have entered or have announced plans to enter the market for electric and other alternative fuel vehicles. Overall, we believe these announcements and vehicle introductions, including the introduction of electric vehicles into rental car company fleets, promote the development of the electric vehicle market by highlighting the attractiveness of electric vehicles relative to the internal combustion vehicle. Many major automobile manufacturers have electric vehicles available today in major markets including the U.S., China and Europe, and other current and prospective automobile manufacturers are also developing electric vehicles. In addition, several manufacturers offer hybrid vehicles, including plug-in versions.

We also believe that there is increasing competition for our vehicle offerings as a platform for delivering self-driving technologies, charging solutions and other features and services, and we expect to compete in this developing market through continued progress on our Autopilot, FSD and neural network capabilities, Supercharger network and our infotainment offerings.

## **Energy Generation and Storage**

### ***Energy Storage Systems***

The market for energy storage products is also highly competitive, and both established and emerging companies have introduced products that are similar to our product portfolio or that are alternatives to the elements of our systems. We compete with these companies based on price, energy density and efficiency. We believe that the specifications and features of our products, our strong brand and the modular, scalable nature of our energy storage products give us a competitive advantage in our markets.

### ***Solar Energy Systems***

The primary competitors to our solar energy business are the traditional local utility companies that supply energy to our potential customers. We compete with these traditional utility companies primarily based on price and the ease by which customers can switch to electricity generated by our solar energy systems. We also compete with solar energy companies that provide products and services similar to ours. Many solar energy companies only install solar energy systems, while others only provide financing for these installations. We believe we have a significant expansion opportunity with our offerings and that the regulatory environment is increasingly conducive to the adoption of renewable energy systems.

## **Intellectual Property**

We place a strong emphasis on our innovative approach and proprietary designs which bring intrinsic value and uniqueness to our product portfolio. As part of our business, we seek to protect the underlying intellectual property rights of these innovations and designs such as with respect to patents, trademarks, copyrights, trade secrets and other measures, including through employee and third-party nondisclosure agreements and other contractual arrangements. For example, we place a high priority on obtaining patents to provide the broadest and strongest possible protection to enable our freedom to operate our innovations and designs within our products and technologies in the electric vehicle market as well as to protect and defend our product portfolio. We have also adopted a patent policy in which we irrevocably pledged that we will not initiate a lawsuit against any party for infringing our patents through activity relating to electric vehicles or related equipment for so long as such party is acting in good faith. We made this pledge in order to encourage the advancement of a common, rapidly-evolving platform for electric vehicles, thereby benefiting ourselves, other companies making electric vehicles and the world.

## **Environmental, Social and Governance (ESG) and Human Capital Resources**

### **ESG**

The very purpose of Tesla's existence is to accelerate the world's transition to sustainable energy. We believe the world cannot reduce carbon emissions without addressing both energy generation and consumption, and we are designing and manufacturing a complete energy and transportation ecosystem to achieve this goal. As we expand, we are building each new factory to be more efficient and sustainably designed than the previous one, including with respect to waste reduction and water usage, and we are focused on reducing the carbon footprint of our supply chain.

We are committed to only sourcing responsibly produced materials, and our suppliers are required to provide evidence of management systems that ensure social, environmental and sustainability best practices in their own operations, as well as to demonstrate a commitment to responsible sourcing into their supply chains. We have a zero-

tolerance policy when it comes to child or forced labor and human trafficking by our suppliers and we look to the Organization for Economic Co-operation and Development Due Diligence Guidelines to inform our process and use feedback from our internal and external stakeholders to find ways to continually improve. We are also driving safety in our own factories by focusing on worker engagement. As our production volumes increase, our incidents per vehicle continue to drop.

We believe that sound corporate governance is critical to helping us achieve our goals, including with respect to ESG. We continue to evolve a governance framework that exercises appropriate oversight of responsibilities at all levels throughout the company and manages its affairs consistent with high principles of business ethics. Our ESG Sustainability Council is made up of leaders from across our company, and regularly presents to our Board of Directors, which oversees our ESG impacts, initiatives and priorities.

### **Human Capital Resources**

As of December 31, 2021, our full-time count for our and our subsidiaries' employees worldwide was 99,290. To date, we have not experienced any work stoppages as a result of labor disputes, and we consider our relationship with our employees to be good. Our key human capital objectives in managing our business include attracting, developing and retaining top talent while integrating diversity, equity and inclusion principles and practices into our core values.

We want to attract a pool of diverse and exceptional candidates and support their career growth once they become employees. Our efforts begin at the entry level with development, apprenticeship and internship programs in local high schools, community colleges and four-year colleges. In addition, we seek to hire based on talent rather than solely on educational pedigree, and have provided thousands of job openings, including in our local communities, for capable workers from various backgrounds to learn valuable skills in critical operations such as in manufacturing, vehicle service and energy product installation. We also emphasize in our evaluation and career development efforts internal mobility opportunities for employees to drive professional development. Our goal is a long-term, upward-bound career at Tesla for every employee, which we believe also drives our retention efforts.

Our ability to retain our talented workforce is correlated to our compensation practices and culture of open communication. We provide a highly competitive wage that meets or exceeds that of comparable manufacturing roles, even before equity and benefits are factored in. In addition, the majority of our employees have the opportunity to receive additional Tesla equity each year based on their performance. We continue to review salary and wages against benchmarks and adjust to ensure wages are competitive, and have instituted a robust process for ensuring pay equity across our organization. In addition, we provide a comprehensive range of benefits options, including no-cost paycheck contributions for medical, dental and vision plan options for employees and family members.

Our employees have the right to freely discuss their wages, benefits and terms and conditions of employment and to raise complaints internally and externally. We encourage our employees to bring any concerns or complaints they have to any member of management, and any employee who is subjected to, a witness or has knowledge of any conduct that violates Tesla policies is asked to immediately report the conduct. Our employees can report concerns to their supervisor or human resources partner, as well as an integrity line to report concerns anonymously and without fear of retaliation that is available 24 hours a day, seven days a week. Concerns are reviewed in accordance with established protocols by investigators with expertise, who also periodically review for trends and outcomes for remediation and appropriate controls. Tesla provides employee training on workplace conduct at least annually and in 2021 implemented a campaign to re-highlight different reporting mechanisms available to employees.

We also believe that our ability to retain our workforce is dependent on our ability to foster an environment that is sustainably safe, respectful, fair and inclusive of everyone and promotes diversity, equity and inclusion inside and outside of our business. From our outreach to Historically Black Colleges and Universities and Hispanic Serving Institutions to sponsoring employee resource groups across numerous locations, including Asian Pacific Islanders at Tesla, Black at Tesla, Intersectionality, Latinos at Tesla, LGBTQ at Tesla, Veterans at Tesla and Women in Tesla, we engage these networks as key business resources and sources of actionable feedback. We are also working on diversity efforts in our supply chain to expand our outreach and support to small- and large-scale suppliers from underrepresented communities to emphasize this culture with our own employees.

### **Available Information**

We file or furnish periodic reports and amendments thereto, including our Annual Reports on Form 10-K, our Quarterly Reports on Form 10-Q and Current Reports on Form 8-K, proxy statements and other information with the SEC. In addition, the SEC maintains a website ([www.sec.gov](http://www.sec.gov)) that contains reports, proxy and information statements, and other information regarding issuers that file electronically. Our website is located at [www.tesla.com](http://www.tesla.com), and our reports, amendments thereto, proxy statements and other information are also made available, free of charge, on our investor relations website at [ir.tesla.com](http://ir.tesla.com) as soon as reasonably practicable after we electronically file or furnish such information with the SEC. The information posted on our website is not incorporated by reference into this Annual Report on Form 10-K.

## ITEM 1A. RISK FACTORS

*You should carefully consider the risks described below together with the other information set forth in this report, which could materially affect our business, financial condition and future results. The risks described below are not the only risks facing our company. Risks and uncertainties not currently known to us or that we currently deem to be immaterial also may materially adversely affect our business, financial condition and operating results.*

### **Risks Related to Our Ability to Grow Our Business**

***We may be impacted by macroeconomic conditions resulting from the global COVID-19 pandemic.***

Since the first quarter of 2020, there has been a worldwide impact from the COVID-19 pandemic. Government regulations and shifting social behaviors have limited or closed non-essential transportation, government functions, business activities and person-to-person interactions. In some cases, the relaxation of such trends has been followed by actual or contemplated returns to stringent restrictions on gatherings or commerce, including in parts of the U.S., and the rest of the world.

During 2020, we temporarily suspended operations at each of our manufacturing facilities worldwide, and certain of our suppliers also shut down operations temporarily or permanently, including during the recently re-imposed lockdowns in certain parts of the world. We instituted temporary employee furloughs and compensation reductions while our U.S. operations were scaled back. Temporary impediments to administrative activities supporting our operations also hampered our product deliveries and deployments.

Global trade conditions and consumer trends that originated during the pandemic continue to persist and may also have long-lasting adverse impact on us and our industries independently of the progress of the pandemic. For example, pandemic-related issues have exacerbated port congestion and intermittent supplier shutdowns and delays, resulting in additional expenses to expedite delivery of critical parts. Similarly, increased demand for personal electronics has created a shortfall of semiconductors, which has caused challenges in our supply chain and production. In addition, labor shortages resulting from the pandemic, including worker absenteeism, may lead to increased difficulty in hiring and retaining manufacturing and service workers, as well as increased labor costs. Sustaining our production trajectory will require the ongoing readiness and solvency of our suppliers and vendors, a stable and motivated production workforce and government cooperation, including for travel and visa allowances. The contingencies inherent in the construction of, and ramp at, new facilities such as Gigafactory Berlin and Gigafactory Texas may be exacerbated by these challenges.

We cannot predict the duration or direction of current global trends or their sustained impact. Ultimately, we continue to monitor macroeconomic conditions to remain flexible and to optimize and evolve our business as appropriate, and we will have to accurately project demand and infrastructure requirements globally and deploy our production, workforce and other resources accordingly. If we experience unfavorable global market conditions, or if we cannot or do not maintain operations at a scope that is commensurate with such conditions or are later required to or choose to suspend such operations again, our business, prospects, financial condition and operating results may be harmed.

***We may experience delays in launching and ramping the production of our products and features, or we may be unable to control our manufacturing costs.***

We have previously experienced and may in the future experience launch and production ramp delays for new products and features. For example, we encountered unanticipated supplier issues that led to delays during the initial ramp of our first Model X and experienced challenges with a supplier and with ramping full automation for certain of our initial Model 3 manufacturing processes. In addition, we may introduce in the future new or unique manufacturing processes and design features for our products. There is no guarantee that we will be able to successfully and timely introduce and scale such processes or features.

In particular, our future business depends in large part on increasing the production of mass-market vehicles including Model 3 and Model Y, which we are planning to achieve through multiple factories worldwide. We have relatively limited experience to date in manufacturing Model 3 and Model Y at high volumes and even less experience building and ramping vehicle production lines across multiple factories in different geographies. In order to be successful, we will need to implement, maintain and ramp efficient and cost-effective manufacturing capabilities, processes and supply chains and achieve the design tolerances, high quality and output rates we have planned at our manufacturing facilities in California, Nevada, Texas, China and Germany. We will also need to hire, train and compensate skilled employees to operate these facilities. Bottlenecks and other unexpected challenges such as those we experienced in the past may arise during our production ramps, and we must address them promptly while continuing to improve manufacturing processes and reducing costs. If we are not successful in achieving these goals, we could face delays in establishing and/or sustaining our Model 3 and Model Y ramps or be unable to meet our related cost and profitability targets.

We may also experience similar future delays in launching and/or ramping production of our energy storage products and Solar Roof; new product versions or variants such as the recently updated Model S and Model X; new vehicles such as Tesla Semi, Cybertruck and the new Tesla Roadster; and future features and services based on artificial intelligence, such as new Autopilot or FSD



functionalities, the autonomous Tesla ride-hailing network and robotics. Likewise, we may encounter delays with the design, construction and regulatory or other approvals necessary to build and bring online future manufacturing facilities and products.

Any delay or other complication in ramping the production of our current products or the development, manufacture, launch and production ramp of our future products, features and services, or in doing so cost-effectively and with high quality, may harm our brand, business, prospects, financial condition and operating results.

***We may be unable to grow our global product sales, delivery and installation capabilities and our servicing and vehicle charging networks, or we may be unable to accurately project and effectively manage our growth.***

Our success will depend on our ability to continue to expand our sales capabilities. We are targeting with Model 3 and Model Y a global mass demographic with a broad range of potential customers, in which we have relatively limited experience projecting demand and pricing our products. We currently produce numerous international variants at a limited number of factories, and if our specific demand expectations for these variants prove inaccurate, we may not be able to timely generate deliveries matched to the vehicles that we produce in the same timeframe or that are commensurate with the size of our operations in a given region. Likewise, as we develop and grow our energy products and services worldwide, our success will depend on our ability to correctly forecast demand in various markets.

Because we do not have independent dealer networks, we are responsible for delivering all of our vehicles to our customers. We may face difficulties with deliveries at increasing volumes, particularly in international markets requiring significant transit times. For example, we saw challenges in ramping our logistics channels in China and Europe to initially deliver Model 3 there in the first quarter of 2019. We have deployed a number of delivery models, such as deliveries to customers' homes and workplaces and touchless deliveries, but there is no guarantee that such models will be scalable or be accepted globally. Likewise, as we ramp our energy products, we are working to substantially increase our production and installation capabilities. If we experience production delays or inaccurately forecast demand, our business, financial condition and operating results may be harmed.

Moreover, because of our unique expertise with our vehicles, we recommend that our vehicles be serviced by us or by certain authorized professionals. If we experience delays in adding servicing capacity or servicing our vehicles efficiently, or experience unforeseen issues with the reliability of our vehicles, particularly higher-volume and relatively newer additions to our fleet such as Model 3 and Model Y, it could overburden our servicing capabilities and parts inventory. Similarly, the increasing number of Tesla vehicles also requires us to continue to rapidly increase the number of our Supercharger stations and connectors throughout the world.

There is no assurance that we will be able to ramp our business to meet our sales, delivery, installation, servicing and vehicle charging targets globally, that our projections on which such targets are based will prove accurate or that the pace of growth or coverage of our customer infrastructure network will meet customer expectations. These plans require significant cash investments and management resources and there is no guarantee that they will generate additional sales or installations of our products, or that we will be able to avoid cost overruns or be able to hire additional personnel to support them. As we expand, we will also need to ensure our compliance with regulatory requirements in various jurisdictions applicable to the sale, installation and servicing of our products, the sale or dispatch of electricity related to our energy products and the operation of Superchargers. If we fail to manage our growth effectively, it may harm our brand, business, prospects, financial condition and operating results.

***Our future growth and success are dependent upon consumers' demand for electric vehicles and specifically our vehicles in an automotive industry that is generally competitive, cyclical and volatile.***

If the market for electric vehicles in general and Tesla vehicles in particular does not develop as we expect, develops more slowly than we expect, or if demand for our vehicles decreases in our markets or our vehicles compete with each other, our business, prospects, financial condition and operating results may be harmed.

We are still at an earlier stage of development and have limited resources and production relative to established competitors that offer internal combustion engine vehicles. In addition, electric vehicles still comprise a small percentage of overall vehicle sales. As a result, the market for our vehicles could be negatively affected by numerous factors, such as:

- perceptions about electric vehicle features, quality, safety, performance and cost;
- perceptions about the limited range over which electric vehicles may be driven on a single battery charge, and access to charging facilities;

- competition, including from other types of alternative fuel vehicles, plug-in hybrid electric vehicles and high fuel-economy internal combustion engine vehicles;
- volatility in the cost of oil and gasoline, such as wide fluctuations in crude oil prices during 2020;
- government regulations and economic incentives; and
- concerns about our future viability.

Finally, the target demographics for our vehicles, particularly Model 3 and Model Y, are highly competitive. Sales of vehicles in the automotive industry tend to be cyclical in many markets, which may expose us to further volatility.

***Our suppliers may fail to deliver components according to schedules, prices, quality and volumes that are acceptable to us, or we may be unable to manage these components effectively.***

Our products contain thousands of parts purchased globally from hundreds of suppliers, including single-source direct suppliers, which exposes us to multiple potential sources of component shortages. Unexpected changes in business conditions, materials pricing, labor issues, wars, trade policies, natural disasters such as the March 2011 earthquakes in Japan, health epidemics such as the global COVID-19 pandemic, trade and shipping disruptions, port congestions and other factors beyond our or our suppliers' control could also affect these suppliers' ability to deliver components to us or to remain solvent and operational. For example, a global shortage of semiconductors has been reported since early 2021 and has caused challenges in the manufacturing industry and impacted our supply chain and production as well. We have used alternative parts and programmed software to mitigate the challenges caused by these shortages, but there is no guarantee we may be able to continually do so as we scale production to meet our growth targets. Additionally, if our suppliers do not accurately forecast and effectively allocate production or if they are not willing to allocate sufficient production to us, it may reduce our access to components and require us to search for new suppliers. The unavailability of any component or supplier could result in production delays, idle manufacturing facilities, product design changes and loss of access to important technology and tools for producing and supporting our products, as well as impact our capacity expansion and our ability to fulfill our obligations under customer contracts. Moreover, significant increases in our production, such as for Model 3 and Model Y, or product design changes by us have required and may in the future require us to procure additional components in a short amount of time. Our suppliers may not be willing or able to sustainably meet our timelines or our cost, quality and volume needs, or to do so may cost us more, which may require us to replace them with other sources. Finally, we have limited vehicle manufacturing experience outside of the Fremont Factory and we may experience issues increasing the level of localized procurement at our Gigafactory Shanghai and at future factories such as Gigafactory Berlin and Gigafactory Texas. While we believe that we will be able to secure additional or alternate sources or develop our own replacements for most of our components, there is no assurance that we will be able to do so quickly or at all. Additionally, we may be unsuccessful in our continuous efforts to negotiate with existing suppliers to obtain cost reductions and avoid unfavorable changes to terms, source less expensive suppliers for certain parts and redesign certain parts to make them less expensive to produce, especially in light of the increases in materials pricing. Any of these occurrences may harm our business, prospects, financial condition and operating results.

As the scale of our vehicle production increases, we will also need to accurately forecast, purchase, warehouse and transport components at high volumes to our manufacturing facilities and servicing locations internationally. If we are unable to accurately match the timing and quantities of component purchases to our actual needs or successfully implement automation, inventory management and other systems to accommodate the increased complexity in our supply chain and parts management, we may incur unexpected production disruption, storage, transportation and write-off costs, which may harm our business and operating results.

***We may be unable to meet our projected construction timelines, costs and production ramps at new factories, or we may experience difficulties in generating and maintaining demand for products manufactured there.***

Our ability to increase production of our vehicles on a sustained basis, make them affordable globally by accessing local supply chains and workforces and streamline delivery logistics is dependent on the construction and ramp of our current and future factories. The construction of and commencement and ramp of production at these factories are subject to a number of uncertainties inherent in all new manufacturing operations, including ongoing compliance with regulatory requirements, procurement and maintenance of construction, environmental and operational licenses and approvals for additional expansion, potential supply chain constraints, hiring, training and retention of qualified employees and the pace of bringing production equipment and processes online with the capability to manufacture high-quality units at scale. For example, we are currently constructing Gigafactory Berlin under conditional permits in anticipation of being granted final permits. Moreover, we will have to establish and ramp production of our proprietary battery cells and packs at our new factories, and we additionally intend to incorporate sequential design and manufacturing changes into vehicles manufactured at each new factory. We have limited experience to date with developing and implementing manufacturing innovations outside of the Fremont Factory and Gigafactory Shanghai. In particular, the majority of our design and engineering resources are currently located in California. In order to meet our expectations for our new factories, we must expand and manage localized design and engineering talent and resources. If we experience any issues or delays in meeting our projected timelines, costs, capital efficiency and production capacity for our new factories, expanding and managing teams to implement iterative design and production changes there, maintaining and complying with the terms of any debt financing that

we obtain to fund them or generating and maintaining demand for the vehicles we manufacture there, our business, prospects, operating results and financial condition may be harmed.

***We will need to maintain and significantly grow our access to battery cells, including through the development and manufacture of our own cells, and control our related costs.***

We are dependent on the continued supply of lithium-ion battery cells for our vehicles and energy storage products, and we will require substantially more cells to grow our business according to our plans. Currently, we rely on suppliers such as Panasonic and Contemporary Amperex Technology Co. Limited (CATL) for these cells. We have to date fully qualified only a very limited number

of such suppliers and have limited flexibility in changing suppliers. Any disruption in the supply of battery cells from our suppliers could limit production of our vehicles and energy storage products. In the long term, we intend to supplement cells from our suppliers with cells manufactured by us, which we believe will be more efficient, manufacturable at greater volumes and more cost-effective than currently available cells. However, our efforts to develop and manufacture such battery cells have required, and may continue to require, significant investments, and there can be no assurance that we will be able to achieve these targets in the timeframes that we have planned or at all. If we are unable to do so, we may have to curtail our planned vehicle and energy storage product production or procure additional cells from suppliers at potentially greater costs, either of which may harm our business and operating results.

In addition, the cost of battery cells, whether manufactured by our suppliers or by us, depends in part upon the prices and availability of raw materials such as lithium, nickel, cobalt and/or other metals. The prices for these materials fluctuate and their available supply may be unstable, depending on market conditions and global demand for these materials, including as a result of increased global production of electric vehicles and energy storage products. Any reduced availability of these materials may impact our access to cells and any increases in their prices may reduce our profitability if we cannot recoup the increased costs through increased vehicle prices. Moreover, any such attempts to increase product prices may harm our brand, prospects and operating results.

***We face strong competition for our products and services from a growing list of established and new competitors.***

The worldwide automotive market is highly competitive today and we expect it will become even more so in the future. For example, Model 3 and Model Y face competition from existing and future automobile manufacturers in the extremely competitive entry-level premium sedan and compact SUV markets. A significant and growing number of established and new automobile manufacturers, as well as other companies, have entered, or are reported to have plans to enter, the market for electric and other alternative fuel vehicles, including hybrid, plug-in hybrid and fully electric vehicles, as well as the market for self-driving technology and other vehicle applications and software platforms. In some cases, our competitors offer or will offer electric vehicles in important markets such as China and Europe, and/or have announced an intention to produce electric vehicles exclusively at some point in the future. Many of our competitors have significantly greater or better-established resources than we do to devote to the design, development, manufacturing, distribution, promotion, sale and support of their products. Increased competition could result in our lower vehicle unit sales, price reductions, revenue shortfalls, loss of customers and loss of market share, which may harm our business, financial condition and operating results.

We also face competition in our energy generation and storage business from other manufacturers, developers, installers and service providers of competing energy technologies, as well as from large utilities. Decreases in the retail or wholesale prices of electricity from utilities or other renewable energy sources could make our products less attractive to customers and lead to an increased rate of residential customer defaults under our existing long-term leases and PPAs.

## **Risks Related to Our Operations**

***We may experience issues with lithium-ion cells or other components manufactured at Gigafactory Nevada and Gigafactory Shanghai, which may harm the production and profitability of our vehicle and energy storage products.***

Our plan to grow the volume and profitability of our vehicles and energy storage products depends on significant lithium-ion battery cell production, including by our partner Panasonic at Gigafactory Nevada. In addition, we produce several vehicle components, such as battery modules and packs and drive units at Gigafactory Nevada and Gigafactory Shanghai, and we also manufacture energy storage products at Gigafactory Nevada. In the past, some of the manufacturing lines for certain product components took longer than anticipated to ramp to their full capacity, and additional bottlenecks may arise in the future as we continue to increase the production rate and introduce new lines. If we are unable to or otherwise do not maintain and grow our respective operations at Gigafactory Nevada and Gigafactory Shanghai production, or if we are unable to do so cost-effectively or hire and retain highly-skilled personnel there, our ability to manufacture our products profitably would be limited, which may harm our business and operating results.

Finally, the high volumes of lithium-ion cells and battery modules and packs manufactured at Gigafactory Nevada are stored and recycled at our various facilities. Any mishandling of battery cells may cause disruption to the operation of such facilities. While we have implemented safety procedures related to the handling of the cells, there can be no assurance that a safety issue or fire related to the cells would not disrupt our operations. Any such disruptions or issues may harm our brand and business.

***We face risks associated with maintaining and expanding our international operations, including unfavorable and uncertain regulatory, political, economic, tax and labor conditions.***

We are subject to legal and regulatory requirements, political uncertainty and social, environmental and economic conditions in numerous jurisdictions, including markets in which we generate significant sales, over which we have little control and which are inherently unpredictable. Our operations in such jurisdictions, particularly as a company based in the U.S., create risks relating to conforming our products to regulatory and safety requirements and charging and other electric infrastructures; organizing local operating entities; establishing, staffing and managing foreign business locations; attracting local customers; navigating foreign

government taxes, regulations and permit requirements; enforceability of our contractual rights; trade restrictions, customs regulations, tariffs and price or exchange controls; and preferences in foreign nations for domestically manufactured products. Such conditions may increase our costs, impact our ability to sell our products and require significant management attention, and may harm our business if we are unable to manage them effectively.

***Our business may suffer if our products or features contain defects, fail to perform as expected or take longer than expected to become fully functional.***

If our products contain design or manufacturing defects that cause them not to perform as expected or that require repair, or certain features of our vehicles such as new Autopilot or FSD features take longer than expected to become enabled, are legally restricted or become subject to onerous regulation, our ability to develop, market and sell our products and services may be harmed, and we may experience delivery delays, product recalls, product liability, breach of warranty and consumer protection claims and significant warranty and other expenses. For example, we are developing self-driving and driver assist technologies to rely on vision-based sensors, unlike alternative technologies in development that additionally require other redundant sensors. There is no guarantee that any incremental changes in the specific equipment we deploy in our vehicles over time will not result in initial functional disparities from prior iterations or will perform as expected in the timeframe we anticipate, or at all.

Our products are also highly dependent on software, which is inherently complex and may contain latent defects or errors or be subject to external attacks. Issues experienced by our customers have included those related to the Model S and Model X 17-inch display screen, the panoramic roof and the 12-volt battery in the Model S, the seats and doors in the Model X and the operation of solar panels installed by us. Although we attempt to remedy any issues we observe in our products as effectively and rapidly as possible, such efforts may not be timely, may hamper production or may not completely satisfy our customers. While we have performed extensive internal testing on our products and features, we currently have a limited frame of reference by which to evaluate their long-term quality, reliability, durability and performance characteristics. There can be no assurance that we will be able to detect and fix any defects in our products prior to their sale to or installation for customers.

***We may be required to defend or insure against product liability claims.***

The automobile industry generally experiences significant product liability claims, and as such we face the risk of such claims in the event our vehicles do not perform or are claimed to not have performed as expected. As is true for other automakers, our vehicles have been involved and we expect in the future will be involved in accidents resulting in death or personal injury, and such accidents where Autopilot or FSD features are engaged are the subject of significant public attention. We have experienced, and we expect to continue to face, claims and regulatory scrutiny arising from or related to misuse or claimed failures of such new technologies that we are pioneering. In addition, the battery packs that we produce make use of lithium-ion cells. On rare occasions, lithium-ion cells can rapidly release the energy they contain by venting smoke and flames in a manner that can ignite nearby materials as well as other lithium-ion cells. While we have designed our battery packs to passively contain any single cell's release of energy without spreading to neighboring cells, there can be no assurance that a field or testing failure of our vehicles or other battery packs that we produce will not occur, in particular due to a high-speed crash. Likewise, as our solar energy systems and energy storage products generate and store electricity, they have the potential to fail or cause injury to people or property. Any product liability claim may subject us to lawsuits and substantial monetary damages, product recalls or redesign efforts, and even a meritless claim may require us to defend it, all of which may generate negative publicity and be expensive and time-consuming. In most jurisdictions, we generally self-insure against the risk of product liability claims for vehicle exposure, meaning that any product liability claims will likely have to be paid from company funds and not by insurance.

***We will need to maintain public credibility and confidence in our long-term business prospects in order to succeed.***

In order to maintain and grow our business, we must maintain credibility and confidence among customers, suppliers, analysts, investors, ratings agencies and other parties in our long-term financial viability and business prospects. Maintaining such confidence may be challenging due to our limited operating history relative to established competitors; customer unfamiliarity with our products; any delays we may experience in scaling manufacturing, delivery and service operations to meet demand; competition and uncertainty regarding the future of electric vehicles or our other products and services; our quarterly production and sales performance compared with market expectations; and other factors including those over which we have no control. In particular, Tesla's products, business, results of operations, statements and actions are well-publicized by a range of third parties. Such attention includes frequent criticism, which is often exaggerated or unfounded, such as speculation regarding the sufficiency or stability of our management team. Any such negative perceptions, whether caused by us or not, may harm our business and make it more difficult to raise additional funds if needed.

***We may be unable to effectively grow, or manage the compliance, residual value, financing and credit risks related to, our various financing programs.***

We offer financing arrangements for our vehicles in North America, Europe and Asia primarily ourselves and through various financial institutions. We also currently offer vehicle financing arrangements directly through our local subsidiaries in certain markets. Depending on the country, such arrangements are available for specified models and may include operating leases directly with us



under which we typically receive only a very small portion of the total vehicle purchase price at the time of lease, followed by a stream of payments over the term of the lease. We have also offered various arrangements for customers of our solar energy systems whereby they pay us a fixed payment to lease or finance the purchase of such systems or purchase electricity generated by them. If we do not successfully monitor and comply with applicable national, state and/or local financial regulations and consumer protection laws governing these transactions, we may become subject to enforcement actions or penalties.

The profitability of any directly-leased vehicles returned to us at the end of their leases depends on our ability to accurately project our vehicles' residual values at the outset of the leases, and such values may fluctuate prior to the end of their terms depending on various factors such as supply and demand of our used vehicles, economic cycles and the pricing of new vehicles. We have made in the past and may make in the future certain adjustments to our prices from time to time in the ordinary course of business, which may impact the residual values of our vehicles and reduce the profitability of our vehicle leasing program. The funding and growth of this program also relies on our ability to secure adequate financing and/or business partners. If we are unable to adequately fund our leasing program through internal funds, partners or other financing sources, and compelling alternative financing programs are not available for our customers who may expect or need such options, we may be unable to grow our vehicle deliveries. Furthermore, if our vehicle leasing business grows substantially, our business may suffer if we cannot effectively manage the resulting greater levels of residual risk.

Similarly, we have provided resale value guarantees to vehicle customers and partners for certain financing programs, under which such counterparties may sell their vehicles back to us at certain points in time at pre-determined amounts. However, actual resale values are subject to fluctuations over the term of the financing arrangements, such as from the vehicle pricing changes discussed above. If the actual resale values of any vehicles resold or returned to us pursuant to these programs are materially lower than the pre-determined amounts we have offered, our financial condition and operating results may be harmed.

Finally, our vehicle and solar energy system financing programs and our energy storage sales programs also expose us to customer credit risk. In the event of a widespread economic downturn or other catastrophic event, our customers may be unable or unwilling to satisfy their payment obligations to us on a timely basis or at all. If a significant number of our customers default, we may incur substantial credit losses and/or impairment charges with respect to the underlying assets.

***We must manage ongoing obligations under our agreement with the Research Foundation for the State University of New York relating to our Gigafactory New York.***

We are party to an operating lease and a research and development agreement through the SUNY Foundation. These agreements provide for the construction and use of our Gigafactory New York, which we have primarily used for the development and production of our Solar Roof and other solar products and components, energy storage components and Supercharger components, and for other lessor-approved functions. Under this agreement, we are obligated to, among other things, meet employment targets as well as specified minimum numbers of personnel in the State of New York and in Buffalo, New York and spend or incur \$5.00 billion in combined capital, operational expenses, costs of goods sold and other costs in the State of New York during a period that was initially 10 years beginning April 30, 2018. As we temporarily suspended most of our manufacturing operations at Gigafactory New York pursuant to a New York State executive order issued in March 2020 as a result of the COVID-19 pandemic, we were granted a deferral of our obligation to be compliant with our applicable targets through December 31, 2021 in an amendment memorialized in August 2021. As of December 31, 2021, we are currently in excess of such targets relating to investments and personnel in the State of New York and Buffalo. While we expect to have and grow significant operations at Gigafactory New York and the surrounding Buffalo area, any failure by us in any year over the course of the term of the agreement to meet all applicable future obligations may result in our obligation to pay a "program payment" of \$41 million to the SUNY Foundation for such year, the termination of our lease at Gigafactory New York which may require us to pay additional penalties, and/or the need to adjust certain of our operations, in particular our production ramp of the Solar Roof or other components. Any of the foregoing events may harm our business, financial condition and operating results.

***If we are unable to attract, hire and retain key employees and qualified personnel, our ability to compete may be harmed.***

The loss of the services of any of our key employees or any significant portion of our workforce could disrupt our operations or delay the development, introduction and ramp of our products and services. In particular, we are highly dependent on the services of Elon Musk, Technoking of Tesla and our Chief Executive Officer. None of our key employees is bound by an employment agreement for any specific term and we may not be able to successfully attract and retain senior leadership necessary to grow our business. Our future success also depends upon our ability to attract, hire and retain a large number of engineering, manufacturing, marketing, sales and delivery, service,

installation, technology and support personnel, especially to support our planned high-volume product sales, market and geographical expansion and technological innovations. Recruiting efforts, particularly for senior employees, may be time-consuming, which may delay the execution of our plans. If we are not successful in managing these risks, our business, financial condition and operating results may be harmed.

Employees may leave Tesla or choose other employers over Tesla due to various factors, such as a very competitive labor market for talented individuals with automotive or technology experience, or any negative publicity related to us. In regions where we

have or will have operations, particularly significant engineering and manufacturing centers, there is strong competition for individuals with skillsets needed for our business, including specialized knowledge of electric vehicles, engineering and electrical and building construction expertise. Moreover, we may be impacted by perceptions relating to reductions in force that we have conducted in the past in order to optimize our organizational structure and reduce costs and the departure of certain senior personnel for various reasons. Likewise, as a result of our temporary suspension of various U.S. manufacturing operations in the first half of 2020, in April 2020, we temporarily furloughed certain hourly employees and reduced most salaried employees' base salaries. We also compete with both mature and prosperous companies that have far greater financial resources than we do and start-ups and emerging companies that promise short-term growth opportunities.

Finally, our compensation philosophy for all of our personnel reflects our startup origins, with an emphasis on equity-based awards and benefits in order to closely align their incentives with the long-term interests of our stockholders. We periodically seek and obtain approval from our stockholders for future increases to the number of awards available under our equity incentive and employee stock purchase plans. If we are unable to obtain the requisite stockholder approvals for such future increases, we may have to expend additional cash to compensate our employees and our ability to retain and hire qualified personnel may be harmed.

***We are highly dependent on the services of Elon Musk, Technoking of Tesla and our Chief Executive Officer.***

We are highly dependent on the services of Elon Musk, Technoking of Tesla and our Chief Executive Officer. Although Mr. Musk spends significant time with Tesla and is highly active in our management, he does not devote his full time and attention to Tesla. Mr. Musk also currently serves as Chief Executive Officer and Chief Technical Officer of Space Exploration Technologies Corp., a developer and manufacturer of space launch vehicles, and is involved in other emerging technology ventures.

***Our information technology systems or data, or those of our service providers or customers or users could be subject to cyber-attacks or other security incidents, which could result in data breaches, intellectual property theft, claims, litigation, regulatory investigations, significant liability, reputational damage and other adverse consequences.***

We continue to expand our information technology systems as our operations grow, such as product data management, procurement, inventory management, production planning and execution, sales, service and logistics, dealer management, financial, tax and regulatory compliance systems. This includes the implementation of new internally developed systems and the deployment of such systems in the U.S. and abroad. While, we maintain information technology measures designed to protect us against intellectual property theft, data breaches, sabotage and other external or internal cyber-attacks or misappropriation, our systems and those of our service providers are potentially vulnerable to malware, ransomware, viruses, denial-of-service attacks, phishing attacks, social engineering, computer hacking, unauthorized access, exploitation of bugs, defects and vulnerabilities, breakdowns, damage, interruptions, system malfunctions, power outages, terrorism, acts of vandalism, security breaches, security incidents, inadvertent or intentional actions by employees or other third parties, and other cyber-attacks.

To the extent any security incident results in unauthorized access or damage to or acquisition, use, corruption, loss, destruction, alteration or dissemination of our data, including intellectual property and personal information, or our products or vehicles, or for it to be believed or reported that any of these occurred, it could disrupt our business, harm our reputation, compel us to comply with applicable data breach notification laws, subject us to time consuming, distracting and expensive litigation, regulatory investigation and oversight, mandatory corrective action, require us to verify the correctness of database contents, or otherwise subject us to liability under laws, regulations and contractual obligations, including those that protect the privacy and security of personal information. This could result in increased costs to us and result in significant legal and financial exposure and/or reputational harm.

We also rely on service providers, and similar incidents relating to their information technology systems could also have a material adverse effect on our business. There have been and may continue to be significant supply chain attacks. Our service providers, including our workforce management software provider, have been subject to ransomware and other security incidents, and we cannot guarantee that our or our service providers' systems have not been breached or that they do not contain exploitable defects, bugs, or vulnerabilities that could result in a security incident, or other disruption to, our or our service providers' systems. Our ability to monitor our service providers' security measures is limited, and, in any event, malicious third parties may be able to circumvent those security measures.

Further, the implementation, maintenance, segregation and improvement of these systems require significant management time, support and cost, and there are inherent risks associated with developing, improving and expanding our core systems as well as implementing new systems and updating current systems, including

disruptions to the related areas of business operation. These risks may affect our ability to manage our data and inventory, procure parts or supplies or manufacture, sell, deliver and service products, adequately protect our intellectual property or achieve and maintain compliance with, or realize available benefits under, tax laws and other applicable regulations.

Moreover, if we do not successfully implement, maintain or expand these systems as planned, our operations may be disrupted, our ability to accurately and/or timely report our financial results could be impaired and deficiencies may arise in our internal control over financial reporting, which may impact our ability to certify our financial results. Moreover, our proprietary information,

including intellectual property and personal information, could be compromised or misappropriated and our reputation may be adversely affected. If these systems or their functionality do not operate as we expect them to, we may be required to expend significant resources to make corrections or find alternative sources for performing these functions.

***Any unauthorized control or manipulation of our products' systems could result in loss of confidence in us and our products.***

Our products contain complex information technology systems. For example, our vehicles and energy storage products are designed with built-in data connectivity to accept and install periodic remote updates from us to improve or update their functionality. While we have implemented security measures intended to prevent unauthorized access to our information technology networks, our products and their systems, malicious entities have reportedly attempted, and may attempt in the future, to gain unauthorized access to modify, alter and use such networks, products and systems to gain control of, or to change, our products' functionality, user interface and performance characteristics or to gain access to data stored in or generated by our products. We encourage reporting of potential vulnerabilities in the security of our products through our security vulnerability reporting policy, and we aim to remedy any reported and verified vulnerability. However, there can be no assurance that any vulnerabilities will not be exploited before they can be identified, or that our remediation efforts are or will be successful.

Any unauthorized access to or control of our products or their systems or any loss of data could result in legal claims or government investigations. In addition, regardless of their veracity, reports of unauthorized access to our products, their systems or data, as well as other factors that may result in the perception that our products, their systems or data are capable of being hacked, may harm our brand, prospects and operating results. We have been the subject of such reports in the past.

***Our business may be adversely affected by any disruptions caused by union activities.***

It is not uncommon for employees of certain trades at companies such as us to belong to a union, which can result in higher employee costs and increased risk of work stoppages. Moreover, regulations in some jurisdictions outside of the U.S. mandate employee participation in industrial collective bargaining agreements and work councils with certain consultation rights with respect to the relevant companies' operations. Although we work diligently to provide the best possible work environment for our employees, they may still decide to join or seek recognition to form a labor union, or we may be required to become a union signatory. From time to time, labor unions have engaged in campaigns to organize certain of our operations, as part of which such unions have filed unfair labor practice charges against us with the National Labor Relations Board (the "NLRB"), and they may do so in the future. In September 2019, an administrative law judge issued a recommended decision for Tesla on certain issues and against us on certain others. In March 2021, the NLRB adopted a portion of the recommendation and overturned others. Tesla appealed the decision to the United States Circuit Court for the Fifth Circuit, which is currently pending. Any unfavorable ultimate outcome for Tesla may have a negative impact on the perception of Tesla's treatment of our employees. Furthermore, we are directly or indirectly dependent upon companies with unionized work forces, such as suppliers and trucking and freight companies. Any work stoppages or strikes organized by such unions could delay the manufacture and sale of our products and may harm our business and operating results.

***We may choose to or be compelled to undertake product recalls or take other similar actions.***

As a manufacturing company, we must manage the risk of product recalls with respect to our products. Recalls for our vehicles have resulted from, for example, industry-wide issues with airbags from a particular supplier, concerns of corrosion in certain Model S and Model X power steering assist motor bolts, suspension failures in certain Model S and Model X, issues with certain Model S and Model X media control units and torquing of bolts to internal specifications on certain Model 3 and Model Y, misalignment of the frunk latch assembly on certain Model S and unavailability of the rearview camera display on certain Model 3. In addition to recalls initiated by us for various causes, testing of or investigations into our products by government regulators or industry groups may compel us to initiate product recalls or may result in negative public perceptions about the safety of our products, even if we disagree with the defect determination or have data that shows the actual safety risk to be non-existent. In the future, we may voluntarily or involuntarily initiate recalls if any of our products are determined by us or a regulator to contain a safety defect or be noncompliant with applicable laws and regulations, such as U.S. federal motor vehicle safety standards. Such recalls, whether voluntary or involuntary or caused by systems or components engineered or manufactured by us or our suppliers, could result in significant expense, supply chain complications and service burdens, and may harm our brand, business, prospects, financial condition and operating results.

***Our current and future warranty reserves may be insufficient to cover future warranty claims.***

We provide a manufacturer's warranty on all new and used Tesla vehicles we sell. We also provide certain warranties with respect to the energy generation and storage systems we sell, including on their installation and maintenance. For components not manufactured by us, we generally pass through to our customers the applicable manufacturers' warranties, but may retain some warranty responsibilities for some or all of the life of such components. As part of our energy generation and storage system contracts, we may provide the customer with performance guarantees that guarantee that the underlying system will meet or exceed the minimum energy generation or other energy performance requirements specified in the contract. Under these performance guarantees, we generally bear the risk of electricity production or other performance shortfalls, even if they result from failures in components

from third party manufacturers. These risks are exacerbated in the event such manufacturers cease operations or fail to honor their warranties.

If our warranty reserves are inadequate to cover future warranty claims on our products, our financial condition and operating results may be harmed. Warranty reserves include our management's best estimates of the projected costs to repair or to replace items under warranty, which are based on actual claims incurred to date and an estimate of the nature, frequency and costs of future claims. Such estimates are inherently uncertain and changes to our historical or projected experience, especially with respect to products such as Model 3, Model Y and Solar Roof that we have introduced relatively recently and/or that we expect to produce at significantly greater volumes than our past products, may cause material changes to our warranty reserves in the future.

***Our insurance coverage strategy may not be adequate to protect us from all business risks.***

We may be subject, in the ordinary course of business, to losses resulting from products liability, accidents, acts of God and other claims against us, for which we may have no insurance coverage. As a general matter, we do not maintain as much insurance coverage as many other companies do, and in some cases, we do not maintain any at all. Additionally, the policies that we do have may include significant deductibles or self-insured retentions, policy limitations and exclusions, and we cannot be certain that our insurance coverage will be sufficient to cover all future losses or claims against us. A loss that is uninsured or which exceeds policy limits may require us to pay substantial amounts, which may harm our financial condition and operating results.

***Our debt agreements contain covenant restrictions that may limit our ability to operate our business.***

The terms of certain of our credit facilities, including our senior asset-based revolving credit agreement, contain, and any of our other future debt agreements may contain, covenant restrictions that limit our ability to operate our business, including restrictions on our ability to, among other things, incur additional debt or issue guarantees, create liens, repurchase stock, or make other restricted payments, and make certain voluntary prepayments of specified debt. In addition, under certain circumstances we are required to comply with a fixed charge coverage ratio. As a result of these covenants, our ability to respond to changes in business and economic conditions and engage in beneficial transactions, including to obtain additional financing as needed, may be restricted. Furthermore, our failure to comply with our debt covenants could result in a default under our debt agreements, which could permit the holders to accelerate our obligation to repay the debt. If any of our debt is accelerated, we may not have sufficient funds available to repay it.

***Additional funds may not be available to us when we need or want them.***

Our business and our future plans for expansion are capital-intensive, and the specific timing of cash inflows and outflows may fluctuate substantially from period to period. We may need or want to raise additional funds through the issuance of equity, equity-related or debt securities or through obtaining credit from financial institutions to fund, together with our principal sources of liquidity, the costs of developing and manufacturing our current or future products, to pay any significant unplanned or accelerated expenses or for new significant strategic investments, or to refinance our significant consolidated indebtedness, even if not required to do so by the terms of such indebtedness. We cannot be certain that additional funds will be available to us on favorable terms when required, or at all. If we cannot raise additional funds when we need them, our financial condition, results of operations, business and prospects could be materially and adversely affected.

***We may be negatively impacted by any early obsolescence of our manufacturing equipment.***

We depreciate the cost of our manufacturing equipment over their expected useful lives. However, product cycles or manufacturing technology may change periodically, and we may decide to update our products or manufacturing processes more quickly than expected. Moreover, improvements in engineering and manufacturing expertise and efficiency may result in our ability to manufacture our products using less of our currently installed equipment. Alternatively, as we ramp and mature the production of our products to higher levels, we may discontinue the use of already installed equipment in favor of different or additional equipment. The useful life of any equipment that would be retired early as a result would be shortened, causing the depreciation on such equipment to be accelerated, and our results of operations may be harmed.

***We hold and may acquire digital assets that may be subject to volatile market prices, impairment and unique risks of loss.***

In January 2021, we updated our investment policy to provide us with more flexibility to further diversify and maximize returns on our cash that is not required to maintain adequate operating liquidity, allowing us to invest a portion of such cash in certain alternative reserve assets including digital assets, gold bullion, gold exchange-traded funds and other assets as specified in the future. Thereafter, we invested certain of such cash in bitcoin and also

accepted bitcoin as a form of payment for sales of certain of our products in specified regions, subject to applicable laws, and suspended this practice in May 2021. We believe in the long-term potential of digital assets both as an investment and also as a liquid alternative to cash. As with any investment and consistent with how we manage fiat-based cash and cash equivalent accounts, we may increase or decrease our holdings of digital assets at any time based on the needs of the business and on our view of market and environmental conditions.



The prices of digital assets have been in the past and may continue to be highly volatile, including as a result of various associated risks and uncertainties. For example, the prevalence of such assets is a relatively recent trend, and their long-term adoption by investors, consumers and businesses is unpredictable. Moreover, their lack of a physical form, their reliance on technology for their creation, existence and transactional validation and their decentralization may subject their integrity to the threat of malicious attacks and technological obsolescence. Finally, the extent to which securities laws or other regulations apply or may apply in the future to such assets is unclear and may change in the future. If we hold digital assets and their values decrease relative to our purchase prices, our financial condition may be harmed.

Moreover, digital assets are currently considered indefinite-lived intangible assets under applicable accounting rules, meaning that any decrease in their fair values below our carrying values for such assets at any time subsequent to their acquisition will require us to recognize impairment charges, whereas we may make no upward revisions for any market price increases until a sale, which may adversely affect our operating results in any period in which such impairment occurs. Moreover, there is no guarantee that future changes in GAAP will not require us to change the way we account for digital assets held by us.

Finally, as intangible assets without centralized issuers or governing bodies, digital assets have been, and may in the future be, subject to security breaches, cyberattacks or other malicious activities, as well as human errors or computer malfunctions that may result in the loss or destruction of private keys needed to access such assets. While we intend to take all reasonable measures to secure any digital assets, if such threats are realized or the measures or controls we create or implement to secure our digital assets fail, it could result in a partial or total misappropriation or loss of our digital assets, and our financial condition and operating results may be harmed.

***There is no guarantee that we will have sufficient cash flow from our business to pay our indebtedness or that we will not incur additional indebtedness.***

As of December 31, 2021, we and our subsidiaries had outstanding \$5.38 billion in aggregate principal amount of indebtedness (see *Note 11, Debt*, to the consolidated financial statements included elsewhere in this Annual Report on Form 10-K). Our consolidated indebtedness may increase our vulnerability to any generally adverse economic and industry conditions. We and our subsidiaries may, subject to the limitations in the terms of our existing and future indebtedness, incur additional debt, secure existing or future debt or recapitalize our debt.

Our ability to make scheduled payments of the principal and interest on our indebtedness when due, to make payments upon conversion or repurchase demands with respect to our convertible senior notes or to refinance our indebtedness as we may need or desire, depends on our future performance, which is subject to economic, financial, competitive and other factors beyond our control. Our business may not continue to generate cash flow from operations in the future sufficient to satisfy our obligations under our existing indebtedness and any future indebtedness we may incur, and to make necessary capital expenditures. If we are unable to generate such cash flow, we may be required to adopt one or more alternatives, such as reducing or delaying investments or capital expenditures, selling assets, refinancing or obtaining additional equity capital on terms that may be onerous or highly dilutive. Our ability to refinance existing or future indebtedness will depend on the capital markets and our financial condition at such time. In addition, our ability to make payments may be limited by law, by regulatory authority or by agreements governing our future indebtedness. We may not be able to engage in these activities on desirable terms or at all, which may result in a default on our existing or future indebtedness and harm our financial condition and operating results.

***We are exposed to fluctuations in currency exchange rates.***

We transact business globally in multiple currencies and have foreign currency risks related to our revenue, costs of revenue, operating expenses and localized subsidiary debt denominated in currencies other than the U.S. dollar, currently primarily the Chinese yuan, euro, Canadian dollar and Norwegian krone. To the extent we have significant revenues denominated in such foreign currencies, any strengthening of the U.S. dollar would tend to reduce our revenues as measured in U.S. dollars, as we have historically experienced. In addition, a portion of our costs and expenses have been, and we anticipate will continue to be, denominated in foreign currencies, including the Chinese yuan and Japanese yen. If we do not have fully offsetting revenues in these currencies and if the value of the U.S. dollar depreciates significantly against these currencies, our costs as measured in U.S. dollars as a percent of our revenues will correspondingly increase and our margins will suffer. Moreover, while we undertake limited hedging activities intended to offset the impact of currency translation exposure, it is impossible to predict or eliminate such impact. As a result, our operating results may be harmed.

***We may need to defend ourselves against intellectual property infringement claims, which may be time-consuming and expensive.***

Our competitors or other third parties may hold or obtain patents, copyrights, trademarks or other proprietary rights that could prevent, limit or interfere with our ability to make, use, develop, sell or market our products and services, which could make it more difficult for us to operate our business. From time to time, the holders of such intellectual property rights may assert their rights and urge us to take licenses and/or may bring suits alleging infringement or misappropriation of such rights, which could result in

substantial costs, negative publicity and management attention, regardless of merit. While we endeavor to obtain and protect the intellectual property rights that we expect will allow us to retain or advance our strategic initiatives, there can be no assurance that we will be able to adequately identify and protect the portions of intellectual property that are strategic to our business, or mitigate the risk of potential suits or other legal demands by our competitors. Accordingly, we may consider the entering into licensing agreements with respect to such rights, although no assurance can be given that such licenses can be obtained on acceptable terms or that litigation will not occur, and such licenses and associated litigation could significantly increase our operating expenses. In addition, if we are determined to have or believe there is a high likelihood that we have infringed upon a third party's intellectual property rights, we may be required to cease making, selling or incorporating certain components or intellectual property into the goods and services we offer, to pay substantial damages and/or license royalties, to redesign our products and services and/or to establish and maintain alternative branding for our products and services. In the event that we are required to take one or more such actions, our brand, business, financial condition and operating results may be harmed.

***Increased scrutiny and changing expectations from stakeholders with respect to the Company's ESG practices may result in additional costs or risks.***

Companies across many industries are facing increasing scrutiny related to their ESG practices. Investor advocacy groups, certain institutional investors, investment funds and other influential investors are also increasingly focused on ESG practices and in recent years have placed increasing importance on the non-financial impacts of their investments. While our mission is to accelerate the world's transition to sustainable energy, if our ESG practices do not meet investor or other industry stakeholder expectations, which continue to evolve, we may incur additional costs and our brand, ability to attract and retain qualified employees and business may be harmed.

***Our operations could be adversely affected by events outside of our control, such as natural disasters, wars or health epidemics.***

We may be impacted by natural disasters, wars, health epidemics, weather conditions, the long-term effects of climate change, power outages or other events outside of our control. For example, our Fremont Factory and Gigafactory Nevada are located in seismically active regions in Northern California and Nevada, and our Gigafactory Shanghai is located in a flood-prone area. Moreover, the area in which our Gigafactory Texas is located experienced severe winter storms in the first quarter of 2021 that had a widespread impact on utilities and transportation. If major disasters such as earthquakes, floods or other climate-related events occur, or our information system or communication breaks down or operates improperly, our headquarters and production facilities may be seriously damaged, or we may have to stop or delay production and shipment of our products. In addition, the global COVID-19 pandemic has impacted economic markets, manufacturing operations, supply chains, employment and consumer behavior in nearly every geographic region and industry across the world, and we have been, and may in the future be, adversely affected as a result. We may incur expenses or delays relating to such events outside of our control, which could have a material adverse impact on our business, operating results and financial condition.

## **Risks Related to Government Laws and Regulations**

***Demand for our products and services may be impacted by the status of government and economic incentives supporting the development and adoption of such products.***

Government and economic incentives that support the development and adoption of electric vehicles in the U.S. and abroad, including certain tax exemptions, tax credits and rebates, may be reduced, eliminated or exhausted from time to time. For example, previously available incentives favoring electric vehicles in areas including Ontario, Canada, Germany, Hong Kong, Denmark and California have expired or were cancelled or temporarily unavailable, and in some cases were not eventually replaced or reinstituted, which may have negatively impacted sales. Certain government and economic incentives may also be implemented that provide disproportionate benefits to manufacturers who assemble domestically, have local suppliers or have other characteristics that may not apply to Tesla. Any similar developments could have some negative impact on demand for our vehicles, and we and our customers may have to adjust to them.

In addition, certain governmental rebates, tax credits and other financial incentives that are currently available with respect to our solar and energy storage product businesses allow us to lower our costs and encourage customers to buy our products and investors to invest in our solar financing funds. However, these incentives may expire when the allocated funding is exhausted, reduced or terminated as renewable energy adoption rates increase, sometimes without warning. For example, the U.S. federal government currently offers certain tax credits for the installation of solar power facilities and energy storage systems that are charged from a co-sited solar power facility; however, these tax credits are currently scheduled to decline and/or expire in 2023 and beyond. Likewise, in jurisdictions where net metering is currently available, our customers receive bill credits from utilities for energy that their solar energy systems generate and export to the grid in excess of the electric load they use. The benefit available under net

metering has been or has been proposed to be reduced, altered or eliminated in several jurisdictions, and has also been contested and may continue to be contested before the Federal Energy Regulatory Commission. Any reductions or terminations of such incentives may harm our business, prospects, financial condition and operating results by making our products less competitive for customers,

increasing our cost of capital and adversely impacting our ability to attract investment partners and to form new financing funds for our solar and energy storage assets.

Finally, we and our fund investors claim these U.S. federal tax credits and certain state incentives in amounts based on independently appraised fair market values of our solar and energy storage systems. Some governmental authorities have audited such values and in certain cases have determined that these values should be lower, and they may do so again in the future. Such determinations may result in adverse tax consequences and/or our obligation to make indemnification or other payments to our funds or fund investors.

***We are subject to evolving laws and regulations that could impose substantial costs, legal prohibitions or unfavorable changes upon our operations or products.***

As we grow our manufacturing operations in additional regions, we are or will be subject to complex environmental, manufacturing, health and safety laws and regulations at numerous jurisdictional levels in the U.S., China, Germany and other locations abroad, including laws relating to the use, handling, storage, recycling, disposal and/or human exposure to hazardous materials, product material inputs and post-consumer products and with respect to constructing, expanding and maintaining our facilities. New, or changes in, environmental and climate change laws, regulations or rules could also lead to increased costs of compliance, including remediations of any discovered issues, and changes to our operations, which may be significant, and any failures to comply could result in significant expenses, delays or fines. In addition, as we have increased our employee headcount and operations, we are and may continue to be subject to increased scrutiny, including litigation and government investigations relating to allegations such as discrimination and workplace misconduct, that we will need to defend against. If we are unable to successfully defend ourselves in such litigation or government investigations, it may harm our brand, ability to attract and retain qualified employees, business and financial condition. We are also subject to laws and regulations applicable to the supply, manufacture, import, sale and service of our products both domestically and abroad. For example, in countries outside of the U.S., we are required to meet standards relating to vehicle safety, fuel economy and emissions that are often materially different from requirements in the U.S., thus resulting in additional investment into the vehicles and systems to ensure regulatory compliance in those countries. This process may include official review and certification of our vehicles by foreign regulatory agencies prior to market entry, as well as compliance with foreign reporting and recall management systems requirements.

In particular, we offer in our vehicles Autopilot and FSD Capability features that today assist drivers with certain tedious and potentially dangerous aspects of road travel, but which currently require drivers to remain fully engaged in the driving operation. We are continuing to develop our FSD Capability technology with the goal of achieving fully self-driving capability in the future. There are a variety of international, federal and state regulations that may apply to the sale, registration and operation of fully self-driving vehicles, which include many existing vehicle standards that were not originally intended to apply to vehicles that may not have a human driver. Such regulations continue to rapidly change, which increases the likelihood of a patchwork of complex or conflicting regulations, or may delay products or restrict self-driving features and their availability, which could adversely affect our business.

Finally, as a manufacturer, installer and service provider with respect to solar generation and energy storage systems, a supplier of electricity generated and stored by certain of the solar energy and energy storage systems we install for customers, and a provider of grid services through virtual power plant models, we are impacted by federal, state and local regulations and policies concerning electricity pricing, the interconnection of electricity generation and storage equipment with the electrical grid and the sale of electricity generated by third party-owned systems. If regulations and policies that adversely impact the interconnection or use of our solar and energy storage systems are introduced, they could deter potential customers from purchasing our solar and energy storage products and services, threaten the economics of our existing contracts and cause us to cease solar and energy storage system sales and services in the relevant jurisdictions, which may harm our business, financial condition and operating results.

***Any failure by us to comply with a variety of U.S. and international privacy and consumer protection laws may harm us.***

Any failure by us or our vendor or other business partners to comply with our public privacy notice or with federal, state or international privacy, data protection or security laws or regulations relating to the processing, collection, use, retention, security and transfer of personally identifiable information could result in regulatory or litigation-related actions against us, legal liability, fines, damages, ongoing audit requirements and other significant costs. Substantial expenses and operational changes may be required in connection with maintaining compliance with such laws, and even an unsuccessful challenge by customers or regulatory authorities of our activities could result in adverse publicity and could require a costly response from and defense by us. In addition, certain emerging privacy laws are still subject to a high degree of uncertainty as to their interpretation, application and impact, and may require extensive system and operational changes, be difficult to implement, increase our operating costs, adversely impact

the cost or attractiveness of the products or services we offer, or result in adverse publicity and harm our reputation. For example, the General Data Protection Regulation applies to the processing of personal information collected from individuals located in the European Union, and has created new compliance obligations and significantly increased fines for noncompliance. Similarly, the California Consumer Privacy Act imposes certain legal obligations on our use and processing of personal information related to California residents. Finally, new privacy and cybersecurity laws have come into effect in China. Notwithstanding our efforts to protect the security and integrity of our customers' personal information, we may be required to expend significant resources to comply with data

breach requirements if, for example, third parties improperly obtain and use the personal information of our customers or we otherwise experience a data loss with respect to customers' personal information. A major breach of our network security and systems may result in fines, penalties and damages and harm our brand, prospects and operating results.

***We could be subject to liability, penalties and other restrictive sanctions and adverse consequences arising out of certain governmental investigations and proceedings.***

We are cooperating with certain government investigations as discussed in *Note 15, Commitments and Contingencies*, to the consolidated financial statements included elsewhere in this Annual Report on Form 10-K. To our knowledge, no government agency in any such ongoing investigation has concluded that any wrongdoing occurred. However, we cannot predict the outcome or impact of any such ongoing matters, and there exists the possibility that we could be subject to liability, penalties and other restrictive sanctions and adverse consequences if the SEC, the U.S. Department of Justice or any other government agency were to pursue legal action in the future. Moreover, we expect to incur costs in responding to related requests for information and subpoenas, and if instituted, in defending against any governmental proceedings.

For example, on October 16, 2018, the U.S. District Court for the Southern District of New York entered a final judgment approving the terms of a settlement filed with the Court on September 29, 2018, in connection with the actions taken by the SEC relating to Mr. Musk's statement on August 7, 2018 that he was considering taking Tesla private. Pursuant to the settlement, we, among other things, paid a civil penalty of \$20 million, appointed an independent director as the chair of our board of directors, appointed two additional independent directors to our board of directors and made further enhancements to our disclosure controls and other corporate governance-related matters. On April 26, 2019, this settlement was amended to clarify certain of the previously-agreed disclosure procedures, which was subsequently approved by the Court. All other terms of the prior settlement were reaffirmed without modification. Although we intend to continue to comply with the terms and requirements of the settlement, if there is a lack of compliance or an alleged lack of compliance, additional enforcement actions or other legal proceedings may be instituted against us.

***We may face regulatory challenges to or limitations on our ability to sell vehicles directly.***

While we intend to continue to leverage our most effective sales strategies, including sales through our website, we may not be able to sell our vehicles through our own stores in certain states in the U.S. with laws that may be interpreted to impose limitations on this direct-to-consumer sales model. It has also been asserted that the laws in some states limit our ability to obtain dealer licenses from state motor vehicle regulators, and such assertions persist. In certain locations, decisions by regulators permitting us to sell vehicles have been, and may be, challenged by dealer associations and others as to whether such decisions comply with applicable state motor vehicle industry laws. We have prevailed in many of these lawsuits and such results have reinforced our continuing belief that state laws were not intended to apply to a manufacturer that does not have franchise dealers. In some states, there have also been regulatory and legislative efforts by dealer associations to propose laws that, if enacted, would prevent us from obtaining dealer licenses in their states given our current sales model. A few states have passed legislation that clarifies our ability to operate, but at the same time limits the number of dealer licenses we can obtain or stores that we can operate. The application of state laws applicable to our operations continues to be difficult to predict.

Internationally, there may be laws in jurisdictions we have not yet entered or laws we are unaware of in jurisdictions we have entered that may restrict our sales or other business practices. Even for those jurisdictions we have analyzed, the laws in this area can be complex, difficult to interpret and may change over time. Continued regulatory limitations and other obstacles interfering with our ability to sell vehicles directly to consumers may harm our financial condition and operating results.

## **Risks Related to the Ownership of Our Common Stock**

***The trading price of our common stock is likely to continue to be volatile.***

The trading price of our common stock has been highly volatile and could continue to be subject to wide fluctuations in response to various factors, some of which are beyond our control. Our common stock has experienced over the last 52 weeks an intra-day trading high of \$1,243.49 per share and a low of \$539.49 per share. The stock market in general, and the market for technology companies in particular, has experienced extreme price and volume fluctuations that have often been unrelated or disproportionate to the operating performance of those companies. In particular, a large proportion of our common stock has been historically and may in the future be traded by short sellers which may put pressure on the supply and demand for our common stock, further influencing volatility in its market price. Public perception and other factors outside of our control may additionally impact the stock price of companies like us that garner a disproportionate degree of public attention, regardless of actual operating performance. In addition, in the past, following periods of volatility in the overall market or the market

price of our shares, securities class action litigation has been filed against us. While we defend such actions vigorously, any judgment against us or any future stockholder litigation could result in substantial costs and a diversion of our management's attention and resources.



***Our financial results may vary significantly from period to period due to fluctuations in our operating costs and other factors.***

We expect our period-to-period financial results to vary based on our operating costs, which we anticipate will fluctuate as the pace at which we continue to design, develop and manufacture new products and increase production capacity by expanding our current manufacturing facilities and adding future facilities, may not be consistent or linear between periods. Additionally, our revenues from period to period may fluctuate as we introduce existing products to new markets for the first time and as we develop and introduce new products. As a result of these factors, we believe that quarter-to-quarter comparisons of our financial results, especially in the short term, are not necessarily meaningful and that these comparisons cannot be relied upon as indicators of future performance. Moreover, our financial results may not meet expectations of equity research analysts, ratings agencies or investors, who may be focused only on short-term quarterly financial results. If any of this occurs, the trading price of our stock could fall substantially, either suddenly or over time.

***We may fail to meet our publicly announced guidance or other expectations about our business, which could cause our stock price to decline.***

We may provide from time to time guidance regarding our expected financial and business performance. Correctly identifying key factors affecting business conditions and predicting future events is inherently an uncertain process, and our guidance may not ultimately be accurate and has in the past been inaccurate in certain respects, such as the timing of new product manufacturing ramps. Our guidance is based on certain assumptions such as those relating to anticipated production and sales volumes (which generally are not linear throughout a given period), average sales prices, supplier and commodity costs and planned cost reductions. If our guidance varies from actual results due to our assumptions not being met or the impact on our financial performance that could occur as a result of various risks and uncertainties, the market value of our common stock could decline significantly.

***Transactions relating to our convertible senior notes may dilute the ownership interest of existing stockholders, or may otherwise depress the price of our common stock.***

The conversion of some or all of the convertible senior notes issued by us or our subsidiaries would dilute the ownership interests of existing stockholders to the extent we deliver shares upon conversion of any of such notes by their holders, and we may be required to deliver a significant number of shares. Any sales in the public market of the common stock issuable upon such conversion could adversely affect their prevailing market prices. In addition, the existence of the convertible senior notes may encourage short selling by market participants because the conversion of such notes could be used to satisfy short positions, or the anticipated conversion of such notes into shares of our common stock could depress the price of our common stock.

***If Elon Musk were forced to sell shares of our common stock that he has pledged to secure certain personal loan obligations, such sales could cause our stock price to decline.***

Certain banking institutions have made extensions of credit to Elon Musk, our Chief Executive Officer, a portion of which was used to purchase shares of common stock in certain of our public offerings and private placements at the same prices offered to third-party participants in such offerings and placements. We are not a party to these loans, which are partially secured by pledges of a portion of the Tesla common stock currently owned by Mr. Musk. If the price of our common stock were to decline substantially, Mr. Musk may be forced by one or more of the banking institutions to sell shares of Tesla common stock to satisfy his loan obligations if he could not do so through other means. Any such sales could cause the price of our common stock to decline further.

***Anti-takeover provisions contained in our governing documents, applicable laws and our convertible senior notes could impair a takeover attempt.***

Our certificate of incorporation and bylaws afford certain rights and powers to our board of directors that may facilitate the delay or prevention of an acquisition that it deems undesirable. We are also subject to Section 203 of the Delaware General Corporation Law and other provisions of Delaware law that limit the ability of stockholders in certain situations to effect certain business combinations. In addition, the terms of our convertible senior notes may require us to repurchase such notes in the event of a fundamental change, including a takeover of our company. Any of the foregoing provisions and terms that has the effect of delaying or deterring a change in control could limit the opportunity for our stockholders to receive a premium for their shares of our common stock, and could also affect the price that some investors are willing to pay for our common stock.

## ITEM 1B. UNRESOLVED STAFF COMMENTS

None.

## ITEM 2. PROPERTIES

We are headquartered in Austin, Texas. Our principal facilities include a large number of properties in North America, Europe and Asia utilized for manufacturing and assembly, warehousing, engineering, retail and service locations, Supercharger sites and administrative and sales offices. Our facilities are used to support both of our reporting segments, and are suitable and adequate for the conduct of our business. We primarily lease such facilities with the exception of some manufacturing facilities. The following table sets forth the location of our primary owned and leased manufacturing facilities.

Primary Manufacturing Facilities	Location	Owned or Leased
Gigafactory Texas	Austin, Texas	Owned
Fremont Factory	Fremont, California	Owned
Gigafactory Nevada	Sparks, Nevada	Owned
Gigafactory Berlin	Grunheide, Germany	Owned
Gigafactory Shanghai	Shanghai, China	*
Gigafactory New York	Buffalo, New York	Leased

\* We own the building and the land use rights with an initial term of 50 years. The land use rights are treated as operating lease right-of-use assets.

## ITEM 3. LEGAL PROCEEDINGS

For a description of our material pending legal proceedings, please see *Note 15, Commitments and Contingencies*, to the consolidated financial statements included elsewhere in this Annual Report on Form 10-K.

In addition, each of the matters below is being disclosed pursuant to Item 103 of Regulation S-K because it relates to environmental regulations and aggregate civil penalties that we currently believe could potentially exceed \$1 million. We believe that any proceeding that is material to our business or financial condition is likely to have potential penalties far in excess of such amount.

The German Umweltbundesamt has issued our subsidiary in Germany a notice and fine in the amount of 12 million euro alleging its non-compliance under applicable laws relating to market participation notifications and take-back obligations with respect to end-of-life battery products required thereunder. In response to Tesla's objection, the German Umweltbundesamt issued Tesla a revised fine notice dated April 29, 2021 in which it reduced the original fine amount to 1.45 million euro. This is primarily relating to administrative requirements, but Tesla has continued to take back battery packs, and although we cannot predict the outcome of this matter, including the final amount of any penalties, we filed a new objection in June 2021 and it is not expected to have a material adverse impact on our business.

In April 2021, we received a notice from the Environmental Protection Agency (the "EPA") alleging that Tesla failed to provide records demonstrating compliance with certain requirements under the applicable National Emission Standards for Hazardous Air Pollutants under the Clean Air Act of 1963, as amended, relating to Surface Coating of Automobiles and Light-Duty Trucks regulations. Tesla has responded to all information requests from the EPA and refutes the allegations. Tesla continues to cooperate with the EPA in resolving this matter, and it is not currently expected to have a material adverse impact on our business.

District attorneys in certain California counties are conducting an investigation into Tesla's waste segregation practices pursuant to Cal. Health & Saf. Code section 25100 et seq. and Cal. Civil Code § 1798.80. Tesla has implemented various remedial measures, including conducting training and audits, and enhancements to its site waste management programs. While the outcome of this matter cannot be determined at this time, it is not currently expected to have a material adverse impact on our business.

## ITEM 4. MINE SAFETY DISCLOSURES

Not applicable.

## PART II

### ITEM 5. MARKET FOR REGISTRANT'S COMMON EQUITY, RELATED STOCKHOLDER MATTERS AND ISSUER PURCHASES OF EQUITY SECURITIES

#### Market Information

Our common stock has traded on The NASDAQ Global Select Market under the symbol "TSLA" since it began trading on June 29, 2010. Our initial public offering was priced at \$3.40 per share on June 28, 2010 as adjusted to give effect to the five-for-one stock split effected in the form of a stock dividend in August 2020.

#### Holders

As of January 31, 2022, there were 7,051 holders of record of our common stock. A substantially greater number of holders of our common stock are "street name" or beneficial holders, whose shares are held by banks, brokers and other financial institutions.

#### Dividend Policy

We have never declared or paid cash dividends on our common stock. We currently do not anticipate paying any cash dividends in the foreseeable future. Any future determination to declare cash dividends will be made at the discretion of our board of directors, subject to applicable laws, and will depend on our financial condition, results of operations, capital requirements, general business conditions and other factors that our board of directors may deem relevant.

#### Stock Performance Graph

*This performance graph shall not be deemed "filed" for purposes of Section 18 of the Securities Exchange Act of 1934, as amended (the "Exchange Act"), or incorporated by reference into any filing of Tesla, Inc. under the Securities Act of 1933, as amended (the "Securities Act"), or the Exchange Act, except as shall be expressly set forth by specific reference in such filing.*

The following graph shows a comparison, from January 1, 2017 through December 31, 2021, of the cumulative total return on our common stock, The NASDAQ Composite Index and a group of all public companies sharing the same SIC code as us, which is SIC code 3711, "Motor Vehicles and Passenger Car Bodies" (Motor Vehicles and Passenger Car Bodies Public Company Group). Such returns are based on historical results and are not intended to suggest future performance. Data for The NASDAQ Composite Index and the Motor Vehicles and Passenger Car Bodies Public Company Group assumes an investment of \$100 on January 1, 2017 and reinvestment of dividends. We have never declared or paid cash dividends on our common stock nor do we anticipate paying any such cash dividends in the foreseeable future.

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**Unregistered Sales of Equity Securities and Use of Proceeds**

In connection with the offering of 2.00% Convertible Senior Notes due 2024 in May 2019, we sold warrants to each of Société Générale, Wells Fargo Bank, National Association, Goldman, Sachs & Co. LLC and Credit Suisse Capital LLC. On October 26, 2021, we agreed with each of Société Générale, Wells Fargo Bank, National Association and Credit Suisse Capital LLC to partially terminate such warrants, and in connection with such partial termination, we issued an aggregate of 2,711,289 shares of our common stock to Société Générale, Wells Fargo Bank, National Association and Credit Suisse Capital LLC. Such shares were issued pursuant to an exemption from registration provided by Rule 3(a)(9) of the Securities Act of 1933.

**Purchases of Equity Securities by the Issuer and Affiliated Purchasers**

None.

**ITEM 6. [RESERVED]**

## **ITEM 7. MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS**

*The following discussion and analysis should be read in conjunction with the consolidated financial statements and the related notes included elsewhere in this Annual Report on Form 10-K. For discussion related to changes in financial condition and the results of operations for fiscal year 2019-related items, refer to Part II, Item 7.*

*Management's Discussion and Analysis of Financial Condition and Results of Operations in our Annual Report on Form 10-K for fiscal year 2020, which was filed with the Securities and Exchange Commission on February 8, 2021.*

### **Overview and 2021 Highlights**

Our mission is to accelerate the world's transition to sustainable energy. We design, develop, manufacture, lease and sell high-performance fully electric vehicles, solar energy generation systems and energy storage products. We also offer maintenance, installation, operation, financial and other services related to our products. Additionally, we are increasingly focused on products and services based on artificial intelligence, robotics and automation.

In 2021, we produced 930,422 vehicles and delivered 936,222 vehicles. We are currently focused on increasing vehicle production and capacity, improving and developing battery technologies, improving our FSD capabilities, increasing the affordability and efficiency of our vehicles and expanding our global infrastructure.

In 2021, we deployed 3.99 GWh of energy storage products and 345 megawatts of solar energy systems. We are currently focused on ramping production of energy storage products, improving our Solar Roof installation capability and efficiency, and increasing market share of retrofit and new build solar energy systems.

In 2021, we recognized total revenues of \$53.82 billion, representing a 71% increase compared to the prior year. We continue to ramp production, build new manufacturing capacity and expand our operations to enable increased deliveries and deployments of our products and further revenue growth.

In 2021, our net income attributable to common stockholders was \$5.52 billion, representing a favorable change of \$4.80 billion, compared to the prior year. We continue to focus on improving our profitability through production and operational efficiencies.

We ended 2021 with \$17.58 billion in cash and cash equivalents, representing a decrease of \$1.81 billion from the end of 2020. Our cash flows provided by operating activities during 2021 was \$11.50 billion, representing an increase of \$5.55 billion compared to \$5.94 billion during 2020, and capital expenditures amounted to \$6.48 billion during 2021, compared to \$3.16 billion during 2020. Sustained growth has allowed our business to generally fund itself, but we will continue investing in a number of capital-intensive projects in upcoming periods.

### **Management Opportunities, Challenges and Risks and 2022 Outlook**

#### *Impact of COVID-19 Pandemic*

Beginning in the first quarter of 2021, there has been a trend in many parts of the world of increasing availability and administration of vaccines against COVID-19, as well as an easing of restrictions on social, business, travel and government activities and functions. On the other hand, infection rates and regulations continue to fluctuate in various regions and there are ongoing global impacts resulting from the pandemic, including challenges and increases in costs for logistics and supply chains, such as increased port congestion, intermittent supplier delays and a shortfall of semiconductor supply. We have also previously been affected by temporary manufacturing closures, employment and compensation adjustments, and impediments to administrative activities supporting our product deliveries and deployments.

Ultimately, we cannot predict the duration of the COVID-19 pandemic. We will continue to monitor macroeconomic conditions to remain flexible and to optimize and evolve our business as appropriate, and we will have to accurately project demand and infrastructure requirements globally and deploy our production, workforce and other resources accordingly.

### *Automotive—Production*

The following is a summary of the status of production of each of our announced vehicle models in production and under development, as of the date of this Annual Report on Form 10-K:

Production Location	Vehicle Model(s)	Production Status
Fremont Factory	Model S / Model X	Active
	Model 3 / Model Y	Active
Gigafactory Shanghai	Model 3 / Model Y	Active
Gigafactory Berlin	Model Y	Equipment test
Gigafactory Texas	Model Y	Equipment test
	Cybertruck	In development
TBD	Tesla Semi	In development
TBD	Tesla Roadster	In development

We are focused on ramping all of our production vehicles to their installed production capacities as well as increasing capacity at our current factories. Our current production continues to be affected by the industry-wide semiconductor and other component shortages, requiring additional workaround manufacturing and production design solutions to be implemented which may be difficult to sustain. Builds of Model Y in Gigafactory Texas and equipment testing through the vehicle production process in Gigafactory Berlin started in late 2021. The next phase of production growth will depend on the testing and ramp at Gigafactory Berlin and Gigafactory Texas, as well as our ability to add to our available sources of battery cell supply by manufacturing our own cells that we are developing to have high-volume output, lower capital and production costs and longer range. Consistent with our approach of innovating manufacturing techniques at our new factories, we expect as well to pioneer new methods related to the mass production of these cells and our unique structural battery pack concept. Our goals are to improve vehicle performance, decrease production costs and increase affordability.

However, these plans are subject to uncertainties inherent in establishing and ramping manufacturing operations, which may be exacerbated by the number of concurrent international projects, any industry-wide component constraints which may increase the number of manufacturing and production design workaround solutions required, labor shortages and any future impact from events outside of our control such as the COVID-19 pandemic. Moreover, we must meet ambitious technological targets with our plans for battery cells as well as for iterative manufacturing and design improvements for our vehicles with each new factory.

### *Automotive—Demand and Sales*

Our cost reduction efforts and additional localized procurement and manufacturing are key to our vehicles' affordability, and for example, have allowed us to competitively price our vehicles in China. In addition to ramping production in 2022, we will also continue to generate demand and brand awareness by improving our vehicles' performance and functionality, including through products based on artificial intelligence such as Autopilot and FSD, and other software features. Moreover, we expect to continue to benefit from a spike in demand in the automotive industry generally, as well as ongoing electrification of the automotive sector and increasing environmental awareness.

However, we operate in a cyclical industry that is sensitive to trade, environmental and political uncertainty, all of which may also be compounded by any future global impact from the COVID-19 pandemic. Moreover, as additional competitors enter the marketplace and help bring the world closer to sustainable transportation, we will have to continue to execute well to maintain our momentum.

### *Automotive—Deliveries and Customer Infrastructure*

As our deliveries increase, we must work constantly to prevent our vehicle delivery capability from becoming a bottleneck on our total deliveries. Increasing the exports of vehicles manufactured at Gigafactory Shanghai has been effective in mitigating the strain on our deliveries in markets outside of the United States, and we expect to benefit further from situating additional factories closer to local markets. As we expand our manufacturing operations globally, we will have to continue to increase and staff our delivery, servicing and charging infrastructure accordingly, maintain our vehicle reliability and optimize our Supercharger locations to ensure cost effectiveness and customer satisfaction. In particular, we remain focused on increasing the capability and efficiency of our servicing operations.

## *Energy Generation and Storage Demand, Production and Deployment*

The long-term success of this business is dependent upon increasing margins through greater volumes. We continue to increase the production of our energy storage products to meet high levels of demand, including beginning construction of our Megafactory in Lathrop, California, but such production is also sensitive to global component constraints. For Megapack, energy storage deployments can vary meaningfully quarter to quarter depending on the timing of specific project milestones. For Powerwall, better availability and growing grid stability concerns drive higher customer interest, and we are emphasizing cross-selling with our residential solar energy products. We remain committed to growing our retrofit solar energy business by offering a low-cost and simplified online ordering experience. In addition, we continue to improve our installation capabilities and price efficiencies for Solar Roof by on-boarding and training new installers, as well as collaborating with real estate developers and builders on new homes to reduce installation time and costs. As these product lines grow, we will have to maintain adequate battery cell supply for our energy storage products and hire additional personnel, particularly skilled electricians, to support the ramp of Solar Roof.

## *Cash Flow and Capital Expenditure Trends*

Our capital expenditures are typically difficult to project beyond the short term given the number and breadth of our core projects at any given time, and may further be impacted by uncertainties in future global market conditions. We are simultaneously ramping new products in the new Model S and Model X, Megapack and Solar Roof, ramping manufacturing facilities on three continents and piloting the development and manufacture of new battery cell technologies, and the pace of our capital spend may vary depending on overall priority among projects, the pace at which we meet milestones, production adjustments to and among our various products, increased capital efficiencies and the addition of new projects. Owing and subject to the foregoing as well as the pipeline of announced projects under development and all other continuing infrastructure growth, we currently expect our capital expenditures to be between \$5.00 to \$7.00 billion in 2022 and each of the next two fiscal years.

Our business has recently been consistently generating cash flow from operations in excess of our level of capital spend, and with better working capital management resulting in shorter days sales outstanding than days payable outstanding, our sales growth is also facilitating positive cash generation. On the other hand, we are likely to see heightened levels of capital expenditures during certain periods depending on the specific pace of our capital-intensive projects and rising material prices and increasing supply chain and labor expenses resulting from changes in global trade conditions and labor availability associated with the COVID-19 pandemic. Moreover, as our stock price has significantly increased, we have seen higher levels of early conversions of “in-the-money” convertible senior notes, which obligates us to deliver cash and or shares pursuant to the terms of those notes. Overall, we expect our ability to be self-funding to continue as long as macroeconomic factors support current trends in our sales.

## *Operating Expense Trends*

As long as we see expanding sales, and excluding the potential impact of macroeconomic conditions including increased labor costs and impairment charges on certain assets as explained below, we generally expect operating expenses relative to revenues to decrease as we continue to increase operational efficiency and process automation. We expect operating expenses to grow in 2022 as we are expanding our operations globally.

In the first quarter of 2021, we invested an aggregate \$1.50 billion in bitcoin. We believe in the long-term potential of digital assets both as an investment and also as a liquid alternative to cash. As with any investment and consistent with how we manage fiat-based cash and cash-equivalent accounts, we may increase or decrease our holdings of digital assets at any time based on the needs of the business and our view of market and environmental conditions. Digital assets are considered indefinite-lived intangible assets under applicable accounting rules. Accordingly, any decrease in their fair values below our carrying values for such assets at any time subsequent to their acquisition will require us to recognize impairment charges, whereas we may make no upward revisions for any market price increases until a sale. For any digital assets held now or in the future, these charges may negatively impact our profitability in the periods in which such impairments occur even if the overall market values of these assets increase. For example, in the year ended December 31, 2021, we recorded approximately \$101 million of impairment losses resulting from changes to the carrying value of our bitcoin and gains of \$128 million on certain sales of bitcoin by us.

## **Critical Accounting Policies and Estimates**

The consolidated financial statements are prepared in accordance with accounting principles generally accepted in the U.S. (“GAAP”). The preparation of the consolidated financial statements requires us to make estimates and

assumptions that affect the reported amounts of assets, liabilities, revenues, costs and expenses and related disclosures. We base our estimates on historical experience, as appropriate, and on various other assumptions that we believe to be reasonable under the circumstances. Changes in the accounting estimates are reasonably likely to occur from period to period. Accordingly, actual results could differ significantly from the estimates made by our management. We evaluate our estimates and assumptions on an ongoing basis. To the extent that there are material differences between these estimates and actual results, our future financial statement presentation, financial condition, results of operations and cash flows may be affected.



Due to the COVID-19 pandemic, there has been uncertainty and disruption in the global economy and financial markets. The estimates used for, but not limited to, determining significant economic incentive for resale value guarantee arrangements, sales return reserves, the collectability of accounts receivable, inventory valuation, fair value of long-lived assets, goodwill, fair value of financial instruments, fair value and residual value of operating lease vehicles and solar energy systems subject to leases could be impacted. We have assessed the impact and are not aware of any specific events or circumstances that required an update to our estimates and assumptions or materially affected the carrying value of our assets or liabilities as of the date of issuance of this Annual Report on Form 10-K. These estimates may change as new events occur and additional information is obtained. Actual results could differ materially from these estimates under different assumptions or conditions.

## *Revenue Recognition*

### Automotive Sales without Resale Value Guarantee

Automotive sales revenue includes revenues related to deliveries of new vehicles and pay-per-use charges, and specific other features and services that meet the definition of a performance obligation under ASC 606, including access to our Supercharger network, internet connectivity, FSD features and over-the-air software updates. We recognize revenue on automotive sales upon delivery to the customer, which is when the control of a vehicle transfers. Payments are typically received at the point control transfers or in accordance with payment terms customary to the business. Other features and services such as access to our Supercharger network, internet connectivity and over-the-air software updates are provisioned upon control transfer of a vehicle and recognized over time on a straight-line basis as we have a stand-ready obligation to deliver such services to the customer. We recognize revenue related to these other features and services over the performance period, which is generally the estimated useful life of the vehicle. Revenue related to FSD features is recognized when functionality is delivered to the customer. For our obligations related to automotive sales, we estimate standalone selling price by considering costs used to develop and deliver the service, third-party pricing of similar options and other information that may be available.

At the time of revenue recognition, we reduce the transaction price and record a sales return reserve against revenue for estimated variable consideration related to future product returns. Such return rate estimates are based on historical experience and are immaterial in all periods presented. In addition, any fees that are paid or payable by us to a customer's lender when we arrange the financing are recognized as an offset against automotive sales revenue.

Costs to obtain a contract mainly relate to commissions paid to our sales personnel for the sale of vehicles. Commissions are not paid on other obligations such as access to our Supercharger network, internet connectivity, FSD features and over-the-air software updates. As our contract costs related to automotive sales are typically fulfilled within one year, the costs to obtain a contract are expensed as incurred. Amounts billed to customers related to shipping and handling are classified as automotive sales revenue, and we have elected to recognize the cost for freight and shipping when control over vehicles, parts or accessories have transferred to the customer as an expense in cost of automotive sales revenue. Our policy is to exclude taxes collected from a customer from the transaction price of automotive contracts.

### Automotive Sales with Resale Value Guarantee or a Buyback Option

We offer resale value guarantees or similar buy-back terms to certain international customers who purchase vehicles and who finance their vehicles through one of our specified commercial banking partners. We also offer resale value guarantees in connection with automotive sales to certain leasing partners. Under these programs, we receive full payment for the vehicle sales price at the time of delivery and our counterparty has the option of selling their vehicle back to us during the guarantee period, which currently is generally at the end of the term of the applicable loan or financing program, for a pre-determined resale value.

We recognize revenue when control transfers upon delivery to customers in accordance with ASC 606 as a sale with a right of return when we do not believe the customer has a significant economic incentive to exercise the resale value guarantee provided to them at contract inception. The process to determine whether there is a significant economic incentive includes a comparison of a vehicle's estimated market value at the time the option is exercisable with the guaranteed resale value to determine the customer's economic incentive to exercise. The performance obligations and the pattern of recognizing automotive sales with resale value guarantees are consistent with automotive sales without resale value guarantees with the exception of our estimate for sales return reserve. Sales return reserves for automotive sales with resale value guarantees are estimated based on historical experience plus consideration for expected future market values. On a quarterly basis, we assess the estimated market values of vehicles sold with resale value guarantees to determine whether there have been changes to the likelihood of future product returns. As we accumulate more data related to the resale values of our vehicles or as market conditions change, there may be material changes to their estimated values.



### *Inventory Valuation*

Inventories are stated at the lower of cost or net realizable value. Cost is computed using standard cost for vehicles and energy storage products, which approximates actual cost on a first-in, first-out basis. In addition, cost for solar energy systems is recorded using actual cost. We record inventory write-downs for excess or obsolete inventories based upon assumptions about current and future demand forecasts. If our inventory on-hand is in excess of our future demand forecast, the excess amounts are written-off.

We also review our inventory to determine whether its carrying value exceeds the net amount realizable upon the ultimate sale of the inventory. This requires us to determine the estimated selling price of our vehicles less the estimated cost to convert the inventory on-hand into a finished product. Once inventory is written-down, a new, lower cost basis for that inventory is established and subsequent changes in facts and circumstances do not result in the restoration or increase in that newly established cost basis.

Should our estimates of future selling prices or production costs change, additional and potentially material write-downs may be required. A small change in our estimates may result in a material charge to our reported financial results.

### *Warranties*

We provide a manufacturer's warranty on all new and used vehicles and a warranty on the installation and components of the energy generation and storage systems we sell for periods typically between 10 to 25 years. We accrue a warranty reserve for the products sold by us, which includes our best estimate of the projected costs to repair or replace items under warranties and recalls if identified. These estimates are based on actual claims incurred to date and an estimate of the nature, frequency and costs of future claims. These estimates are inherently uncertain given our relatively short history of sales, and changes to our historical or projected warranty experience may cause material changes to the warranty reserve in the future. The warranty reserve does not include projected warranty costs associated with our vehicles subject to operating lease accounting and our solar energy systems under lease contracts or PPAs, as the costs to repair these warranty claims are expensed as incurred. The portion of the warranty reserve expected to be incurred within the next 12 months is included within Accrued liabilities and other, while the remaining balance is included within Other long-term liabilities on the consolidated balance sheets. Warranty expense is recorded as a component of Cost of revenues in the consolidated statements of operations. Due to the magnitude of our automotive business, accrued warranty balance is primarily related to our automotive segment.

### *Stock-Based Compensation*

We use the fair value method of accounting for our stock options and restricted stock units ("RSUs") granted to employees and for our employee stock purchase plan (the "ESPP") to measure the cost of employee services received in exchange for the stock-based awards. The fair value of stock option awards with only service and/or performance conditions is estimated on the grant or offering date using the Black-Scholes option-pricing model. The Black-Scholes option-pricing model requires inputs such as the risk-free interest rate, expected term and expected volatility. These inputs are subjective and generally require significant judgment. The fair value of RSUs is measured on the grant date based on the closing fair market value of our common stock. The resulting cost is recognized over the period during which an employee is required to provide service in exchange for the awards, usually the vesting period, which is generally four years for stock options and RSUs and six months for the ESPP. Stock-based compensation expense is recognized on a straight-line basis, net of actual forfeitures in the period.

For performance-based awards, stock-based compensation expense is recognized over the expected performance achievement period of individual performance milestones when the achievement of each individual performance milestone becomes probable. For performance-based awards with a vesting schedule based entirely on the attainment of both performance and market conditions, stock-based compensation expense associated with each tranche is recognized over the longer of (i) the expected achievement period for the operational milestone for such tranche and (ii) the expected achievement period for the related market capitalization milestone determined on the grant date, beginning at the point in time when the relevant operational milestone is considered probable of being achieved. If such operational milestone becomes probable any time after the grant date, we will recognize a cumulative catch-up expense from the grant date to that point in time. If the related market capitalization milestone is achieved earlier than its expected achievement period and the achievement of the related operational milestone, then the stock-based compensation expense will be recognized over the expected achievement period for the operational milestone, which may accelerate the rate at which such expense is recognized. The fair value of such awards is estimated on the grant date using Monte Carlo simulations.

As we accumulate additional employee stock-based awards data over time and as we incorporate market data related to our common stock, we may calculate significantly different volatilities and expected lives, which could

materially impact the valuation of our stock-based awards and the stock-based compensation expense that we will recognize in future periods. Stock-based compensation expense is recorded in Cost of revenues, Research and development expense and Selling, general and administrative expense in the consolidated statements of operations.

## *Income Taxes*

We are subject to taxes in the U.S. and in many foreign jurisdictions. Significant judgment is required in determining our provision for income taxes, our deferred tax assets and liabilities and any valuation allowance recorded against our net deferred tax assets. We make these estimates and judgments about our future taxable income that are based on assumptions that are consistent with our future plans. Tax laws, regulations and administrative practices may be subject to change due to economic or political conditions including fundamental changes to the tax laws applicable to corporate multinationals. The U.S., many countries in the European Union and a number of other countries are actively considering changes in this regard. As of December 31, 2021, we had recorded a full valuation allowance on our net U.S. deferred tax assets because we expect that it is more likely than not that our U.S. deferred tax assets will not be realized. Should the actual amounts differ from our estimates, the amount of our valuation allowance could be materially impacted.

Furthermore, significant judgment is required in evaluating our tax positions. In the ordinary course of business, there are many transactions and calculations for which the ultimate tax settlement is uncertain. As a result, we recognize the effect of this uncertainty on our tax attributes or taxes payable based on our estimates of the eventual outcome. These effects are recognized when, despite our belief that our tax return positions are supportable, we believe that it is more likely than not that some of those positions may not be fully sustained upon review by tax authorities. We are required to file income tax returns in the U.S. and various foreign jurisdictions, which requires us to interpret the applicable tax laws and regulations in effect in such jurisdictions. Such returns are subject to audit by the various federal, state and foreign taxing authorities, who may disagree with respect to our tax positions. We believe that our consideration is adequate for all open audit years based on our assessment of many factors, including past experience and interpretations of tax law. We review and update our estimates in light of changing facts and circumstances, such as the closing of a tax audit, the lapse of a statute of limitations or a change in estimate. To the extent that the final tax outcome of these matters differs from our expectations, such differences may impact income tax expense in the period in which such determination is made. The eventual impact on our income tax expense depends in part if we still have a valuation allowance recorded against our deferred tax assets in the period that such determination is made.

## Results of Operations

### Revenues

(Dollars in millions)	Year Ended December 31,			2021 vs. 2020 Change		2020 vs. 2019 Change	
	2021	2020	2019	\$	%	\$	%
Automotive sales	\$ 44,125	\$ 24,604	\$ 19,358	\$ 19,521	79 %	\$ 5,246	27 %
Automotive regulatory credits	1,465	1,580	594	(115)	-7 %	986	166 %
Automotive leasing	1,642	1,052	869	590	56 %	183	21 %
Total automotive revenues	47,232	27,236	20,821	19,996	73 %	6,415	31 %
Services and other	3,802	2,306	2,226	1,496	65 %	80	4 %
Total automotive & services and other segment revenue	51,034	29,542	23,047	21,492	73 %	6,495	28 %
Energy generation and storage segment revenue	2,789	1,994	1,531	795	40 %	463	30 %
Total revenues	<u>\$ 53,823</u>	<u>\$ 31,536</u>	<u>\$ 24,578</u>	<u>\$ 22,287</u>	71 %	<u>\$ 6,958</u>	28 %

#### Automotive & Services and Other Segment

Automotive sales revenue includes revenues related to cash deliveries of new Model S, Model X, Model 3 and Model Y vehicles, including access to our Supercharger network, internet connectivity, FSD features and over-the-air software updates. Cash deliveries are vehicles that are not subject to lease accounting.

Automotive regulatory credits includes sales of regulatory credits to other automotive manufacturers. Our revenue from automotive regulatory credits is directly related to our new vehicle production, sales and pricing negotiated with our customers. We monetize them proactively as new vehicles are sold based on standing arrangements with buyers of such credits, typically as close as possible to the production and delivery of the vehicle or changes in regulation impacting the credits.

Automotive leasing revenue includes the amortization of revenue for vehicles under direct operating lease agreements as well as those sold with resale value guarantees accounted for as operating leases under lease accounting. Additionally, automotive leasing revenue includes direct sales-type leasing programs where we recognize all revenue associated with the sales-type lease upon delivery to the customer.

Services and other revenue consists of non-warranty after-sales vehicle services, sales of used vehicles, retail merchandise, sales by our acquired subsidiaries to third party customers and vehicle insurance revenue.

#### 2021 compared to 2020

Automotive sales revenue increased \$19.52 billion, or 79%, in the year ended December 31, 2021 as compared to the year ended December 31, 2020, primarily due to an increase of 433,815 Model 3 and Model Y cash deliveries year over year from production ramping at both Gigafactory Shanghai and the Fremont Factory at a slightly higher combined average selling price from a higher proportion of Model Y sales offset by regional sales mix. Additionally, we had a \$365 million net release of our sales return reserve on vehicles sold with resale value guarantees, which increased our automotive sales revenue, due to actual return rates being lower than expected and increases in resale values of our vehicles in 2021. The increases in automotive sales revenue were partially offset by a decrease of 28,819 Model S and Model X cash deliveries at a higher combined average selling price as deliveries of the new versions of Model S and Model X only began ramping in the second and fourth quarters of 2021, respectively.

Automotive regulatory credits revenue decreased \$115 million, or 7%, in the year ended December 31, 2021 as compared to the year ended December 31, 2020, primarily due to changes in regulation which entitled us to additional credits in the prior year and changes in pricing in certain regions.

Automotive leasing revenue increased \$590 million, or 56%, in the year ended December 31, 2021 as compared to the year ended December 31, 2020, primarily due to an increase in cumulative vehicles under our direct operating lease program and an increase in direct sales-type leasing revenue as we have a full year of sales in 2021 since we began offering the program during the third quarter of 2020. These increases were partially offset by the decrease in automotive leasing revenue associated with our resale value guarantee leasing programs accounted for as operating leases as those portfolios have declined.

Services and other revenue increased \$1.50 billion, or 65%, in the year ended December 31, 2021 as compared to the year ended December 31, 2020, primarily due to an increase in used vehicle revenue driven by increases in volume and average selling prices of used vehicles, non-warranty maintenance services revenue as our fleet continues to grow and retail merchandise revenue.

#### Energy Generation and Storage Segment

Energy generation and storage revenue includes sales and leasing of solar energy generation and energy storage products, services related to such products and sales of solar energy systems incentives.

## 2021 compared to 2020

Energy generation and storage revenue increased by \$795 million, or 40%, in the year ended December 31, 2021 as compared to the year ended December 31, 2020, primarily due to an increase in deployments of Megapack, solar cash and loan jobs, Powerwall and Solar Roof, partially offset by a decrease in Powerpack deployments as we phase out the product following the introduction of Megapack.

## Cost of Revenues and Gross Margin

(Dollars in millions)	Year Ended December 31,			2021 vs. 2020 Change		2020 vs. 2019 Change	
	2021	2020	2019	\$	%	\$	%
<b>Cost of revenues</b>							
Automotive sales	\$ 32,415	\$ 19,696	\$ 15,939	\$ 12,719	65 %	\$ 3,757	24 %
Automotive leasing	978	563	459	415	74 %	104	23 %
Total automotive cost of revenues	33,393	20,259	16,398	13,134	65 %	3,861	24 %
Services and other	3,906	2,671	2,770	1,235	46 %	(99)	-4 %
Total automotive & services and other segment cost of revenues	37,299	22,930	19,168	14,369	63 %	3,762	20 %
Energy generation and storage segment	2,918	1,976	1,341	942	48 %	635	47 %
Total cost of revenues	<u>\$ 40,217</u>	<u>\$ 24,906</u>	<u>\$ 20,509</u>	<u>\$ 15,311</u>	61 %	<u>\$ 4,397</u>	21 %
Gross profit total automotive	\$ 13,839	\$ 6,977	\$ 4,423				
Gross margin total automotive	29.3 %	25.6 %	21.2 %				
Gross profit total automotive & services and other segment	\$ 13,735	\$ 6,612	\$ 3,879				
Gross margin total automotive & services and other segment	26.9 %	22.4 %	16.8 %				
Gross profit energy generation and storage segment	\$ (129)	\$ 18	\$ 190				
Gross margin energy generation and storage segment	-4.6 %	0.9 %	12.4 %				
Total gross profit	\$ 13,606	\$ 6,630	\$ 4,069				
Total gross margin	25.3 %	21.0 %	16.6 %				

## Automotive & Services and Other Segment

Cost of automotive sales revenue includes direct and indirect materials, labor costs, manufacturing overhead, including depreciation costs of tooling and machinery, shipping and logistic costs, vehicle connectivity costs, allocations of electricity and infrastructure costs related to our Supercharger network and reserves for estimated warranty expenses. Cost of automotive sales revenues also includes adjustments to warranty expense and charges to write down the carrying value of our inventory when it exceeds its estimated net realizable value and to provide for obsolete and on-hand inventory in excess of forecasted demand.

Cost of automotive leasing revenue includes the depreciation of operating lease vehicles, cost of goods sold associated with direct sales-type leases and warranty expense related to leased vehicles. Cost of automotive leasing revenue also includes vehicle connectivity costs and allocations of electricity and infrastructure costs related to our Supercharger network for vehicles under our leasing programs.

Cost of services and other revenue includes costs associated with providing non-warranty after-sales services, cost of used vehicles including refurbishment costs, costs for retail merchandise, and costs to provide vehicle insurance. Cost of services and other revenue also includes direct parts, material and labor costs and manufacturing overhead associated with the sales by our acquired subsidiaries to third party customers.

## 2021 compared to 2020

Cost of automotive sales revenue increased \$12.72 billion, or 65%, in the year ended December 31, 2021 as compared to the year ended December 31, 2020, primarily due to an increase of 433,815 Model 3 and Model Y cash deliveries. Additionally, the net release of our sales return reserve on vehicles sold with resale value guarantees resulted in a corresponding increase of \$286 million in cost of automotive sales revenue. These increases were partially offset by a decrease of 28,819 Model S and Model X cash deliveries at higher costs per unit due to temporary under-utilization of manufacturing capacity at lower production volumes during our current production ramp of the new versions of Model S and Model X. Additionally, there was a decrease in combined average Model 3 and Model Y costs per unit due to changes in regional production mix as Gigafactory Shanghai has ramped in capacity, where costs are lower from localized procurement and manufacturing in China.



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Cost of automotive leasing revenue increased \$415 million, or 74%, in the year ended December 31, 2021 as compared to the year ended December 31, 2020, primarily due to an increase in cumulative vehicles under our direct operating lease program and an increase in direct sales-type leasing cost of revenues from more sales in the current year. These increases were partially offset by the decrease in cost of automotive leasing revenue associated with our resale value guarantee leasing programs accounted for as operating leases as those portfolios have declined.

Cost of services and other revenue increased \$1.24 billion, or 46%, in the year ended December 31, 2021 as compared to the year ended December 31, 2020, primarily due to an increase in used vehicle cost of revenue driven by increases in volume and costs of non-Tesla used vehicles, costs to support our increase in non-warranty maintenance services revenue and costs of retail merchandise as our sales have increased.

Gross margin for total automotive increased from 25.6% in the year ended December 31, 2020 to 29.3% in the year ended December 31, 2021. The increase was primarily due to favorable changes in sales and production mix of Model 3 and Model Y as Gigafactory Shanghai has ramped in capacity. The average Model 3 and Model Y costs per unit have decreased significantly due to localized procurement and manufacturing in China despite rising raw material, commodity, logistics and expedite costs. Additionally, our Model Y gross margin has benefitted from shared manufacturing of Model 3 and learnings from the scaling of past products. These increases were partially offset by a decrease of \$115 million in sales of regulatory credits, which have negligible incremental costs associated with them.

Gross margin for total automotive & services and other segment increased from 22.4% in the year ended December 31, 2020 to 26.9% in the year ended December 31, 2021, primarily due to the automotive gross margin impacts discussed above and an improvement in our services and other gross margin. Additionally, there was a lower proportion of services and other, which operated at a lower gross margin than our automotive business, within the segment in the year ended December 31, 2021 compared to the prior year.

#### *Energy Generation and Storage Segment*

Cost of energy generation and storage revenue includes direct and indirect material and labor costs, warehouse rent, freight, warranty expense, other overhead costs and amortization of certain acquired intangible assets. Cost of energy generation and storage revenue also includes charges to write down the carrying value of our inventory when it exceeds its estimated net realizable value and to provide for obsolete and on-hand inventory in excess of forecasted demand. In agreements for solar energy system and PPAs where we are the lessor, the cost of revenue is primarily comprised of depreciation of the cost of leased solar energy systems, maintenance costs associated with those systems and amortization of any initial direct costs.

#### 2021 compared to 2020

Cost of energy generation and storage revenue increased by \$942 million, or 48%, in the year ended December 31, 2021 as compared to the year ended December 31, 2020, primarily due to increases in deployments of Solar Roof, solar cash and loan jobs, Megapack and Powerwall, partially offset by reductions in average costs per unit of Solar Roof as deployments have increased and a decrease in Powerpack deployments as we phase out the product following the introduction of Megapack.

Gross margin for energy generation and storage decreased from 0.9% in the year ended December 31, 2020 to -4.6% in the year ended December 31, 2021, primarily due to a higher proportion of Solar Roof in our overall energy business which operated at a lower gross margin as a result of temporary manufacturing underutilization during product ramp despite an improvement in gross margin compared to the prior year and lower Powerpack gross margin as fixed cost absorptions are negatively impacted as we phase out the product following the introduction of Megapack. These decreases were partially offset by a higher proportion of Powerwall in our overall energy business which operated at a higher gross margin as well as an increase in Megapack gross margin as we continue to scale the products.

#### *Research and Development Expense*

	Year Ended December 31,			2021 vs. 2020 Change		2020 vs. 2019 Change	
	2021	2020	2019	\$	%	\$	%
(Dollars in millions)							
Research and development	\$ 2,593	\$ 1,491	\$ 1,343	\$ 1,102	74 %	\$ 148	11 %
As a percentage of revenues	5 %	5 %	5 %				

Research and development (“R&D”) expenses consist primarily of personnel costs for our teams in engineering and research, manufacturing engineering and manufacturing test organizations, prototyping expense, contract and professional services and amortized equipment expense.

R&D expenses increased \$1.10 billion, or 74%, in the year ended December 31, 2021 as compared to the year ended December 31, 2020. The increase was primarily due to a \$506 million increase in employee and labor related expenses due to an increase in headcount, a \$263 million increase in R&D expensed materials, a \$211 million increase in facilities, outside services, freight and depreciation expense and an \$103 million increase in stock-based compensation expense. These increases were to support our expanding product roadmap such as the new versions of Model S and Model X and technologies including our proprietary battery cells and there were additional R&D expenses as we were in the pre-production phases at both Gigafactory Texas and Gigafactory Berlin in the current year.

R&D expenses as a percentage of revenue remained consistent at 5% in the year ended December 31, 2021 as compared to the year ended December 31, 2020. R&D expenses increased proportionately with the increase in total revenues from expanding sales.

### ***Selling, General and Administrative Expense***

(Dollars in millions)	Year Ended December 31,			2021 vs. 2020 Change		2020 vs. 2019 Change	
	2021	2020	2019	\$	%	\$	%
Selling, general and administrative	\$ 4,517	\$ 3,145	\$ 2,646	\$ 1,372	44 %	\$ 499	19 %
As a percentage of revenues	8 %	10 %	11 %				

Selling, general and administrative (“SG&A”) expenses generally consist of personnel and facilities costs related to our stores, marketing, sales, executive, finance, human resources, information technology and legal organizations, as well as fees for professional and contract services and litigation settlements.

SG&A expenses increased \$1.37 billion, or 44%, in the year ended December 31, 2021 as compared to the year ended December 31, 2020. The increase is primarily due to an increase of \$568 million in employee and labor related expenses from increased headcount and increased payroll taxes due to our higher average share price in the year ended December 31, 2021 compared to the prior year. Additionally, there was \$340 million of additional payroll tax due to our CEO's option exercises from the 2012 CEO Performance Award, a \$319 million increase in office, information technology, facilities-related expenses, sales and marketing activities and other costs and an increase of \$145 million in stock-based compensation expense, of which \$72 million was attributable to the 2018 CEO Performance Award. See *Note 13, Equity Incentive Plans*, to the consolidated financial statements included elsewhere in this Annual Report on Form 10-K.

SG&A expenses as a percentage of revenue decreased from 10% in the year ended December 31, 2020 to 8% in the year ended December 31, 2021. Our SG&A expenses have decreased as a proportion of total revenues due to operational efficiencies.

### ***Restructuring and Other Expense***

(Dollars in millions)	Year Ended December 31,			2021 vs. 2020 Change		2020 vs. 2019 Change	
	2021	2020	2019	\$	%	\$	%
Restructuring and other	\$ (27)	\$ —	\$ 149	\$ (27)	Not meaningful	\$ (149)	-100 %
As a percentage of revenues	0 %	0 %	1 %				

During the year ended December 31, 2021, we recorded \$101 million of impairment losses on bitcoin. We also realized gains of \$128 million in connection with selling a portion of our holdings in March 2021. See *Note 2, Summary of Significant Accounting Policies*, and *Note 3, Digital Assets, Net*, to the consolidated financial statements included elsewhere in this Annual Report on Form 10-K for further details.

### ***Interest Expense***

(Dollars in millions)	Year Ended December 31,			2021 vs. 2020 Change		2020 vs. 2019 Change	
	2021	2020	2019	\$	%	\$	%
Interest expense	\$ (371)	\$ (748)	\$ (685)	\$ 377	-50 %	\$ (63)	9 %
As a percentage of revenues	1 %	2 %	3 %				

Interest expense decreased by \$377 million, or 50%, in the year ended December 31, 2021 as compared to the year ended December 31, 2020, primarily due to a reduction of \$173 million as a result of the adoption of ASU 2020-06, *Accounting for Convertible Instruments and Contracts in an Entity's Own Equity*, on January 1, 2021, whereby we have de-recognized the remaining debt discounts on the 2022 Notes and 2024 Notes and therefore no longer recognize any amortization of debt discounts as interest expense, as well as the continued reduction in our

overall debt balance. See Note 2, *Summary of Significant Accounting Policies*, to the consolidated financial statements included elsewhere in this Annual Report on Form 10-K for further details.

### Other Income (Expense), Net

(Dollars in millions)	Year Ended December 31,			2021 vs. 2020 Change		2020 vs. 2019 Change	
	2021	2020	2019	\$	%	\$	%
Other income (expense), net	\$ 135	\$ (122)	\$ 45	\$ 257	Not meaningful	\$ (167)	Not meaningful
As a percentage of revenues	0 %	0 %	0 %				

Other income (expense), net, consists primarily of foreign exchange gains and losses related to our foreign currency-denominated monetary assets and liabilities and changes in the fair values of our fixed-for-floating interest rate swaps. We expect our foreign exchange gains and losses will vary depending upon movements in the underlying exchange rates.

Other income (expense), net, changed favorably by \$257 million in the year ended December 31, 2021 as compared to the year ended December 31, 2020, primarily due to favorable fluctuations in foreign currency exchange rates and a \$49 million favorable change in the mark-to-market remeasurement of our interest rate swaps.

### Provision for Income Taxes

(Dollars in millions)	Year Ended December 31,			2021 vs. 2020 Change		2020 vs. 2019 Change	
	2021	2020	2019	\$	%	\$	%
Provision for income taxes	\$ 699	\$ 292	\$ 110	\$ 407	139 %	\$ 182	165 %
Effective tax rate	11 %	25 %	-17 %				

Our provision for income taxes increased by \$407 million, or 139%, in the year ended December 31, 2021 as compared to the year ended December 31, 2020, primarily due to the increases in taxable profits within our foreign jurisdictions year over year.

Our effective tax rate decreased from 25% to 11% in the year ended December 31, 2021 as compared to the year ended December 31, 2020, primarily due to growth in pre-tax income and changes in mix of jurisdictional earnings.

See Note 14, *Income Taxes*, to the consolidated financial statements included elsewhere in this Annual Report on Form 10-K for further details.

### Net Income Attributable to Noncontrolling Interests and Redeemable Noncontrolling Interests

(Dollars in millions)	Year Ended December 31,			2021 vs. 2020 Change		2020 vs. 2019 Change	
	2021	2020	2019	\$	%	\$	%
Net income attributable to noncontrolling interests and redeemable noncontrolling interests in subsidiaries	\$ 125	\$ 141	\$ 87	\$ (16)	-11 %	\$ 54	62 %

Net income attributable to noncontrolling interests and redeemable noncontrolling interests decreased by \$16 million, or 11%, in the year ended December 31, 2021 as compared to the year ended December 31, 2020.

### Liquidity and Capital Resources

We expect to continue to generate net positive operating cash flow as we have done in the last four fiscal years. The cash we generate from our core operations enables us to fund ongoing operations and production, our research and development projects for new products and technologies including our proprietary battery cells, additional manufacturing ramps at existing manufacturing facilities such as the Fremont Factory, Gigafactory Nevada, Gigafactory Shanghai and Gigafactory New York, the construction and ramp of Gigafactory Berlin and Gigafactory Texas and the continued expansion of our retail and service locations, body shops, Mobile Service fleet, Supercharger network and energy product installation capabilities.

In addition, because a large portion of our future expenditures will be to fund our growth, we expect that if needed we will be able to adjust our capital and operating expenditures by operating segment. For example, if our near-term manufacturing operations decrease in scale or ramp more slowly than expected, including due to global economic or business conditions, we may choose to correspondingly slow the pace of our capital expenditures. Finally, we continually evaluate our cash needs and may decide it is best to raise additional capital or seek alternative financing sources to fund the rapid growth of our business, including through drawdowns on existing or new debt

facilities or financing funds. Conversely, we may also from time to time determine that it is in our best interests to voluntarily repay certain indebtedness early.

Accordingly, we believe that our current sources of funds will provide us with adequate liquidity during the 12-month period following December 31, 2021, as well as in the long-term.

See the sections below for more details regarding the material requirements for cash in our business and our sources of liquidity to meet such needs.

### *Material Cash Requirements*

From time to time in the ordinary course of business, we enter into agreements with vendors for the purchase of components and raw materials to be used in the manufacture of our products. However, due to contractual terms, variability in the precise growth curves of our development and production ramps, and opportunities to renegotiate pricing, we generally do not have binding and enforceable purchase orders under such contracts beyond the short term, and the timing and magnitude of purchase orders beyond such period is difficult to accurately project.

As discussed in and subject to the considerations referenced in Part II, Item 7, *Management's Discussion and Analysis of Financial Condition and Results of Operations—Management Opportunities, Challenges and Risks and 2022 Outlook—Cash Flow and Capital Expenditure*

*Trends* in this Annual Report on Form 10-K, we currently expect our capital expenditures to support our projects globally to be between \$5.00 to \$7.00 billion in 2022 and each of the next two fiscal years. In connection with our operations at Gigafactory New York, we have an agreement to spend or incur \$5.00 billion in combined capital, operational expenses, costs of goods sold and other costs in the State of New York through December 31, 2029 (pursuant to a deferral of our required timelines to meet such obligations that was granted in April 2021 and which was memorialized in an amendment to our agreement with the SUNY Foundation in August 2021). We also have an operating lease arrangement with the local government of Shanghai pursuant to which we are required to spend RMB 14.08 billion in capital expenditures at Gigafactory Shanghai by the end of 2023. For details regarding these obligations, refer to *Note 15, Commitments and Contingencies*, to the consolidated financial statements included elsewhere in this Annual Report on Form 10-K.

As of December 31, 2021, we and our subsidiaries had outstanding \$5.38 billion in aggregate principal amount of indebtedness, of which \$1.09 billion is scheduled to become due in the succeeding 12 months. As of December 31, 2021, our total minimum lease payments are \$4.03 billion, of which \$1.04 billion is due in the succeeding 12 months. For details regarding our indebtedness and lease obligations, refer to *Note 11, Debt*, and *Note 12, Leases*, to the consolidated financial statements included elsewhere in this Annual Report on Form 10-K.

### *Sources and Conditions of Liquidity*

Our sources to fund our material cash requirements are predominantly from our deliveries and servicing of new and used vehicles, sales and installations of our energy storage products and solar energy systems, proceeds from debt facilities and proceeds from equity offerings, when applicable.

As of December 31, 2021, we had \$17.58 billion of cash and cash equivalents. Balances held in foreign currencies had a U.S. dollar equivalent of \$7.22 billion and consisted primarily of Chinese yuan, euros and Canadian dollars. In addition, we had \$1.11 billion of unused committed amounts under our credit facilities as of December 31, 2021. Certain of such unused committed amounts are subject to satisfying specified conditions prior to draw-down (such as pledging to our lenders sufficient amounts of qualified receivables, inventories, leased vehicles and our interests in those leases, solar energy systems and the associated customer contracts or various other assets). For details regarding our indebtedness, refer to *Note 11, Debt* to the consolidated financial statements included elsewhere in this Annual Report on Form 10-K.

We continue adapting our investment strategy to meet our liquidity and risk objectives, such as investing in U.S. government and other marketable securities, digital assets and providing product related financing. In the first quarter of 2021, we invested an aggregate \$1.50 billion in bitcoin. The fair market value of our bitcoin holdings as of December 31, 2021 was \$1.99 billion. We believe in the long-term potential of digital assets both as an investment and also as a liquid alternative to cash. As with any investment and consistent with how we manage fiat-based cash and cash equivalent accounts, we may increase or decrease our holdings of digital assets at any time based on the needs of the business and our view of market and environmental conditions. However, digital assets may be subject to volatile market prices, which may be unfavorable at the times when we may want or need to liquidate them. Additionally, we held short-term marketable securities of \$131 million as of December 31, 2021.

## Summary of Cash Flows

(Dollars in millions)	Year Ended December 31,		
	2021	2020	2019
Net cash provided by operating activities	\$ 11,497	\$ 5,943	\$ 2,405
Net cash used in investing activities	\$ (7,868)	\$ (3,132)	\$ (1,436)
Net cash (used in) provided by financing activities	\$ (5,203)	\$ 9,973	\$ 1,529

### Cash Flows from Operating Activities

Our cash flows from operating activities are significantly affected by our cash investments to support the growth of our business in areas such as research and development and selling, general and administrative and working capital. Our operating cash inflows include cash from vehicle sales and related servicing, customer lease payments, customer deposits, cash from sales of regulatory credits and energy generation and storage products. These cash inflows are offset by our payments to suppliers for production materials and parts used in our manufacturing process, operating expenses, operating lease payments and interest payments on our financings.

Net cash provided by operating activities increased by \$5.55 billion to \$11.50 billion during the year ended December 31, 2021 from \$5.94 billion during the year ended December 31, 2020. This increase was primarily due to the increase in net income excluding non-cash expenses and gains of \$5.22 billion and the overall decrease in net operating assets and liabilities of \$334 million. The decrease in our net operating assets and liabilities was mainly driven by a larger increase of accounts payable and accrued liabilities in the year ended December 31, 2021 as compared to the prior year from ramp up in production at Gigafactory Shanghai and the Fremont Factory. The decrease in our net operating assets and liabilities was partially offset by larger increases of inventory and operating lease vehicles compared to the prior year.

### Cash Flows from Investing Activities

Cash flows from investing activities and their variability across each period related primarily to capital expenditures, which were \$6.48 billion for the year ended December 31, 2021 and \$3.16 billion for the year ended December 31, 2020, mainly for the construction of Gigafactory Texas and Gigafactory Berlin and the expansions of Gigafactory Shanghai and the Fremont Factory. Additionally, net cash outflows related to digital assets were \$1.23 billion in the year ended December 31, 2021 from purchases of digital assets for \$1.50 billion offset by proceeds from sales of digital assets of \$272 million.

### Cash Flows from Financing Activities

Cash outflows from financing activities were \$5.20 billion during the year ended December 31, 2021 compared to \$9.97 billion net cash provided by financing activities during the year ended December 31, 2020. The change was primarily due to no equity offerings in 2021 compared to \$12.27 billion of proceeds from issuances of common stock net of issuance costs in 2020, a \$3.37 billion increase in net repayments of convertible and other debt compared to the prior year, offset by an increase in proceeds from exercise of stock options and other stock issuances of \$290 million and a decrease in collateralized lease repayments of \$231 million compared to the prior year. See *Note 11, Debt*, to the consolidated financial statements included elsewhere in this Annual Report on Form 10-K for further details regarding our debt obligations.

### Recent Accounting Pronouncements

See Note 2, *Summary of Significant Accounting Policies*, to the consolidated financial statements included elsewhere in this Annual Report on Form 10-K.

## ITEM 7A. QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISK

### Foreign Currency Risk

We transact business globally in multiple currencies and hence have foreign currency risks related to our revenue, costs of revenue, operating expenses and localized subsidiary debt denominated in currencies other than the U.S. dollar (primarily the Chinese yuan, euro, Canadian dollar and Norwegian krone in relation to our current year operations). In general, we are a net receiver of currencies other than the U.S. dollar for our foreign subsidiaries. Accordingly, changes in exchange rates affect our revenue and other operating results as expressed in U.S. dollars as we do not typically hedge foreign currency risk.



We have also experienced, and will continue to experience, fluctuations in our net income as a result of gains (losses) on the settlement and the re-measurement of monetary assets and liabilities denominated in currencies that are not the local currency (primarily consisting of our intercompany and cash and cash equivalents balances).

We considered the historical trends in foreign currency exchange rates and determined that it is reasonably possible that adverse changes in foreign currency exchange rates of 10% for all currencies could be experienced in the near-term. These changes were applied to our total monetary assets and liabilities denominated in currencies other than our local currencies at the balance sheet date to compute the impact these changes would have had on our net income before income taxes. These changes would have resulted in a gain or loss of \$277 million at December 31, 2021 and \$8 million at December 31, 2020 assuming no foreign currency hedging.

**Interest Rate Risk**

We are exposed to interest rate risk on our borrowings that bear interest at floating rates. Pursuant to our risk management policies, in certain cases, we utilize derivative instruments to manage some of this risk. We do not enter into derivative instruments for trading or speculative purposes. A hypothetical 10% change in interest rates on our floating rate debt would have increased or decreased our interest expense for the years ended December 31, 2021 and 2020 by \$2 million and \$4 million, respectively.

**ITEM 8. FINANCIAL STATEMENTS AND SUPPLEMENTARY DATA**

**Index to Consolidated Financial Statements**

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## **Report of Independent Registered Public Accounting Firm**

To the Board of Directors and Stockholders of Tesla, Inc.

### ***Opinions on the Financial Statements and Internal Control over Financial Reporting***

We have audited the accompanying consolidated balance sheets of Tesla, Inc. and its subsidiaries (the “Company”) as of December 31, 2021 and 2020, and the related consolidated statements of operations, of comprehensive income (loss), of redeemable noncontrolling interests and equity and of cash flows for each of the three years in the period ended December 31, 2021, including the related notes (collectively referred to as the “consolidated financial statements”). We also have audited the Company's internal control over financial reporting as of December 31, 2021, based on criteria established in *Internal Control - Integrated Framework* (2013) issued by the Committee of Sponsoring Organizations of the Treadway Commission (COSO).

In our opinion, the consolidated financial statements referred to above present fairly, in all material respects, the financial position of the Company as of December 31, 2021 and 2020, and the results of its operations and its cash flows for each of the three years in the period ended December 31, 2021 in conformity with accounting principles generally accepted in the United States of America. Also in our opinion, the Company maintained, in all material respects, effective internal control over financial reporting as of December 31, 2021, based on criteria established in *Internal Control - Integrated Framework* (2013) issued by the COSO.

### ***Changes in Accounting Principles***

As discussed in Note 2 to the consolidated financial statements, the Company changed the manner in which it accounts for convertible debt in 2021 and the manner in which it accounts for leases in 2019.

### ***Basis for Opinions***

The Company's management is responsible for these consolidated financial statements, for maintaining effective internal control over financial reporting, and for its assessment of the effectiveness of internal control over financial reporting, included in Management's Report on Internal Control over Financial Reporting appearing under Item 9A. Our responsibility is to express opinions on the Company's consolidated financial statements and on the Company's internal control over financial reporting based on our audits. We are a public accounting firm registered with the Public Company Accounting Oversight Board (United States) (PCAOB) and are required to be independent with respect to the Company in accordance with the U.S. federal securities laws and the applicable rules and regulations of the Securities and Exchange Commission and the PCAOB.

We conducted our audits in accordance with the standards of the PCAOB. Those standards require that we plan and perform the audits to obtain reasonable assurance about whether the consolidated financial statements are free of material misstatement, whether due to error or fraud, and whether effective internal control over financial reporting was maintained in all material respects.

Our audits of the consolidated financial statements included performing procedures to assess the risks of material misstatement of the consolidated financial statements, whether due to error or fraud, and performing procedures that respond to those risks. Such procedures included examining, on a test basis, evidence regarding the amounts and disclosures in the consolidated financial statements. Our audits also included evaluating the accounting principles used and significant estimates made by management, as well as evaluating the overall presentation of the consolidated financial statements. Our audit of internal control over financial reporting included obtaining an understanding of internal control over financial reporting, assessing the risk that a material weakness exists, and testing and evaluating the design and operating effectiveness of internal control based on the assessed risk. Our audits also included performing such other procedures as we considered necessary in the circumstances. We believe that our audits provide a reasonable basis for our opinions.

### ***Definition and Limitations of Internal Control over Financial Reporting***

A company's internal control over financial reporting is a process designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles. A company's internal control over financial reporting includes those policies and procedures that (i) pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of the assets of the company; (ii) provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with generally accepted accounting principles, and that receipts and expenditures of the company are being made only in accordance with authorizations of management and directors of the company; and (iii) provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use, or disposition of the company's assets that could have a material effect on the financial statements.

Because of its inherent limitations, internal control over financial reporting may not prevent or detect misstatements. Also, projections of any evaluation of effectiveness to future periods are subject to the risk that controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate.

### ***Critical Audit Matters***

The critical audit matter communicated below is a matter arising from the current period audit of the consolidated financial statements that was communicated or required to be communicated to the audit committee and that (i) relates to accounts or disclosures that are material to the consolidated financial statements and (ii) involved our especially challenging, subjective, or complex judgments. The communication of critical audit matters does not alter in any way our opinion on the consolidated financial statements, taken as a whole, and we are not, by communicating the critical audit matter below, providing a separate opinion on the critical audit matter or on the accounts or disclosures to which it relates.

#### ***Automotive Warranty Reserve***

As described in Note 2 to the consolidated financial statements, total accrued warranty, which primarily relates to the automotive segment, was \$2,101 million as of December 31, 2021. The Company provides a manufacturer's warranty on all new and used Tesla vehicles. A warranty reserve is accrued for these products sold, which includes management's best estimate of the projected costs to repair or replace items under warranty, including recalls if identified. These estimates are based on actual claims incurred to date and an estimate of the nature, frequency and costs of future claims.

The principal considerations for our determination that performing procedures relating to the automotive warranty reserve is a critical audit matter are the significant judgment by management in determining the automotive warranty reserve; this in turn led to significant auditor judgment, subjectivity, and effort in performing procedures to evaluate the estimate of the nature, frequency and costs of future claims, and the audit effort involved the use of professionals with specialized skill and knowledge.

Addressing the matter involved performing procedures and evaluating audit evidence in connection with forming our overall opinion on the consolidated financial statements. These procedures included testing the effectiveness of controls relating to management's estimate of the automotive warranty reserve, including controls over management's estimate of the nature, frequency and costs of future claims as well as the completeness and accuracy of actual claims incurred to date. These procedures also included, among others, testing management's process for determining the automotive warranty reserve. This included evaluating the appropriateness of the model applied and the reasonableness of significant assumptions related to the nature and frequency of future claims and the related costs to repair or replace items under warranty. Evaluating the assumptions related to the nature and frequency of future claims and the related costs to repair or replace items under warranty involved evaluating whether the assumptions used were reasonable considering current and past performance, including a lookback analysis comparing prior period forecasted claims to actual claims incurred. These procedures also included developing an independent estimate of a portion of the automotive warranty reserve and comparing the independent estimate to management's estimate to evaluate the reasonableness of the estimate, and testing the completeness and accuracy of historical vehicle claims processed and that such claims were appropriately used by management in the estimation of future claims. Professionals with specialized skill and knowledge were used to assist in developing an independent estimate of a portion of the automotive warranty reserve and in evaluating the appropriateness of certain aspects of management's model for estimating the nature and frequency of future claims.

/s/ PricewaterhouseCoopers LLP

San Jose, California  
February 4, 2022

We have served as the Company's auditor since 2005.

**Tesla, Inc.**  
**Consolidated Balance Sheets**  
(in millions, except per share data)

	December 31, 2021	December 31, 2020
<b>Assets</b>		
Current assets		
Cash and cash equivalents	\$ 17,576	\$ 19,384
Short-term marketable securities	131	—
Accounts receivable, net	1,913	1,886
Inventory	5,757	4,101
Prepaid expenses and other current assets	1,723	1,346
Total current assets	27,100	26,717
Operating lease vehicles, net	4,511	3,091
Solar energy systems, net	5,765	5,979
Property, plant and equipment, net	18,884	12,747
Operating lease right-of-use assets	2,016	1,558
Digital assets, net	1,260	—
Intangible assets, net	257	313
Goodwill	200	207
Other non-current assets	2,138	1,536
<b>Total assets</b>	<b>\$ 62,131</b>	<b>\$ 52,148</b>
<b>Liabilities</b>		
Current liabilities		
Accounts payable	\$ 10,025	\$ 6,051
Accrued liabilities and other	5,719	3,855
Deferred revenue	1,447	1,458
Customer deposits	925	752
Current portion of debt and finance leases	1,589	2,132
Total current liabilities	19,705	14,248
Debt and finance leases, net of current portion	5,245	9,556
Deferred revenue, net of current portion	2,052	1,284
Other long-term liabilities	3,546	3,330
<b>Total liabilities</b>	<b>30,548</b>	<b>28,418</b>
Commitments and contingencies (Note 15)		
Redeemable noncontrolling interests in subsidiaries	568	604
Convertible senior notes (Note 11)	—	51
<b>Equity</b>		
Stockholders' equity		
Preferred stock; \$0.001 par value; 100 shares authorized; no shares issued and outstanding	—	—
Common stock; \$0.001 par value; 2,000 shares authorized; 1,033 and 960 shares issued and outstanding as of December 31, 2021 and December 31, 2020, respectively	1	1
Additional paid-in capital	29,803	27,260
Accumulated other comprehensive income	54	363
Retained earnings (accumulated deficit)	331	(5,399)
Total stockholders' equity	30,189	22,225
Noncontrolling interests in subsidiaries	826	850
<b>Total liabilities and equity</b>	<b>\$ 62,131</b>	<b>\$ 52,148</b>

The accompanying notes are an integral part of these consolidated financial statements.

**Tesla, Inc.**

**Consolidated Statements of Operations**  
(in millions, except per share data)

	Year Ended December 31,		
	2021	2020	2019
<b>Revenues</b>			
Automotive sales	\$ 44,125	\$ 24,604	\$ 19,358
Automotive regulatory credits	1,465	1,580	594
Automotive leasing	1,642	1,052	869
Total automotive revenues	47,232	27,236	20,821
Energy generation and storage	2,789	1,994	1,531
Services and other	3,802	2,306	2,226
Total revenues	53,823	31,536	24,578
<b>Cost of revenues</b>			
Automotive sales	32,415	19,696	15,939
Automotive leasing	978	563	459
Total automotive cost of revenues	33,393	20,259	16,398
Energy generation and storage	2,918	1,976	1,341
Services and other	3,906	2,671	2,770
Total cost of revenues	40,217	24,906	20,509
<b>Gross profit</b>	13,606	6,630	4,069
<b>Operating expenses</b>			
Research and development	2,593	1,491	1,343
Selling, general and administrative	4,517	3,145	2,646
Restructuring and other	(27)	—	149
Total operating expenses	7,083	4,636	4,138
<b>Income (loss) from operations</b>	6,523	1,994	(69)
Interest income	56	30	44
Interest expense	(371)	(748)	(685)
Other income (expense), net	135	(122)	45
<b>Income (loss) before income taxes</b>	6,343	1,154	(665)
Provision for income taxes	699	292	110
<b>Net income (loss)</b>	5,644	862	(775)
Net income attributable to noncontrolling interests and redeemable noncontrolling interests in subsidiaries	125	141	87
<b>Net income (loss) attributable to common stockholders</b>	\$ 5,519	\$ 721	\$ (862)
Net income (loss) per share of common stock attributable to common stockholders			
Basic	\$ 5.60	\$ 0.74	\$ (0.98)
Diluted	\$ 4.90	\$ 0.64	\$ (0.98)
Weighted average shares used in computing net income (loss) per share of common stock			
Basic	986	933	887
Diluted	1,129	1,083	887

The accompanying notes are an integral part of these consolidated financial statements.



**Tesla, Inc.**  
**Consolidated Statements of Comprehensive Income (Loss)**  
**(in millions)**

	Year Ended December 31,		
	2021	2020	2019
Net income (loss)	\$ 5,644	\$ 862	\$ (775)
Other comprehensive income (loss):			
Foreign currency translation adjustment	(308)	399	(28)
Unrealized net loss on marketable securities	(1)	—	—
Comprehensive income (loss)	5,335	1,261	(803)
Less: Comprehensive income attributable to noncontrolling interests and redeemable noncontrolling interests in subsidiaries	125	141	87
Comprehensive income (loss) attributable to common stockholders	\$ 5,210	\$ 1,120	\$ (890)

The accompanying notes are an integral part of these consolidated financial statements.

Tesla, Inc.

**Consolidated Statements of Redeemable Noncontrolling Interests and Equity**  
(in millions, except per share data)

	Redeemable	Common Stock		Additional	Accumulated	Accumulated	Total	Noncontrolling	
	Noncontrolling	Shares	Amount	Paid-	Other	Deficit)	Stockholders'	Interests	Total
	Interests			In	Comprehensive	Retained	Equity	in	Equity
				Capital	(Loss)	Earnings		Subsidiaries	
<b>Balance as of December 31, 2018</b>	\$ 556	863	\$ 1	\$10,248	\$ (8)	\$ (5,318)	\$ 4,923	\$ 834	\$ 5,757
Adjustments for prior periods from adopting ASC 842	—	—	—	—	—	97	97	—	97
Conversion feature of 2.00% Convertible Senior Notes due in 2024 ("2024 Notes")	—	—	—	491	—	—	491	—	491
Purchase of convertible note hedges	—	—	—	(476)	—	—	(476)	—	(476)
Sales of warrants	—	—	—	174	—	—	174	—	174
Issuance of common stock for equity incentive awards and acquisitions, net of transaction costs	—	24	0	482	—	—	482	—	482
Issuance of common stock in May 2019 public offering at \$48.60 per share, net of issuance costs of \$15	—	18	0	848	—	—	848	—	848
Stock-based compensation	—	—	—	973	—	—	973	—	973
Contributions from noncontrolling interests	105	—	—	—	—	—	—	174	174
Distributions to noncontrolling interests	(65)	—	—	—	—	—	—	(198)	(198)
Other	(1)	—	—	(4)	—	—	(4)	—	(4)
Net income (loss)	48	—	—	—	—	(862)	(862)	39	(823)
Other comprehensive loss	—	—	—	—	(28)	—	(28)	—	(28)
<b>Balance as of December 31, 2019</b>	\$ 643	905	\$ 1	\$12,736	\$ (36)	\$ (6,083)	\$ 6,618	\$ 849	\$ 7,467
Adjustments for prior periods from adopting ASU 2016-13	—	—	—	—	—	(37)	(37)	—	(37)
Reclassification between equity and mezzanine equity for convertible senior notes	—	—	—	(51)	—	—	(51)	—	(51)
Exercises of conversion feature of convertible senior notes	—	2	0	59	—	—	59	—	59
Issuance of common stock for equity incentive awards	—	19	0	417	—	—	417	—	417
Issuance of common stock in public offerings, net of issuance costs of \$68	—	34	0	12,269	—	—	12,269	—	12,269
Stock-based compensation	—	—	—	1,861	—	—	1,861	—	1,861
Contributions from noncontrolling interests	7	—	—	—	—	—	—	17	17
Distributions to noncontrolling interests	(67)	—	—	—	—	—	—	(132)	(132)
Buy-outs of noncontrolling interests	(4)	—	—	(31)	—	—	(31)	—	(31)
Net income	25	—	—	—	—	721	721	116	837
Other comprehensive income	—	—	—	—	399	—	399	—	399
<b>Balance as of December 31, 2020</b>	\$ 604	960	\$ 1	\$27,260	\$ 363	\$ (5,399)	\$ 22,225	\$ 850	\$23,075
Adjustments for prior periods from adopting ASU 2020-06	—	—	—	(474)	—	211	(263)	—	(263)
Exercises of conversion feature of convertible senior notes	—	1	0	6	—	—	6	—	6
Settlements of warrants	—	37	0	—	—	—	—	—	—
Issuance of common stock for equity incentive awards	—	35	0	707	—	—	707	—	707
Stock-based compensation	—	—	—	2,299	—	—	2,299	—	2,299
Contributions from noncontrolling interests	2	—	—	—	—	—	—	—	—
Distributions to noncontrolling interests	(66)	—	—	—	—	—	—	(106)	(106)
Buy-outs of noncontrolling interests	(15)	—	—	5	—	—	5	—	5
Net income	43	—	—	—	—	5,519	5,519	82	5,601
Other comprehensive loss	—	—	—	—	(309)	—	(309)	—	(309)
<b>Balance as of December 31, 2021</b>	\$ 568	1,033	\$ 1	\$29,803	\$ 54	\$ 331	\$ 30,189	\$ 826	\$31,015

The accompanying notes are an integral part of these consolidated financial statements.

**Tesla, Inc.**  
**Consolidated Statements of Cash Flows**  
(in millions)

	Year Ended December 31,		
	2021	2020	2019
<b>Cash Flows from Operating Activities</b>			
Net income (loss)	\$ 5,644	\$ 862	\$ (775)
Adjustments to reconcile net income (loss) to net cash provided by operating activities:			
Depreciation, amortization and impairment	2,911	2,322	2,154
Stock-based compensation	2,121	1,734	898
Inventory and purchase commitments write-downs	140	202	193
Foreign currency transaction net unrealized (gain) loss	(55)	114	(48)
Non-cash interest and other operating activities	245	525	520
Digital assets gain, net	(27)	—	—
Operating cash flow related to repayment of discounted convertible senior notes	—	—	(188)
Changes in operating assets and liabilities:			
Accounts receivable	(130)	(652)	(367)
Inventory	(1,709)	(422)	(429)
Operating lease vehicles	(2,114)	(1,072)	(764)
Prepaid expenses and other current assets	(271)	(251)	(288)
Other non-current assets	(1,291)	(344)	115
Accounts payable and accrued liabilities	4,578	2,102	646
Deferred revenue	793	321	801
Customer deposits	186	7	(58)
Other long-term liabilities	476	495	(5)
Net cash provided by operating activities	11,497	5,943	2,405
<b>Cash Flows from Investing Activities</b>			
Purchases of property and equipment excluding finance leases, net of sales	(6,482)	(3,157)	(1,327)
Purchases of solar energy systems, net of sales	(32)	(75)	(105)
Purchases of digital assets	(1,500)	—	—
Proceeds from sales of digital assets	272	—	—
Purchases of marketable securities	(132)	—	—
Receipt of government grants	6	123	46
Purchase of intangible assets	—	(10)	(5)
Business combinations, net of cash acquired	—	(13)	(45)
Net cash used in investing activities	(7,868)	(3,132)	(1,436)
<b>Cash Flows from Financing Activities</b>			
Proceeds from issuances of common stock in public offerings, net of issuance costs	—	12,269	848
Proceeds from issuances of convertible and other debt	8,883	9,713	10,669
Repayments of convertible and other debt	(14,167)	(11,623)	(9,161)
Collateralized lease repayments	(9)	(240)	(389)
Proceeds from exercises of stock options and other stock issuances	707	417	263
Principal payments on finance leases	(439)	(338)	(321)
Debt issuance costs	(9)	(6)	(37)
Purchase of convertible note hedges	—	—	(476)
Proceeds from issuance of warrants	—	—	174
Proceeds from investments by noncontrolling interests in subsidiaries	2	24	279
Distributions paid to noncontrolling interests in subsidiaries	(161)	(208)	(311)
Payments for buy-outs of noncontrolling interests in subsidiaries	(10)	(35)	(9)
Net cash (used in) provided by financing activities	(5,203)	9,973	1,529
Effect of exchange rate changes on cash and cash equivalents and restricted cash	(183)	334	8
Net (decrease) increase in cash and cash equivalents and restricted cash	(1,757)	13,118	2,506
Cash and cash equivalents and restricted cash, beginning of period	19,901	6,783	4,277
Cash and cash equivalents and restricted cash, end of period	\$ 18,144	\$ 19,901	\$ 6,783
<b>Supplemental Non-Cash Investing and Financing Activities</b>			
Equity issued in connection with business combination	\$ —	\$ —	\$ 207
Acquisitions of property and equipment included in liabilities	\$ 2,251	\$ 1,088	\$ 562
<b>Supplemental Disclosures</b>			
Cash paid during the period for interest, net of amounts capitalized	\$ 266	\$ 444	\$ 455
Cash paid during the period for taxes, net of refunds	\$ 561	\$ 115	\$ 54

The accompanying notes are an integral part of these consolidated financial statements.

**Tesla, Inc.**  
**Notes to Consolidated Financial Statements**

**Note 1 – Overview**

Tesla, Inc. (“Tesla”, the “Company”, “we”, “us” or “our”) was incorporated in the State of Delaware on July 1, 2003. We design, develop, manufacture and sell high-performance fully electric vehicles and design, manufacture, install and sell solar energy generation and energy storage products. Our Chief Executive Officer, as the chief operating decision maker (“CODM”), organizes our company, manages resource allocations and measures performance among two operating and reportable segments: (i) automotive and (ii) energy generation and storage.

There has continued to be widespread impact from the coronavirus disease (“COVID-19”) pandemic. Beginning in the first quarter of 2021, there has been a trend in many parts of the world of increasing availability and administration of vaccines against COVID-19, as well as an easing of restrictions on social, business, travel and government activities and functions. On the other hand, infection rates and regulations continue to fluctuate in various regions and there are ongoing global impacts resulting from the pandemic, including challenges and increases in costs for logistics and supply chains, such as increased port congestion, intermittent supplier delays and a shortfall of semiconductor supply. We have also previously been affected by temporary manufacturing closures, employment and compensation adjustments and impediments to administrative activities supporting our product deliveries and deployments.

**Note 2 – Summary of Significant Accounting Policies**

*Principles of Consolidation*

The accompanying consolidated financial statements have been prepared in conformity with U.S. generally accepted accounting principles (“GAAP”) and reflect our accounts and operations and those of our subsidiaries in which we have a controlling financial interest. In accordance with the provisions of Accounting Standards Codification (“ASC”) 810, *Consolidation*, we consolidate any variable interest entity (“VIE”) of which we are the primary beneficiary. We have formed VIEs with financing fund investors in the ordinary course of business in order to facilitate the funding and monetization of certain attributes associated with solar energy systems and leases under our direct vehicle leasing programs. The typical condition for a controlling financial interest ownership is holding a majority of the voting interests of an entity; however, a controlling financial interest may also exist in entities, such as VIEs, through arrangements that do not involve controlling voting interests. ASC 810 requires a variable interest holder to consolidate a VIE if that party has the power to direct the activities of the VIE that most significantly impact the VIE’s economic performance and the obligation to absorb losses of the VIE that could potentially be significant to the VIE or the right to receive benefits from the VIE that could potentially be significant to the VIE. We do not consolidate a VIE in which we have a majority ownership interest when we are not considered the primary beneficiary. We have determined that we are the primary beneficiary of all the VIEs (see *Note 16, Variable Interest Entity Arrangements*). We evaluate our relationships with all the VIEs on an ongoing basis to ensure that we continue to be the primary beneficiary. All intercompany transactions and balances have been eliminated upon consolidation.

*Use of Estimates*

The preparation of financial statements in conformity with U.S. GAAP requires management to make estimates and assumptions that affect the reported amounts of assets, liabilities, revenues, costs and expenses and related disclosures in the accompanying notes.

Due to the COVID-19 pandemic, there has been uncertainty and disruption in the global economy and financial markets which could impact our estimates and assumptions. We have assessed the impact and are not aware of any specific events or circumstances that required an update to our estimates and assumptions or materially affected the carrying value of our assets or liabilities as of the date of issuance of this Annual Report on Form 10-K. These estimates may change as new events occur and additional information is obtained. Actual results could differ materially from these estimates under different assumptions or conditions.

*Reclassifications*

Certain prior period balances have been reclassified to conform to the current period presentation in the consolidated financial statements and the accompanying notes.

## Revenue Recognition

### Revenue by source

The following table disaggregates our revenue by major source (in millions):

	Year Ended December 31,		
	2021	2020	2019
Automotive sales without resale value guarantee	\$ 43,186	\$ 24,053	\$ 19,212
Automotive sales with resale value guarantee (1)	939	551	146
Automotive regulatory credits	1,465	1,580	594
Energy generation and storage sales	2,279	1,477	1,000
Services and other	3,802	2,306	2,226
Total revenues from sales and services	51,671	29,967	23,178
Automotive leasing	1,642	1,052	869
Energy generation and storage leasing	510	517	531
Total revenues	<u>\$ 53,823</u>	<u>\$ 31,536</u>	<u>\$ 24,578</u>

Pricing adjustments on our vehicle offerings can impact the estimate of likelihood that customers would exercise their resale value guarantees, resulting in an adjustment of our sales return reserve on vehicles sold with resale value guarantees. Actual return rates being lower than expected and increases in resale values of our vehicles in 2021 resulted in a net release of our reserve of \$365 million, which represented an increase in automotive sales revenue. For the years ended December 31, 2020 and 2019, vehicle pricing reductions resulted in an increase of our reserve of \$72 million and \$555 million, respectively, which represented decreases in automotive sales revenue.

### Automotive Segment

#### Automotive Sales Revenue

##### Automotive Sales without Resale Value Guarantee

Automotive sales revenue includes revenues related to deliveries of new vehicles and pay-per-use charges, and specific other features and services that meet the definition of a performance obligation under ASC 606, including access to our Supercharger network, internet connectivity, Full Self Driving ("FSD") features and over-the-air software updates. We recognize revenue on automotive sales upon delivery to the customer, which is when the control of a vehicle transfers. Payments are typically received at the point control transfers or in accordance with payment terms customary to the business. Other features and services such as access to our Supercharger network, internet connectivity and over-the-air software updates are provisioned upon control transfer of a vehicle and recognized over time on a straight-line basis as we have a stand-ready obligation to deliver such services to the customer. We recognize revenue related to these other features and services over the performance period, which is generally the estimated useful life of the vehicle. Revenue related to FSD features is recognized when functionality is delivered to the customer. For our obligations related to automotive sales, we estimate standalone selling price by considering costs used to develop and deliver the service, third-party pricing of similar options and other information that may be available.

At the time of revenue recognition, we reduce the transaction price and record a sales return reserve against revenue for estimated variable consideration related to future product returns. Such return rate estimates are based on historical experience and are immaterial in all periods presented. In addition, any fees that are paid or payable by us to a customer's lender when we arrange the financing are recognized as an offset against automotive sales revenue.

Costs to obtain a contract mainly relate to commissions paid to our sales personnel for the sale of vehicles. Commissions are not paid on other obligations such as access to our Supercharger network, internet connectivity, FSD features and over-the-air software updates. As our contract costs related to automotive sales are typically fulfilled within one year, the costs to obtain a contract are expensed as incurred. Amounts billed to customers related to shipping and handling are classified as automotive sales revenue, and we have elected to recognize the cost for freight and shipping when control over vehicles, parts or accessories have transferred to the customer as an expense in cost of automotive sales revenue. Our policy is to exclude taxes collected from a customer from the transaction price of automotive contracts.

##### Automotive Sales with Resale Value Guarantee or a Buyback Option

We offer resale value guarantees or similar buy-back terms to certain international customers who purchase vehicles and who finance their vehicles through one of our specified commercial banking partners. We also offer resale value guarantees in connection with automotive sales to certain leasing partners. Under these programs, we

receive full payment for the vehicle sales price at the time of delivery and our counterparty has the option of selling their vehicle back to us during the guarantee period, which currently is generally at the end of the term of the applicable loan or financing program, for a pre-determined resale value.

We recognize revenue when control transfers upon delivery to customers in accordance with ASC 606 as a sale with a right of return when we do not believe the customer has a significant economic incentive to exercise the resale value guarantee provided to them at contract inception. The process to determine whether there is a significant economic incentive includes a comparison of a vehicle's estimated market value at the time the option is exercisable with the guaranteed resale value to determine the customer's economic incentive to exercise. The performance obligations and the pattern of recognizing automotive sales with resale value guarantees are consistent with automotive sales without resale value guarantees with the exception of our estimate for sales return reserve. Sales return reserves for automotive sales with resale value guarantees are estimated based on historical experience plus consideration for expected future market values. On a quarterly basis, we assess the estimated market values of vehicles sold with resale value guarantees to determine whether there have been changes to the likelihood of future product returns. As we accumulate more data related to the resale values of our vehicles or as market conditions change, there may be material changes to their estimated values.

Due to actual return rates being lower than expected and increases in resale values of our vehicles during 2021, we estimated that there is a lower future likelihood that customers will exercise their resale value guarantees. We adjusted our sales return reserve on vehicles sold with resale value guarantees resulting in an increase of automotive sales revenues of \$365 million for the year ended December 31, 2021 and a corresponding increase in cost of automotive sales of \$286 million. The net benefit in gross profit was \$79 million for the year ended December 31, 2021. The total sales return reserve on vehicles sold with resale value guarantees was \$223 million and \$703 million as of December 31, 2021 and December 31, 2020, respectively, of which \$91 million and \$202 million was short term, respectively.

Deferred revenue activity related to the access to our Supercharger network, internet connectivity, FSD features and over-the-air software updates on automotive sales with and without resale value guarantee consisted of the following (in millions):

	Year ended December 31,	
	2021	2020
Deferred revenue on automotive sales with and without resale value guarantee— beginning of period	\$ 1,926	\$ 1,472
Additions	847	724
Net changes in liability for pre-existing contracts	(25)	56
Revenue recognized	(366)	(326)
Deferred revenue on automotive sales with and without resale value guarantee— end of period	\$ 2,382	\$ 1,926

Deferred revenue is equivalent to the total transaction price allocated to the performance obligations that are unsatisfied, or partially unsatisfied, as of the balance sheet date. Revenue recognized from the deferred revenue balance as of December 31, 2020 and 2019 was \$312 million and \$283 million for the years ended December 31, 2021 and 2020, respectively. Of the total deferred revenue on automotive sales with and without resale value guarantees as of December 31, 2021, we expect to recognize \$962 million of revenue in the next 12 months. The remaining balance will be recognized over the performance period as discussed above in Automotive Sales without Resale Value Guarantee.

#### Automotive Regulatory Credits

We earn tradable credits in the operation of our automotive business under various regulations related to zero-emission vehicles, greenhouse gas, fuel economy and clean fuel. We sell these credits to other regulated entities who can use the credits to comply with emission standards and other regulatory requirements.

Payments for automotive regulatory credits are typically received at the point control transfers to the customer, or in accordance with payment terms customary to the business. We recognize revenue on the sale of automotive regulatory credits, which have negligible incremental costs associated with them, at the time control of the regulatory credits is transferred to the purchasing party. Revenue from the sale of automotive regulatory credits totaled \$1.46 billion, \$1.58 billion and \$594 million for the years ended December 31, 2021, 2020 and 2019, respectively. Deferred revenue related to sales of automotive regulatory credits was immaterial as of December 31, 2021 and 2020, respectively. Revenue recognized from the deferred revenue balance as of December 31, 2020 and 2019 was immaterial and \$140 million for the years ended December 31, 2021 and 2020, respectively.

### Automotive Leasing Revenue

#### Direct Vehicle Operating Leasing Program

We have outstanding leases under our direct vehicle operating leasing programs in the U.S., Canada and in certain countries in Europe. Qualifying customers are permitted to lease a vehicle directly from Tesla for up to 48 months. At the end of the lease term, customers are required to return the vehicles to us or, for Model S and Model X in certain regions, may opt to purchase the vehicles for a pre-determined residual value. We account for these leasing transactions as operating leases. We record leasing revenues to automotive leasing revenue on a straight-line basis over the contractual term, and we record the depreciation of these vehicles to cost of automotive leasing revenue. For the years ended December 31, 2021, 2020 and 2019, we recognized \$1.25 billion, \$752 million and \$532 million of direct vehicle leasing revenue, respectively. As of December 31, 2021 and 2020, we had deferred \$392 million and \$293 million, respectively, of lease-related upfront payments, which will be recognized on a straight-line basis over the contractual terms of the individual leases.

Our policy is to exclude taxes collected from a customer from the transaction price of automotive contracts.

#### Direct Sales-Type Leasing Program

We have outstanding direct leases and vehicles financed by us under loan arrangements accounted for as sales-type leases under ASC 842 in certain countries in Asia and Europe, which we introduced during the third quarter of 2020. Depending on the specific program, customers may or may not have a right to return the vehicle to us during or at the end of the lease term. If the customer does not have a right to return, the customer will take title to the vehicle at the end of the lease term after making all contractual payments. Under the programs for which there is a right to return, the purchase option is reasonably certain to be exercised by the lessee and we therefore expect the customer to take title to the vehicle at the end of the lease term after making all contractual payments. Qualifying customers are permitted to lease a vehicle directly under these programs for up to 48 months. Our loan arrangements under these programs can have terms for up to 72 months. We recognize all revenue and costs associated with the sales-type lease as automotive leasing revenue and automotive leasing cost of revenue, respectively, upon delivery of the vehicle to the customer. Interest income based on the implicit rate in the lease is recorded to automotive leasing revenue over time as customers are invoiced on a monthly basis. For the years ended December 31, 2021 and 2020, we recognized \$369 million and \$120 million, respectively, of sales-type leasing revenue and \$234 million and \$87 million, respectively, of sales-type leasing cost of revenue.

### Services and Other Revenue

Services and other revenue consists of non-warranty after-sales vehicle services, sales of used vehicles, retail merchandise, sales by our acquired subsidiaries to third party customers and vehicle insurance revenue.

Revenues related to repair and maintenance services are recognized over time as services are provided and extended service plans are recognized over the performance period of the service contract as the obligation represents a stand-ready obligation to the customer. We sell used vehicles, services, service plans, vehicle components and merchandise separately and thus use standalone selling prices as the basis for revenue allocation to the extent that these items are sold in transactions with other performance obligations. Payment for used vehicles, services, and merchandise are typically received at the point when control transfers to the customer or in accordance with payment terms customary to the business. Payments received for prepaid plans are refundable upon customer cancellation of the related contracts and are included within customer deposits on the consolidated balance sheets. Deferred revenue related to services and other revenue was immaterial as of December 31, 2021 and 2020.



## *Energy Generation and Storage Segment*

### Energy Generation and Storage Sales

Energy generation and storage sales revenue consists of the sale of solar energy systems and energy storage systems to residential, small commercial, large commercial and utility grade customers. Energy generation and storage sales revenue also includes revenue from agreements for solar energy systems and power purchase agreements (“PPAs”) that commence after January 1, 2019, which is recognized as earned, based on the amount of capacity provided for solar energy systems or electricity delivered for PPAs at the contractual billing rates, assuming all other revenue recognition criteria have been met. Under the practical expedient available under ASC 606-10-55-18, we recognize revenue based on the value of the service which is consistent with the billing amount. Sales of solar energy systems to residential and small scale commercial customers consist of the engineering, design and installation of the system. Post-installation, residential and small scale commercial customers receive a proprietary monitoring system that captures and displays historical energy generation data. Residential and small scale commercial customers pay the full purchase price of the solar energy system upfront. Revenue for the design and installation obligation is recognized when control transfers, which is when we install a solar energy system and the system passes inspection by the utility or the authority having jurisdiction. Sales of energy storage systems to residential and small scale commercial customers consist of the installation of the energy storage system and revenue is recognized when control transfers, which is when the product has been delivered or, if we are performing installation, when installed and commissioned. Payment for such storage systems is made upon invoice or in accordance with payment terms customary to the business.

For large commercial and utility grade solar energy system and energy storage system sales which consist of the engineering, design and installation of the system, customers make milestone payments that are consistent with contract-specific phases of a project. Revenue from such contracts is recognized over time using the percentage of completion method based on cost incurred as a percentage of total estimated contract costs for energy storage system sales and as a percentage of total estimated labor hours for solar energy system sales. Certain large-scale commercial and utility grade solar energy system and energy storage system sales also include operations and maintenance service which are negotiated with the design and installation contracts and are thus considered to be a combined contract with the design and installation service. For certain large commercial and utility grade solar energy systems and energy storage systems where the percentage of completion method does not apply, revenue is recognized when control transfers, which is when the product has been delivered to the customer and commissioned for energy storage systems and when the project has received permission to operate from the utility for solar energy systems. Operations and maintenance service revenue is recognized ratably over the respective contract term for solar energy system sales and upon delivery of the service for energy storage system sales. Customer payments for such services are usually paid annually or quarterly in advance.

In instances where there are multiple performance obligations in a single contract, we allocate the consideration to the various obligations in the contract based on the relative standalone selling price method. Standalone selling prices are estimated based on estimated costs plus margin or by using market data for comparable products. Costs incurred on the sale of residential installations before the solar energy systems are completed are included as work in process within inventory in the consolidated balance sheets. Any fees that are paid or payable by us to a solar loan lender would be recognized as an offset against revenue. Costs to obtain a contract relate mainly to commissions paid to our sales personnel related to the sale of solar energy systems and energy storage systems. As our contract costs related to solar energy system and energy storage system sales are typically fulfilled within one year, the costs to obtain a contract are expensed as incurred.

As part of our solar energy system and energy storage system contracts, we may provide the customer with performance guarantees that warrant that the underlying system will meet or exceed the minimum energy generation or energy performance requirements specified in the contract. In certain instances, we may receive a bonus payment if the system performs above a specified level. Conversely, if a solar energy system or energy storage system does not meet the performance guarantee requirements, we may be required to pay liquidated damages. Other forms of variable consideration related to our large commercial and utility grade solar energy system and energy storage system contracts include variable customer payments that will be made based on our energy market participation activities. Such guarantees and variable customer payments represent a form of variable consideration and are estimated at contract inception at their most likely amount and updated at the end of each reporting period as additional performance data becomes available. Such estimates are included in the transaction price only to the extent that it is probable a significant reversal of revenue will not occur.

We record as deferred revenue any non-refundable amounts that are collected from customers related to fees charged for prepayments and remote monitoring service and operations and maintenance service, which is recognized as revenue ratably over the respective customer contract term. As of December 31, 2021 and 2020, deferred revenue related to such customer payments amounted to \$399 million and \$187 million, respectively. Revenue recognized from the deferred revenue balance as of December 31, 2020 and 2019 was \$93 million and \$34 million for the years ended December 31, 2021 and 2020, respectively. We have elected the practical expedient to omit disclosure of the amount of the transaction price allocated to remaining performance obligations for energy generation and storage sales with an original expected contract length of one year or less and the amount that we have the right to invoice when that amount corresponds directly with the value of the performance to date. As of December 31, 2021, total transaction price allocated to performance obligations that were unsatisfied or partially unsatisfied for contracts with an original expected length of more than one year was \$152 million. Of this amount, we expect to recognize \$9 million in the next 12 months and the remaining over a period up to 26 years.

#### Energy Generation and Storage Leasing

For revenue arrangements where we are the lessor under operating lease agreements for energy generation and storage products, we record lease revenue from minimum lease payments, including upfront rebates and incentives earned from such systems, on a straight-line basis over the life of the lease term, assuming all other revenue recognition criteria have been met. The difference between the payments received and the revenue recognized is recorded as deferred revenue or deferred asset on the consolidated balance sheet.

For solar energy systems where customers purchase electricity from us under PPAs prior to January 1, 2019, we have determined that these agreements should be accounted for as operating leases pursuant to ASC 840. Revenue is recognized based on the amount of electricity delivered at rates specified under the contracts, assuming all other revenue recognition criteria are met.

We record as deferred revenue any amounts that are collected from customers, including lease prepayments, in excess of revenue recognized and operations and maintenance service fees, which is recognized as revenue ratably over the respective customer contract term. As of December 31, 2021 and 2020, deferred revenue related to such customer payments amounted to \$198 million and \$206 million, respectively. Deferred revenue also includes the portion of rebates and incentives received from utility companies and various local and state government agencies, which is recognized as revenue over the lease term. As of December 31, 2021 and 2020, deferred revenue from rebates and incentives amounted to \$27 million and \$29 million, respectively.

We capitalize initial direct costs from the execution of agreements for solar energy systems and PPAs, which include the referral fees and sales commissions, as an element of solar energy systems, net, and subsequently amortize these costs over the term of the related agreements.

#### *Cost of Revenues*

##### *Automotive Segment*

##### Automotive Sales

Cost of automotive sales revenue includes direct and indirect materials, labor costs, manufacturing overhead, including depreciation costs of tooling and machinery, shipping and logistic costs, vehicle connectivity costs, allocations of electricity and infrastructure costs related to our Supercharger network and reserves for estimated warranty expenses. Cost of automotive sales revenues also includes adjustments to warranty expense and charges to write down the carrying value of our inventory when it exceeds its estimated net realizable value and to provide for obsolete and on-hand inventory in excess of forecasted demand.

##### Automotive Leasing

Cost of automotive leasing revenue includes the depreciation of operating lease vehicles, cost of goods sold associated with direct sales-type leases and warranty expense related to leased vehicles. Cost of automotive leasing revenue also includes vehicle connectivity costs and allocations of electricity and infrastructure costs related to our Supercharger network for vehicles under our leasing programs.

##### Services and Other

Costs of services and other revenue includes costs associated with providing non-warranty after-sales services, cost of used vehicles including refurbishment costs, costs for retail merchandise and costs to provide vehicle insurance. Cost of services and other revenue also includes direct parts, material and labor costs and manufacturing overhead associated with the sales by our acquired subsidiaries to third party customers.



## *Energy Generation and Storage Segment*

### *Energy Generation and Storage*

Cost of energy generation and storage revenue includes direct and indirect material and labor costs, warehouse rent, freight, warranty expense, other overhead costs and amortization of certain acquired intangible assets. Cost of energy generation and storage revenue also includes charges to write down the carrying value of our inventory when it exceeds its estimated net realizable value and to provide for obsolete and on-hand inventory in excess of forecasted demand. In agreements for solar energy systems and PPAs where we are the lessor, the cost of revenue is primarily comprised of depreciation of the cost of leased solar energy systems, maintenance costs associated with those systems and amortization of any initial direct costs.

### *Leases*

We adopted ASC 842, Leases, as of January 1, 2019 using the cumulative effect adjustment approach (“adoption of the new lease standard”). In addition, we elected the package of practical expedients permitted under the transition guidance within the new standard, which allowed us to carry forward the historical determination of contracts as leases, lease classification and not reassess initial direct costs for historical lease arrangements. The finance lease classification under ASC 842 includes leases previously classified as capital leases under ASC 840.

### *Research and Development Costs*

Research and development costs are expensed as incurred.

### *Marketing, Promotional and Advertising Costs*

Marketing, promotional and advertising costs are expensed as incurred and are included as an element of selling, general and administrative expense in the consolidated statement of operations. Marketing, promotional and advertising costs were immaterial for the years ended December 31, 2021, 2020 and 2019.

### *Income Taxes*

Income taxes are computed using the asset and liability method, under which deferred tax assets and liabilities are determined based on the difference between the financial statement and tax bases of assets and liabilities using enacted tax rates in effect for the year in which the differences are expected to affect taxable income. Valuation allowances are established when necessary to reduce deferred tax assets to the amount expected to be realized.

We record liabilities related to uncertain tax positions when, despite our belief that our tax return positions are supportable, we believe that it is more likely than not that those positions may not be fully sustained upon review by tax authorities. Accrued interest and penalties related to unrecognized tax benefits are classified as income tax expense.

The Tax Cuts and Jobs Act (“TCJA”) subjects a U.S. shareholder to tax on global intangible low-taxed income (“GILTI”) earned by certain foreign subsidiaries. Under GAAP, we can make an accounting policy election to either treat taxes due on the GILTI inclusion as a current period expense or factor such amounts into our measurement of deferred taxes. We elected the deferred method, under which we recorded the corresponding deferred tax assets and liabilities on our consolidated balance sheets, currently subject to valuation allowance.

### *Comprehensive Income (Loss)*

Comprehensive income (loss) is comprised of net income (loss) and other comprehensive income (loss). Other comprehensive income (loss) consists of foreign currency translation adjustments and unrealized net gains and losses on marketable securities that have been excluded from the determination of net income (loss).

### *Stock-Based Compensation*

We use the fair value method of accounting for our stock options and restricted stock units (“RSUs”) granted to employees and for our employee stock purchase plan (the “ESPP”) to measure the cost of employee services received in exchange for the stock-based awards. The fair value of stock option awards with only service and/or performance conditions is estimated on the grant or offering date using the Black-Scholes option-pricing model. The Black-Scholes option-pricing model requires inputs such as the risk-free interest rate, expected term and expected volatility. These inputs are subjective and generally require significant judgment. The fair value of RSUs is measured on the grant date based on the closing fair market value of our common stock. The resulting cost is recognized over the period during which an employee is required to provide service in exchange for the awards, usually the vesting

period, which is generally four years for stock options and RSUs and six months for the ESPP. Stock-based compensation expense is recognized on a straight-line basis, net of actual forfeitures in the period.

For performance-based awards, stock-based compensation expense is recognized over the expected performance achievement period of individual performance milestones when the achievement of each individual performance milestone becomes probable. For performance-based awards with a vesting schedule based entirely on the attainment of both performance and market conditions, stock-based compensation expense associated with each tranche is recognized over the longer of (i) the expected achievement period for the operational milestone for such tranche and (ii) the expected achievement period for the related market capitalization milestone determined on the grant date, beginning at the point in time when the relevant operational milestone is considered probable of being achieved. If such operational milestone becomes probable any time after the grant date, we will recognize a cumulative catch-up expense from the grant date to that point in time. If the related market capitalization milestone is achieved earlier than its expected achievement period and the achievement of the related operational milestone, then the stock-based compensation expense will be recognized over the expected achievement period for the operational milestone, which may accelerate the rate at which such expense is recognized. The fair value of such awards is estimated on the grant date using Monte Carlo simulations.

As we accumulate additional employee stock-based awards data over time and as we incorporate market data related to our common stock, we may calculate significantly different volatilities and expected lives, which could materially impact the valuation of our stock-based awards and the stock-based compensation expense that we will recognize in future periods. Stock-based compensation expense is recorded in Cost of revenues, Research and development expense and Selling, general and administrative expense in the consolidated statements of operations.

#### *Noncontrolling Interests and Redeemable Noncontrolling Interests*

Noncontrolling interests and redeemable noncontrolling interests represent third-party interests in the net assets under certain funding arrangements, or funds, that we have entered into to finance the costs of solar energy systems and vehicles under operating leases. We have determined that the contractual provisions of the funds represent substantive profit-sharing arrangements. We have further determined that the methodology for calculating the noncontrolling interest and redeemable noncontrolling interest balances that reflects the substantive profit-sharing arrangements is a balance sheet approach using the hypothetical liquidation at book value (“HLBV”) method. We, therefore, determine the amount of the noncontrolling interests and redeemable noncontrolling interests in the net assets of the funds at each balance sheet date using the HLBV method, which is presented on the consolidated balance sheet as noncontrolling interests in subsidiaries and redeemable noncontrolling interests in subsidiaries. Under the HLBV method, the amounts reported as noncontrolling interests and redeemable noncontrolling interests in the consolidated balance sheet represent the amounts the third parties would hypothetically receive at each balance sheet date under the liquidation provisions of the funds, assuming the net assets of the funds were liquidated at their recorded amounts determined in accordance with GAAP and with tax laws effective at the balance sheet date and distributed to the third parties. The third parties’ interests in the results of operations of the funds are determined as the difference in the noncontrolling interest and redeemable noncontrolling interest balances in the consolidated balance sheets between the start and end of each reporting period, after taking into account any capital transactions between the funds and the third parties. However, the redeemable noncontrolling interest balance is at least equal to the redemption amount. The redeemable noncontrolling interest balance is presented as temporary equity in the mezzanine section of the consolidated balance sheet since these third parties have the right to redeem their interests in the funds for cash or other assets. For certain funds, there may be significant fluctuations in net income (loss) attributable to noncontrolling interests and redeemable noncontrolling interests in subsidiaries due to changes in the liquidation provisions as time-based milestones are reached.

#### *Net Income (Loss) per Share of Common Stock Attributable to Common Stockholders*

Basic net income (loss) per share of common stock attributable to common stockholders is calculated by dividing net income (loss) attributable to common stockholders by the weighted-average shares of common stock outstanding for the period. Potentially dilutive shares, which are based on the weighted-average shares of common stock underlying outstanding stock-based awards, warrants and convertible senior notes using the treasury stock method or the if-converted method, as applicable, are included when calculating diluted net income (loss) per share of common stock attributable to common stockholders when their effect is dilutive.

On January 1, 2021, we adopted ASU 2020-06 using the modified retrospective method. Following this adoption, we utilize the if-converted method for diluted net income per share calculation of our convertible debt instruments (see *Recent Accounting Pronouncements* section below for further details). During the year ended December 31, 2021, we increased net income (loss) attributable to common stockholders by \$9 million to arrive at the numerator used to calculate diluted net income per share, which represents the interest expense recognized on the convertible debt instruments that were subject to this change in methodology.

Prior to the adoption, we applied the treasury stock method when calculating the potential dilutive effect, if any, of the following convertible senior notes which we intended to settle or have settled in cash the principal outstanding.

Furthermore, in connection with the offerings of our convertible senior notes, we entered into convertible note hedges and warrants (see *Note 11, Debt*). However, our convertible note hedges are not included when calculating potentially dilutive shares since their effect is always anti-dilutive. The strike price on the warrants were below our average share price during the period and were in the money and included in the tables below. Warrants have been included in the weighted-average shares used in computing basic net income (loss) per share of common stock in the period(s) they are settled.

The following table presents the reconciliation of net income (loss) attributable to common stockholders to net income (loss) used in computing basic and diluted net income (loss) per share of common stock (in millions):

	Year Ended December 31,		
	2021	2020	2019
Net income (loss) attributable to common stockholders	\$ 5,519	\$ 721	\$ (862)
Less: Buy-out of noncontrolling interest	(5)	31	8
Net income (loss) used in computing basic net income (loss) per share of common stock	5,524	690	(870)
Less: Dilutive convertible debt	(9)	—	—
Net income (loss) used in computing diluted net income (loss) per share of common stock	\$ 5,533	\$ 690	\$ (870)

The following table presents the reconciliation of basic to diluted weighted average shares used in computing net income (loss) per share of common stock attributable to common stockholders (in millions):

	Year Ended December 31,		
	2021	2020	2019
Weighted average shares used in computing net income (loss) per share of common stock, basic	986	933	887
Add:			
Stock-based awards	98	66	—
Convertible senior notes (1)	10	47	—
Warrants	35	37	—
Weighted average shares used in computing net income (loss) per share of common stock, diluted	1,129	1,083	887

The following table presents the potentially dilutive shares that were excluded from the computation of diluted net income (loss) per share of common stock attributable to common stockholders, because their effect was anti-dilutive (in millions):

	Year Ended December 31,		
	2021	2020	2019
Stock-based awards	0	2	50
Convertible senior notes (1)	—	1	5

(Under the modified retrospective method of adoption of ASU 2020-06, the dilutive impact of convertible senior notes was calculated using the if-converted method for the year ended December 31, 2021. Certain convertible senior notes were calculated using the treasury stock method for the years ended December 31, 2020 and 2019. Refer to discussion above for further details.

#### *Business Combinations*

We account for business acquisitions under ASC 805, *Business Combinations*. The total purchase consideration for an acquisition is measured as the fair value of the assets given, equity instruments issued and liabilities assumed at the acquisition date. Costs that are directly attributable to the acquisition are expensed as incurred. Identifiable assets (including intangible assets), liabilities assumed (including contingent liabilities) and noncontrolling interests in an acquisition are measured initially at their fair values at the acquisition date. We recognize goodwill if the fair value of the total purchase consideration and any noncontrolling interests is in excess of the net fair value of the identifiable assets acquired and the liabilities assumed. We recognize a bargain purchase gain within other income (expense), net, on the consolidated statement of operations if the net fair value of the identifiable assets acquired and the liabilities assumed is in excess of the fair value of the total purchase consideration and any noncontrolling interests. We include the results of operations of the acquired business in the consolidated financial statements beginning on the acquisition date.

#### *Cash and Cash Equivalents*

All highly liquid investments with an original maturity of three months or less at the date of purchase are considered cash equivalents. Our cash equivalents are primarily comprised of money market funds.



### *Restricted Cash*

We maintain certain cash balances restricted as to withdrawal or use. Our restricted cash is comprised primarily of cash held to service certain payments under various secured debt facilities. In addition, restricted cash includes cash held as collateral for certain permits as well as sales to lease partners with a resale value guarantee, letters of credit, real estate leases, insurance policies, certain operating leases and cash received from certain fund investors that have not been released for use by us. We record restricted cash as other assets in the consolidated balance sheets and determine current or non-current classification based on the expected duration of the restriction.

Our total cash and cash equivalents and restricted cash, as presented in the consolidated statements of cash flows, was as follows (in millions):

	December 31, 2021	December 31, 2020	December 31, 2019
Cash and cash equivalents	\$ 17,576	\$ 19,384	\$ 6,268
Restricted cash included in prepaid expenses and other current assets	345	238	246
Restricted cash included in other non-current assets	223	279	269
Total as presented in the consolidated statements of cash flows	<u>\$ 18,144</u>	<u>\$ 19,901</u>	<u>\$ 6,783</u>

### *Marketable Securities*

Marketable securities may be comprised of a combination of U.S. government securities and corporate debt securities and are all designated as available-for-sale and reported at estimated fair value, with unrealized gains and losses recorded in accumulated other comprehensive income which is included within stockholders' equity. Available-for-sale marketable securities with maturities greater than three months at the date of purchase are included in short-term marketable securities on our consolidated balance sheet. Interest, dividends, amortization and accretion of purchase premiums and discounts on our marketable securities are included in other income (expense), net.

The cost of available-for-sale marketable securities sold is based on the specific identification method. Realized gains and losses on the sale of available-for-sale marketable securities are recorded in other income (expense), net.

We regularly review all of our marketable securities for declines in fair value. The review includes but is not limited to (i) the consideration of the cause of the decline, (ii) any currently recorded expected credit losses and (iii) the creditworthiness of the respective security issuers. The amortized cost basis of our marketable securities approximates its fair value.

### *Accounts Receivable and Allowance for Doubtful Accounts*

Accounts receivable primarily include amounts related to receivables from financial institutions and leasing companies offering various financing products to our customers, sales of energy generation and storage products, sales of regulatory credits to other automotive manufacturers, government rebates already passed through to customers and maintenance services on vehicles owned by leasing companies. We provide an allowance against accounts receivable for the amount we expect to be uncollectible. We write-off accounts receivable against the allowance when they are deemed uncollectible.

Depending on the day of the week on which the end of a fiscal quarter falls, our accounts receivable balance may fluctuate as we are waiting for certain customer payments to clear through our banking institutions and receipts of payments from our financing partners, which can take up to approximately two weeks based on the contractual payment terms with such partners. Our accounts receivable balances associated with our sales of regulatory credits, which are typically transferred to other manufacturers during the last few days of the quarter, is dependent on contractual payment terms. Additionally, government rebates can take up to a year or more to be collected depending on the customary processing timelines of the specific jurisdictions issuing them. These various factors may have a significant impact on our accounts receivable balance from period to period. As of December 31, 2021 and 2020, we had \$627 million and \$46 million, respectively, of long-term government rebates receivable in Other non-current assets on our consolidated balance sheets.

### *MyPower Customer Notes Receivable*

We have customer notes receivable under the legacy MyPower loan program, which provided residential customers with the option to finance the purchase of a solar energy system through a 30-year loan. The outstanding balances, net of any allowance for expected credit losses, are presented on the consolidated balance sheets as a component of Prepaid expenses and other current assets for the current portion and as Other non-current assets for the long-term portion. In determining expected credit losses, we consider our historical level of credit losses, current economic trends, and reasonable and supportable forecasts that affect the collectability of the future cash flows. As of December 31, 2021 and 2020, the total outstanding balance of MyPower customer notes receivable, net of allowance for expected credit losses, was \$299 million and \$334 million, respectively, of which \$11 million and \$9 million were due in the next 12 months as of December 31, 2021 and 2020, respectively. As of December 31, 2021 and 2020, the allowance for expected credit losses was \$41 million and \$45 million, respectively.

### *Concentration of Risk*

#### *Credit Risk*

Financial instruments that potentially subject us to a concentration of credit risk consist of cash, cash equivalents, marketable securities, restricted cash, accounts receivable, convertible note hedges, and interest rate swaps. Our cash balances are primarily invested in money market funds or on deposit at high credit quality financial institutions in the U.S. These deposits are typically in excess of insured limits. As of December 31, 2021 and 2020, no entity represented 10% or more of our total accounts receivable balance. The risk of concentration for our convertible note hedges and interest rate swaps is mitigated by transacting with several highly-rated multinational banks.

#### *Supply Risk*

We are dependent on our suppliers, including single source suppliers, and the inability of these suppliers to deliver necessary components of our products in a timely manner at prices, quality levels and volumes acceptable to us, or our inability to efficiently manage these components from these suppliers, could have a material adverse effect on our business, prospects, financial condition and operating results.

### *Inventory Valuation*

Inventories are stated at the lower of cost or net realizable value. Cost is computed using standard cost for vehicles and energy storage products, which approximates actual cost on a first-in, first-out basis. In addition, cost for solar energy systems is recorded using actual cost. We record inventory write-downs for excess or obsolete inventories based upon assumptions about current and future demand forecasts. If our inventory on-hand is in excess of our future demand forecast, the excess amounts are written-off.

We also review our inventory to determine whether its carrying value exceeds the net amount realizable upon the ultimate sale of the inventory. This requires us to determine the estimated selling price of our vehicles less the estimated cost to convert the inventory on-hand into a finished product. Once inventory is written-down, a new, lower cost basis for that inventory is established and subsequent changes in facts and circumstances do not result in the restoration or increase in that newly established cost basis.

Should our estimates of future selling prices or production costs change, additional and potentially material write-downs may be required. A small change in our estimates may result in a material charge to our reported financial results.

### *Operating Lease Vehicles*

Vehicles that are leased as part of our direct vehicle leasing program are classified as operating lease vehicles at cost less accumulated depreciation. We generally depreciate their cost, less residual value, using the straight-line method to cost of automotive leasing revenue over the contractual period. The gross cost of operating lease vehicles as of December 31, 2021 and 2020 was \$5.28 billion and \$3.54 billion, respectively. Operating lease vehicles on the consolidated balance sheets are presented net of accumulated depreciation of \$773 million and \$446 million as of December 31, 2021 and 2020, respectively.

### *Digital Assets, Net*

During the year ended December 31, 2021, we purchased an aggregate of \$1.50 billion in bitcoin (a "digital asset") and briefly accepted bitcoin as a payment for sales of certain of our products in specified regions, subject to applicable laws. We account for such non-cash consideration at the time we enter into transactions with our customers in accordance with the non-cash consideration guidance included in the Accounting Standards

Codification (“ASC”) 606, *Revenue from Contracts with Customers*, based on the then current quoted market prices of the digital assets.

We currently account for all digital assets held as a result of these transactions as indefinite-lived intangible assets in accordance with ASC 350, *Intangibles—Goodwill and Other*. We have ownership of and control over our digital assets and we may use third-party custodial services to secure it. The digital assets are initially recorded at cost and are subsequently remeasured on the consolidated balance sheet at cost, net of any impairment losses incurred since acquisition.

We determine the fair value of our digital assets on a nonrecurring basis in accordance with ASC 820, *Fair Value Measurement*, based on quoted prices on the active exchange(s) that we have determined is the principal market for such assets (Level 1 inputs). We perform an analysis each quarter to identify whether events or changes in circumstances, principally decreases in the quoted prices on active exchanges, indicate that it is more likely than not that our digital assets are impaired. In determining if an impairment has occurred, we consider the lowest market price of one unit of digital asset quoted on the active exchange since acquiring the digital asset. If the then current carrying value of a digital asset exceeds the fair value so determined, an impairment loss has occurred with respect to those digital assets in the amount equal to the difference between their carrying values and the price determined.

Impairment losses are recognized within Restructuring and other in the consolidated statements of operations in the period in which the impairment is identified. The impaired digital assets are written down to their fair value at the time of impairment and this new cost basis will not be adjusted upward for any subsequent increase in fair value. Gains are not recorded until realized upon sale(s), at which point they are presented net of any impairment losses for the same digital assets held within Restructuring and other. In determining the gain to be recognized upon sale, we calculate the difference between the sales price and carrying value of the digital assets sold immediately prior to sale.

See Note 3, *Digital Assets, Net*, for further information regarding digital assets.

#### *Solar Energy Systems, Net*

We are the lessor of solar energy systems. Solar energy systems are stated at cost less accumulated depreciation.

Depreciation and amortization is calculated using the straight-line method over the estimated useful lives of the respective assets, as follows:

Solar energy systems in service	30 to 35 years
Initial direct costs related to customer solar energy system lease acquisition costs	Lease term (up to 25 years)

Solar energy systems pending interconnection will be depreciated as solar energy systems in service when they have been interconnected and placed in-service. Solar energy systems under construction represents systems that are under installation, which will be depreciated as solar energy systems in service when they are completed, interconnected and placed in service. Initial direct costs related to customer solar energy system agreement acquisition costs are capitalized and amortized over the term of the related customer agreements.

#### *Property, Plant and Equipment, Net*

Property, plant and equipment, net, including leasehold improvements, are recognized at cost less accumulated depreciation. Depreciation is generally computed using the straight-line method over the estimated useful lives of the respective assets, as follows:

Machinery, equipment, vehicles and office furniture	3 to 15 years
Tooling	4 to 7 years
Building and building improvements	15 to 30 years
Computer equipment and software	3 to 10 years

Leasehold improvements are depreciated on a straight-line basis over the shorter of their estimated useful lives or the terms of the related leases.

Upon the retirement or sale of our property, plant and equipment, the cost and associated accumulated depreciation are removed from the consolidated balance sheet, and the resulting gain or loss is reflected on the consolidated statement of operations. Maintenance and repair expenditures are expensed as incurred while major improvements that increase the functionality, output or expected life of an asset are capitalized and depreciated ratably over the identified useful life.

Interest expense on outstanding debt is capitalized during the period of significant capital asset construction. Capitalized interest on construction in progress is included within Property, plant and equipment, net and is amortized over the life of the related assets.

### *Long-Lived Assets Including Acquired Intangible Assets*

We review our property, plant and equipment, solar energy systems, long-term prepayments and intangible assets for impairment whenever events or changes in circumstances indicate that the carrying amount of an asset (or asset group) may not be recoverable. We measure recoverability by comparing the carrying amount to the future undiscounted cash flows that the asset is expected to generate. If the asset is not recoverable, its carrying amount would be adjusted down to its fair value. For the years ended December 31, 2021 and 2020, we have recognized no material impairments of our long-lived assets. For the year ended December 31, 2019, we have recognized certain impairments of our long-lived assets (refer to *Note 19, Restructuring and Other*, for further details).

Intangible assets with definite lives are amortized on a straight-line basis over their estimated useful lives, which range from three to thirty years.

### *Goodwill*

We assess goodwill for impairment annually in the fourth quarter, or more frequently if events or changes in circumstances indicate that it might be impaired, by comparing its carrying value to the reporting unit's fair value. For the years ended December 31, 2021, 2020, and 2019, we did not recognize any impairment of goodwill.

### *Capitalization of Software Costs*

We capitalize costs incurred in the development of internal use software, during the application development stage to Property, plant and equipment, net on the consolidated balance sheets. Costs related to preliminary project activities and post-implementation activities are expensed as incurred. Such costs are amortized on a straight-line basis over its estimated useful life of three years.

Software development costs incurred in development of software to be sold, leased, or otherwise marketed, incurred subsequent to the establishment of technological feasibility and prior to the general availability of the software are capitalized when they are expected to become significant. Such costs are amortized over the estimated useful life of the applicable software once it is made generally available to our customers.

We evaluate the useful lives of these assets on an annual basis, and we test for impairment whenever events or changes in circumstances occur that could impact the recoverability of these assets. For the years ended December 31, 2021, 2020, and 2019, we have recognized no material impairments of capitalized software costs.

### *Foreign Currency*

We determine the functional and reporting currency of each of our international subsidiaries and their operating divisions based on the primary currency in which they operate. In cases where the functional currency is not the U.S. dollar, we recognize a cumulative translation adjustment created by the different rates we apply to current period income or loss and the balance sheet. For each subsidiary, we apply the monthly average functional exchange rate to its monthly income or loss and the month-end functional currency rate to translate the balance sheet.

Foreign currency transaction gains and losses are a result of the effect of exchange rate changes on transactions denominated in currencies other than the functional currency. Transaction gains and losses are recognized in Other income (expense), net, in the consolidated statements of operations. For the years ended December 31, 2021, 2020 and 2019, we recorded a net foreign currency transaction gain of \$97 million, loss of \$114 million and gain of \$48 million, respectively.

### Warranties

We provide a manufacturer's warranty on all new and used vehicles and a warranty on the installation and components of the energy generation and storage systems we sell for periods typically between 10 to 25 years. We accrue a warranty reserve for the products sold by us, which includes our best estimate of the projected costs to repair or replace items under warranties and recalls if identified. These estimates are based on actual claims incurred to date and an estimate of the nature, frequency and costs of future claims. These estimates are inherently uncertain given our relatively short history of sales, and changes to our historical or projected warranty experience may cause material changes to the warranty reserve in the future. The warranty reserve does not include projected warranty costs associated with our vehicles subject to operating lease accounting and our solar energy systems under lease contracts or PPAs, as the costs to repair these warranty claims are expensed as incurred. The portion of the warranty reserve expected to be incurred within the next 12 months is included within Accrued liabilities and other, while the remaining balance is included within Other long-term liabilities on the consolidated balance sheets. Warranty expense is recorded as a component of Cost of revenues in the consolidated statements of operations. Due to the magnitude of our automotive business, accrued warranty balance is primarily related to our automotive segment. Accrued warranty activity consisted of the following (in millions):

	Year Ended December 31,		
	2021	2020	2019
Accrued warranty—beginning of period	\$ 1,468	\$ 1,089	\$ 748
Warranty costs incurred	(525)	(312)	(250)
Net changes in liability for pre-existing warranties, including expirations and foreign exchange impact	102	66	36
Provision for warranty	1,056	625	555
Accrued warranty—end of period	<u>\$ 2,101</u>	<u>\$ 1,468</u>	<u>\$ 1,089</u>

### Customer Deposits

Customer deposits primarily consist of cash payments from customers at the time they place an order or reservation for a vehicle or an energy product and any additional payments up to the point of delivery or the completion of installation, including the fair values of any customer trade-in vehicles that are applicable toward a new vehicle purchase. Customer deposits also include prepayments on contracts that can be cancelled without significant penalties, such as vehicle maintenance plans. Customer deposit amounts and timing vary depending on the vehicle model, the energy product and the country of delivery. With the exception of a nominal order fee, customer deposits are fully refundable on vehicles prior to delivery and fully refundable in the case of an energy generation or storage product prior to the entry into a purchase agreement or in certain cases for a limited time thereafter (in accordance with applicable laws). Customer deposits are included in current liabilities until refunded, forfeited or applied towards the customer's purchase balance.

### Solar Renewable Energy Credits

We account for Solar Renewable Energy Certificates ("SRECs") when they are purchased by us or sold to third parties. For SRECs generated by solar energy systems owned by us and minted by government agencies, we do not recognize any specifically identifiable costs as there are no specific incremental costs incurred to generate the SRECs. We recognize revenue within the energy generation and storage segment from the sale of an SREC when the SREC is transferred to the buyer, and the cost of the SREC, if any, is then recorded to energy generation and storage cost of revenue.

### Nevada Tax Incentives

In connection with the construction of Gigafactory Nevada, we entered into agreements with the State of Nevada and Storey County in Nevada that provide abatements for specified taxes, discounts to the base tariff energy rates and transferable tax credits of up to \$195 million in consideration of capital investment and hiring targets that were met at Gigafactory Nevada. These incentives are available until June 2024 or June 2034, depending on the incentive. As of December 31, 2021 and 2020, we had earned the maximum of \$195 million of transferable tax credits under these agreements.

### Gigafactory Texas Tax Incentives

In connection with the construction of Gigafactory Texas, we entered into a 20-year agreement with Travis County in Texas pursuant to which we would receive grant funding equal to 70-80% of property taxes paid by us to Travis County and a separate 10-year agreement with the Del Valle Independent School District in Texas pursuant to which a portion of the taxable value of our property would be capped at a specified amount, in each case subject to our meeting certain minimum economic development metrics through our construction and operations at Gigafactory

Texas. As of December 31, 2021, we had not yet received any grant funding related to property taxes paid to Travis County.



### *Defined Contribution Plan*

We have a 401(k) savings plan in the U.S. that is intended to qualify as a deferred salary arrangement under Section 401(k) of the Internal Revenue Code and a number of savings plans internationally. Under the 401(k) savings plan, participating employees may elect to contribute up to 90% of their eligible compensation, subject to certain limitations. We did not make any contributions to the 401(k) savings plan during the years ended December 31, 2021, 2020 and 2019 (other than employee deferrals of eligible compensation). Beginning in January 2022, we will match 50% of each employee's contributions up to a maximum of 6% (capped at \$3,000) of the employee's eligible compensation, vested upon one year of service.

### *Recent Accounting Pronouncements*

#### *Recently issued accounting pronouncements not yet adopted*

In October 2021, the FASB issued ASU No. 2021-08, Accounting for Contract Assets and Contract Liabilities from Contracts with Customers (Topic 805). This ASU requires an acquirer in a business combination to recognize and measure contract assets and contract liabilities (deferred revenue) from acquired contracts using the revenue recognition guidance in Topic 606. At the acquisition date, the acquirer applies the revenue model as if it had originated the acquired contracts. The ASU is effective for annual periods beginning after December 15, 2022, including interim periods within those fiscal years. Adoption of the ASU should be applied prospectively. Early adoption is also permitted, including adoption in an interim period. If early adopted, the amendments are applied retrospectively to all business combinations for which the acquisition date occurred during the fiscal year of adoption. This ASU is currently not expected to have a material impact on our consolidated financial statements.

In November 2021, the FASB issued ASU No. 2021-10, Government Assistance (Topic 832). This ASU requires business entities to disclose information about government assistance they receive if the transactions were accounted for by analogy to either a grant or a contribution accounting model. The disclosure requirements include the nature of the transaction and the related accounting policy used, the line items on the balance sheets and statements of operations that are affected and the amounts applicable to each financial statement line item and the significant terms and conditions of the transactions. The ASU is effective for annual periods beginning after December 15, 2021. The disclosure requirements can be applied either retrospectively or prospectively to all transactions in the scope of the amendments that are reflected in the financial statements at the date of initial application and new transactions that are entered into after the date of initial application. The ASU is currently not expected to have a material impact on our consolidated financial statements.

#### *Recently adopted accounting pronouncements*

In December 2019, the FASB issued ASU No. 2019-12, Simplifying the Accounting for Income Taxes, as part of its initiative to reduce complexity in accounting standards. The amendments in the ASU include removing exceptions to incremental intraperiod tax allocation of losses and gains from different financial statement components, exceptions to the method of recognizing income taxes on interim period losses, and exceptions to deferred tax liability recognition related to foreign subsidiary investments. In addition, the ASU requires that entities recognize franchise tax based on an incremental method and requires an entity to evaluate the accounting for step-ups in the tax basis of goodwill as inside or outside of a business combination. We adopted ASU 2019-12 starting 2021, which did not have a material impact on our consolidated financial statements.

In March 2020, the FASB issued ASU No. 2020-04, Facilitation of the Effects of Reference Rate Reform on Financial Reporting (Topic 848). The ASU provides optional expedients and exceptions for applying GAAP to transactions affected by reference rate (e.g., LIBOR) reform if certain criteria are met, for a limited period of time to ease the potential burden in accounting for (or recognizing the effects of) reference rate reform on financial reporting. The ASU is effective as of March 12, 2020 through December 31, 2022. We continue to evaluate transactions or contract modifications occurring as a result of reference rate reform and determine whether to apply the optional guidance on an ongoing basis. We adopted ASU 2020-04 during 2021. The ASU has not and is currently not expected to have a material impact on our consolidated financial statements.

In May 2021, the FASB issued ASU No. 2021-04, Issuer's Accounting for Certain Modifications or Exchanges of Freestanding Equity-Classified Written Call Options. The ASU addresses the previous lack of specific guidance in the accounting standards codification related to modifications or exchanges of freestanding equity-classified written call options (such as warrants) by specifying the accounting for various modification scenarios. The ASU is effective for interim and annual periods beginning after December 15, 2021, with early adoption permitted for any periods after issuance to be applied as of the beginning of the fiscal year that includes the interim period. We adopted the ASU during 2021 as of the beginning of our fiscal year, which did not have a material impact on our consolidated financial statements.

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### ASU 2020-06

In August 2020, the FASB issued ASU 2020-06, Accounting for Convertible Instruments and Contracts in an Entity's Own Equity. The ASU simplifies the accounting for convertible instruments by removing certain separation models in ASC 470-20, Debt—Debt with Conversion and Other Options, for convertible instruments. The ASU updates the guidance on certain embedded conversion features that are not required to be accounted for as derivatives under Topic 815, Derivatives and Hedging, or that do not result in substantial premiums accounted for as paid-in capital, such that those features are no longer required to be separated from the host contract. The convertible debt instruments will be accounted for as a single liability measured at amortized cost. This will also result in the interest expense recognized for convertible debt instruments to be typically closer to the coupon interest rate when applying the guidance in Topic 835, Interest. Further, the ASU made amendments to the EPS guidance in Topic 260 for convertible debt instruments, the most significant impact of which is requiring the use of the if-converted method for diluted EPS calculation, and no longer allowing the net share settlement method. The ASU also made revisions to Topic 815-40, which provides guidance on how an entity must determine whether a contract qualifies for a scope exception from derivative accounting. The amendments to Topic 815-40 change the scope of contracts that are recognized as assets or liabilities. The ASU is effective for interim and annual periods beginning after December 15, 2021, with early adoption permitted for periods beginning after December 15, 2020. Adoption of the ASU can either be on a modified retrospective or full retrospective basis.

On January 1, 2021, we adopted the ASU using the modified retrospective method. We recognized a cumulative effect of initially applying the ASU as an adjustment to the January 1, 2021 opening balance of accumulated deficit. Due to the recombination of the equity conversion component of our convertible debt remaining outstanding, additional paid in capital and convertible senior notes (mezzanine equity) were reduced. The removal of the remaining debt discounts recorded for this previous separation had the effect of increasing our net debt balance and the reduction of property, plant and equipment was related to previously capitalized interest. The prior period consolidated financial statements have not been retrospectively adjusted and continue to be reported under the accounting standards in effect for those periods.

Accordingly, the cumulative effect of the changes made on our January 1, 2021 consolidated balance sheet for the adoption of the ASU was as follows (in millions):

	Balances at December 31, 2020	Adjustments from Adoption of ASU 2020-06	Balances at January 1, 2021
<b>Assets</b>			
Property, plant and equipment, net	\$ 12,747	\$ (45)	\$ 12,702
<b>Liabilities</b>			
Current portion of debt and finance leases	2,132	50	2,182
Debt and finance leases, net of current portion	9,556	219	9,775
<b>Mezzanine equity</b>			
Convertible senior notes	51	(51)	—
<b>Equity</b>			
Additional paid-in capital	27,260	(474)	26,786
Accumulated deficit	(5,399)	211	(5,188)

The impact of adoption on our consolidated statements of operations for the year ended December 31, 2021 was primarily to decrease net interest expense by \$204 million and to decrease depreciation expense by immaterial amounts. This had the effect of increasing our basic and diluted net income per share of common stock attributable to common stockholders by \$0.22 and \$0.20, respectively, for the year ended December 31, 2021. The change in methodology to determine the denominator used in the calculation of diluted net income per share of common stock attributable to common stockholders contributed less than \$0.01 of the increase by requiring the use of the if-converted method as discussed above for the year ended December 31, 2021.

### **Note 3 – Digital Assets, Net**

During the year ended December 31, 2021, we purchased and received \$1.50 billion of bitcoin. During the year ended December 31, 2021, we recorded \$101 million of impairment losses on such digital assets. We also realized gains of \$128 million in connection with selling a portion of our holdings in March 2021. Such gains are presented net of impairment losses in Restructuring and other in the consolidated statement of operations. As of December 31, 2021, the carrying value of our digital assets held was \$1.26 billion, which reflects cumulative impairments of \$101 million. The fair market value of such digital assets held as of December 31, 2021 was \$1.99 billion.

#### Note 4 – Goodwill and Intangible Assets

Goodwill decreased \$7 million within the automotive segment from \$207 million as of December 31, 2020 to \$200 million as of December 31, 2021. There were no accumulated impairment losses as of December 31, 2021 and 2020.

Information regarding our intangible assets including assets recognized from our acquisitions was as follows (in millions):

	December 31, 2021				December 31, 2020			
	Gross Carrying Amount	Accumulated Amortization	Other	Net Carrying Amount	Gross Carrying Amount	Accumulated Amortization	Other	Net Carrying Amount
<b>Finite-lived intangible assets:</b>								
Developed technology	\$ 299	\$ (150)	\$ 3	\$ 152	\$ 302	\$ (111)	\$ 3	\$ 194
Trade names	2	(1)	—	1	3	(1)	—	2
Favorable contracts and leases, net	113	(40)	—	73	113	(32)	—	81
Other	36	(21)	1	16	38	(18)	1	21
Total finite-lived intangible assets	450	(212)	4	242	456	(162)	4	298
<b>Indefinite-lived intangible assets:</b>								
Gigafactory Nevada water rights	15	—	—	15	15	—	—	15
Total intangible assets	\$ 465	\$ (212)	\$ 4	\$ 257	\$ 471	\$ (162)	\$ 4	\$ 313

Amortization expense during the years ended December 31, 2021, 2020 and 2019 was \$51 million, \$51 million and \$44 million, respectively.

Total future amortization expense for finite-lived intangible assets was estimated as follows (in millions):

2022	\$ 49
2023	43
2024	28
2025	28
2026	28
Thereafter	66
Total	\$ 242

#### Note 5 – Fair Value of Financial Instruments

ASC 820, *Fair Value Measurements*, states that fair value is an exit price, representing the amount that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants. As such, fair value is a market-based measurement that should be determined based on assumptions that market participants would use in pricing an asset or a liability. The three-tiered fair value hierarchy, which prioritizes which inputs should be used in measuring fair value, is comprised of: (Level I) observable inputs such as quoted prices in active markets; (Level II) inputs other than quoted prices in active markets that are observable either directly or indirectly and (Level III) unobservable inputs for which there is little or no market data. The fair value hierarchy requires the use of observable market data when available in determining fair value. Our assets and liabilities that were measured at fair value on a recurring basis were as follows (in millions):

	December 31, 2021				December 31, 2020			
	Fair Value	Level I	Level II	Level III	Fair Value	Level I	Level II	Level III
Money market funds (cash and cash equivalents)	\$ 9,548	\$ 9,548	\$ —	\$ —	\$ 13,847	\$ 13,847	\$ —	\$ —
Corporate debt securities (short-term marketable securities)	131	—	131	—	—	—	—	—
Interest rate swap liabilities	31	—	31	—	58	—	58	—
Total	\$ 9,710	\$ 9,548	\$ 162	\$ —	\$ 13,905	\$ 13,847	\$ 58	\$ —

All of our money market funds were classified within Level I of the fair value hierarchy because they were valued using quoted prices in active markets.

Our marketable securities are classified within Level II of the fair value hierarchy and the market approach was used to determine fair value of these investments. Our interest rate swaps were classified within Level II of the fair value hierarchy because they were valued using alternative pricing sources or models that utilized market observable inputs, including current and forward interest rates.

### Interest Rate Swaps

We enter into fixed-for-floating interest rate swap agreements to swap variable interest payments on certain debt for fixed interest payments, as required by certain of our lenders. We do not designate our interest rate swaps as hedging instruments. Accordingly, our interest rate swaps are recorded at fair value on the consolidated balance sheets within Other non-current assets or Other long-term liabilities, with any changes in their fair values recognized as Other income (expense), net, in the consolidated statements of operations and with any cash flows recognized as operating activities in the consolidated statements of cash flows. Our interest rate swaps outstanding were as follows (in millions):

	December 31, 2021			December 31, 2020		
	Aggregate Notional Amount	Gross Asset at Fair Value	Gross Liability at Fair Value	Aggregate Notional Amount	Gross Asset at Fair Value	Gross Liability at Fair Value
Interest rate swaps	\$ 312	\$ —	\$ 31	\$ 554	\$ —	\$ 58

Our interest rate swaps activity was as follows (in millions):

	Year Ended December 31,					
	2021		2020		2019	
Gross losses	\$	9	\$	42	\$	51
Gross gains	\$	22	\$	6	\$	11

### Disclosure of Fair Values

Our financial instruments that are not re-measured at fair value include accounts receivable, MyPower customer notes receivable, accounts payable, accrued liabilities, customer deposits and debt. The carrying values of these financial instruments approximate their fair values, other than our 1.25% Convertible Senior Notes due in 2021 (“2021 Notes”), 2.375% Convertible Senior Notes due in 2022 (“2022 Notes”), 2024 Notes and our subsidiary’s 5.50% Convertible Senior Notes due in 2022 (collectively referred to as “Convertible Senior Notes” below), 5.30% Senior Notes due in 2025 (“2025 Notes”), Solar Asset and Loan-backed Notes.

We estimate the fair value of the Convertible Senior Notes and the 2025 Notes using commonly accepted valuation methodologies and market-based risk measurements that are indirectly observable, such as credit risk (Level II). In addition, we estimate the fair values of our Solar Asset and Loan-backed Notes based on rates currently offered for instruments with similar maturities and terms (Level III). The following table presents the estimated fair values and the carrying values (in millions):

	December 31, 2021		December 31, 2020	
	Carrying Value	Fair Value	Carrying Value	Fair Value
Convertible Senior Notes (1)	\$ 119	\$ 2,016	\$ 1,971	\$ 24,596
2025 Notes (1)	\$ —	\$ —	\$ 1,785	\$ 1,877
Solar Asset and Loan-backed Notes	\$ 827	\$ 834	\$ 1,261	\$ 1,289

(1)The 2021 Notes, our subsidiary’s 5.50% Convertible Senior Notes due in 2022 and the 2025 Notes were fully settled in 2021.

### Note 6 – Inventory

Our inventory consisted of the following (in millions):

	December 31, 2021	December 31, 2020
Raw materials	\$ 2,816	\$ 1,508
Work in process	1,089	493
Finished goods (1)	1,277	1,666
Service parts	575	434
Total	\$ 5,757	\$ 4,101

(1)Finished goods inventory includes vehicles in transit to fulfill customer orders, new vehicles available for sale, used vehicles, energy storage products and Solar Roof products available for sale.

For solar energy systems, we commence transferring component parts from inventory to construction in progress, a component of solar energy systems, once a lease or PPA contract with a customer has been executed and installation has been initiated. Additional costs incurred on the leased solar energy systems, including labor and overhead, are recorded within solar energy systems under construction.



We write-down inventory for any excess or obsolete inventories or when we believe that the net realizable value of inventories is less than the carrying value. During the years ended December 31, 2021, 2020, and 2019, we recorded write-downs of \$106 million, \$145 million and \$138 million, respectively, in Cost of revenues in the consolidated statements of operations.

#### Note 7 – Solar Energy Systems, Net

Our solar energy systems, net, consisted of the following (in millions):

	December 31, 2021	December 31, 2020
Solar energy systems in service	\$ 6,809	\$ 6,758
Initial direct costs related to customer solar energy system lease acquisition costs	104	103
	6,913	6,861
Less: accumulated depreciation and amortization (1)	(1,187)	(955)
	5,726	5,906
Solar energy systems under construction	18	28
Solar energy systems pending interconnection	21	45
Solar energy systems, net (2) (3)	<u>\$ 5,765</u>	<u>\$ 5,979</u>

(1) Depreciation and amortization expense during the years ended December 31, 2021, 2020 and 2019 was \$236 million, \$232 million and \$227 million, respectively.

(2) As of December 31, 2021 and 2020, solar energy systems, net, included \$36 million of gross finance leased assets with accumulated depreciation and amortization of \$9 million and \$7 million, respectively.

(3) As of December 31, 2021 and 2020, there were \$1.02 billion and \$1.05 billion, respectively, of gross solar energy systems under lease pass-through fund arrangements with accumulated depreciation of \$165 million and \$137 million, respectively.

#### Note 8 – Property, Plant and Equipment, Net

Our property, plant and equipment, net, consisted of the following (in millions):

	December 31, 2021	December 31, 2020
Machinery, equipment, vehicles and office furniture	\$ 9,953	\$ 8,493
Tooling	2,188	1,811
Leasehold improvements	1,826	1,421
Land and buildings	4,675	3,662
Computer equipment, hardware and software	1,414	856
Construction in progress	5,559	1,621
	25,615	17,864
Less: Accumulated depreciation	(6,731)	(5,117)
Total	<u>\$ 18,884</u>	<u>\$ 12,747</u>

Construction in progress is primarily comprised of construction of Gigafactory Berlin and Gigafactory Texas, expansion of Gigafactory Shanghai and equipment and tooling related to the manufacturing of our products. We are currently constructing Gigafactory Berlin under conditional permits in anticipation of being granted final permits. Completed assets are transferred to their respective asset classes and depreciation begins when an asset is ready for its intended use. Interest on outstanding debt is capitalized during periods of significant capital asset construction and amortized over the useful lives of the related assets. During the years ended December 31, 2021, 2020 and 2019, we capitalized interest of \$53 million, \$48 million and \$31 million, respectively.

Depreciation expense during the years ended December 31, 2021, 2020 and 2019 was \$1.91 billion, \$1.57 billion and \$1.37 billion, respectively. Gross property, plant and equipment under finance leases as of December 31, 2021 and 2020 was \$2.75 billion and \$2.28 billion, respectively, with accumulated depreciation of \$1.21 billion and \$816 million, respectively.



Panasonic has partnered with us on Gigafactory Nevada with investments in the production equipment that it uses to manufacture and supply us with battery cells. Under our arrangement with Panasonic, we plan to purchase the full output from their production equipment at negotiated prices. As the terms of the arrangement convey a finance lease under ASC 842, *Leases*, we account for their production equipment as leased assets when production commences. We account for each lease and any non-lease components associated with that lease as a single lease component for all asset classes, except production equipment classes embedded in supply agreements. This results in us recording the cost of their production equipment within Property, plant and equipment, net, on the consolidated balance sheets with a corresponding liability recorded to debt and finance leases. Depreciation on Panasonic production equipment is computed using the units-of-production method whereby capitalized costs are amortized over the total estimated productive life of the respective assets. As of December 31, 2021 and 2020, we had cumulatively capitalized gross costs of \$1.98 billion and \$1.77 billion, respectively, on the consolidated balance sheets in relation to the production equipment under our Panasonic arrangement.

During the years ended December 31, 2021, 2020 and 2019, we received cash incentives of \$6 million, \$123 million and \$46 million, respectively, from the Shanghai government in connection with us making certain manufacturing equipment investments at Gigafactory Shanghai. These incentives were taken as a reduction to Property, plant and equipment, net, on the consolidated balance sheets and cash receipts were reflected as investing cash inflows on the consolidated statements of cash flows.

#### Note 9 – Accrued Liabilities and Other

Our accrued liabilities and other current liabilities consisted of the following (in millions):

	December 31, 2021	December 31, 2020
Accrued purchases (1)	\$ 2,045	\$ 901
Taxes payable (2)	1,122	777
Payroll and related costs	906	654
Accrued warranty reserve, current portion	703	479
Sales return reserve, current portion	265	417
Operating lease liabilities, current portion	368	286
Accrued interest	16	77
Other current liabilities	294	264
Total	<u>\$ 5,719</u>	<u>\$ 3,855</u>

(1) Accrued purchases primarily reflects receipts of goods and services that we had not been invoiced yet. As we are invoiced for these goods and services, this balance will reduce and accounts payable will increase. For the year ended December 31, 2021, accrued purchases increased as we continued construction and expansion of our facilities and operations.

(2) Taxes payable includes value added tax, sales tax, property tax, use tax and income tax payables.

#### Note 10 – Other Long-Term Liabilities

Our other long-term liabilities consisted of the following (in millions):

	December 31, 2021	December 31, 2020
Operating lease liabilities	\$ 1,671	\$ 1,254
Accrued warranty reserve	1,398	989
Sales return reserve	133	500
Deferred tax liability	24	151
Other non-current liabilities	320	436
Total other long-term liabilities	<u>\$ 3,546</u>	<u>\$ 3,330</u>

## Note 11 – Debt

The following is a summary of our debt and finance leases as of December 31, 2021 (in millions):

	Net Carrying Value		Unpaid Principal Balance	Unused Committed Amount (1)	Contractual Interest Rates	Contractual Maturity Date
	Current	Long-Term				
<b>Recourse debt:</b>						
2022 Notes	\$ 29	\$ —	\$ 29	\$ —	2.375 %	March 2022
2024 Notes	1	89	91	—	2.00 %	May 2024
Credit Agreement	—	1,250	1,250	920	3.3 %	July 2023
Solar Bonds	0	7	7	—	4.0-5.8 %	January 2022 - January 2031
Total recourse debt	30	1,346	1,377	920		
<b>Non-recourse debt:</b>						
Automotive Asset-backed Notes						September 2022-September 2025
	1,007	1,706	2,723	—	0.1%-5.5 %	
Solar Asset and Loan-backed Notes						September 2024-September 2049
	27	800	844	—	2.9%-7.7 %	
Cash Equity Debt	24	388	422	—	5.3-5.8 %	July 2033-January 2035
Automotive Lease-backed Credit Facilities	—	—	—	167	Not applicable	September 2023
Other Loans	—	14	14	21	5.1 %	February 2033
Total non-recourse debt	1,058	2,908	4,003	188		
Total debt	1,088	4,254	\$ 5,380	\$ 1,108		
Finance leases	501	991				
Total debt and finance leases	\$ 1,589	\$ 5,245				

The following is a summary of our debt and finance leases as of December 31, 2020 (in millions):

	Net Carrying Value		Unpaid Principal Balance	Unused Committed Amount (1)	Contractual Interest Rates	Contractual Maturity Date
	Current	Long-Term				
<b>Recourse debt:</b>						
2021 Notes	\$ 419	\$ —	\$ 422	\$ —	1.25 %	March 2021
2022 Notes	115	366	503	—	2.375 %	March 2022
2024 Notes	171	856	1,282	—	2.00 %	May 2024
2025 Notes	—	1,785	1,800	—	5.30 %	August 2025
Credit Agreement	—	1,895	1,895	278	3.3 %	July 2023
Solar Bonds and other Loans	4	49	55	—	3.6%-5.8 %	January 2021 - January 2031
Total recourse debt	709	4,951	5,957	278		
<b>Non-recourse debt:</b>						
Automotive Asset-backed Notes	777	921	1,705	—	0.6%-7.9 %	August 2021-August 2024
Solar Asset and Loan-backed Notes						September 2024-September 2049
	52	1,209	1,293	—	3.0%-7.7 %	
China Loan Agreements	—	616	616	1,372	4.0 %	June 2021-December 2024
Cash Equity Debt	18	408	439	—	5.3%-5.8 %	July 2033-January 2035
Warehouse Agreement	37	257	294	806	1.7%-1.8 %	September 2022
Solar Term Loan	151	—	151	—	3.7 %	January 2021
Automotive Lease-backed Credit Facility						September 2022-November 2022
	14	19	33	153	1.9%-5.9 %	
Solar Revolving Credit Facility and other Loans	—	81	81	23	2.7%-5.1 %	June 2022-February 2033
Total non-recourse debt	1,049	3,511	4,612	2,354		
Total debt	1,758	8,462	\$ 10,569	\$ 2,632		
Finance leases	374	1,094				
Total debt and finance leases	\$ 2,132	\$ 9,556				

(There are no restrictions on draw-down or use for general corporate purposes with respect to any available committed funds under our credit facilities, except certain specified conditions prior to draw-down, including pledging to our lenders sufficient amounts of qualified receivables, inventories, leased vehicles and our interests in those leases, solar energy systems and the associated customer contracts or various other assets and as may be described below.

Recourse debt refers to debt that is recourse to our general assets. Non-recourse debt refers to debt that is recourse to only assets of our subsidiaries. The differences between the unpaid principal balances and the net carrying values are due to debt discounts or deferred financing costs. On January 1, 2021, we adopted ASU 2020-06 using the modified retrospective method. As a result of this adoption, we have de-recognized the remaining debt

discounts on the 2021, 2022 and 2024 Notes and therefore no longer recognized any amortization of debt discounts as interest expense (see Note 2, *Summary of Significant Accounting Policies*). As of December 31, 2021, we were in material compliance with all financial debt covenants.

### ***2021 Notes, Bond Hedges and Warrant Transactions***

During the first quarter of 2021, the remaining \$422 million in aggregate principal amount of the 2021 Notes was settled in cash for the par amount and 5.3 million shares of our common stock were issued for the applicable conversion premium. The note hedges we entered into in connection with the issuance of the 2021 Notes were automatically settled with the respective conversions of the 2021 Notes, resulting in the receipt of 5.3 million shares of our common stock during the same period. Additionally, during the second and third quarters of 2021, we fully settled the warrants entered into in connection with the issuance of the 2021 Notes, resulting in the issuance of 15.8 million shares of our common stock.

### ***2022 Notes, Bond Hedges and Warrant Transactions***

In March 2017, we issued \$978 million in aggregate principal amount of our 2022 Notes in a public offering. The net proceeds from the issuance, after deducting transaction costs, were \$966 million.

Each \$1,000 of principal of the 2022 Notes is convertible into 15.2670 shares of our common stock, which is equivalent to a conversion price of \$65.50 per share, subject to adjustment upon the occurrence of specified events. As of December 31, 2021, holders of the 2022 Notes have the option to convert. Such holders also had the option to convert in each quarter in 2021 due to the closing price of our common stock exceeding 130% of the applicable conversion price on at least 20 of the last

30 consecutive trading days of the prior applicable quarter. We have elected to settle the principal in cash and the conversion premium in net shares upon a conversion. If a fundamental change occurs prior to the maturity date, holders of the 2022 Notes may require us to repurchase all or a portion of their 2022 Notes for cash at a repurchase price equal to 100% of the principal amount plus any accrued and unpaid interest. In addition, if specific corporate events occur prior to the maturity date, we would increase the conversion rate for a holder who elects to convert its 2022 Notes in connection with such an event in certain circumstances.

In accordance with GAAP relating to embedded conversion features, we initially valued and bifurcated the conversion feature associated with the 2022 Notes. We recorded to stockholders' equity \$146 million for the conversion feature. The resulting debt discount was being amortized to interest expense at an effective interest rate of 6.00%, which is no longer applicable under ASU 2020-06.

In connection with the offering of the 2022 Notes, we entered into convertible note hedge transactions whereby we had the option to purchase 14.9 million shares of our common stock at a price of \$65.50 per share. The cost of the convertible note hedge transactions was \$204 million. In addition, we sold warrants whereby the holders of the warrants have the option to purchase 14.9 million shares of our common stock at a price of \$131.00 per share. We received \$53 million in cash proceeds from the sale of these warrants. Taken together, the purchase of the convertible note hedges and the sale of the warrants are intended to reduce potential dilution from the conversion of the 2022 Notes and to effectively increase the overall conversion price from \$65.50 to \$131.00 per share. As these transactions meet certain accounting criteria, the convertible note hedges and warrants are recorded in stockholders' equity and are not accounted for as derivatives. The net cost incurred in connection with the convertible note hedge and warrant transactions was recorded as a reduction to additional paid-in capital on the consolidated balance sheet.

During the year ended December 31, 2021, \$474 million in aggregate principal amount of the 2022 Notes was early converted and settled in cash for the par amount and 6.5 million shares of our common stock were issued for the applicable conversion premium. The note hedges we entered into in connection with the issuance of the 2022 Notes were automatically settled with the respective conversions of the 2022 Notes, resulting in the receipt of 6.5 million shares of our common stock during the same period. The related warrants will settle under their terms after the maturity or settlement of the 2022 Notes. As of December 31, 2021, the if-converted value of the notes exceeds the outstanding principal amount by \$439 million.

### ***2024 Notes, Bond Hedges and Warrant Transactions***

In May 2019, we issued \$1.84 billion in aggregate principal amount of our 2024 Notes in a public offering. The net proceeds from the issuance, after deducting transaction costs, were \$1.82 billion.

Each \$1,000 of principal of the 2024 Notes is convertible into 16.1380 shares of our common stock, which is equivalent to a conversion price of \$61.97 per share, subject to adjustment upon the occurrence of specified events. Holders of the 2024 Notes may convert, at their option, on or after February 15, 2024. Further, holders of the 2024 Notes may convert, at their option, prior to February 15, 2024 only under the following circumstances: (1) during any calendar quarter commencing after September 30, 2019 (and only during such calendar quarter), if the last reported sale price of our common stock for at least 20 trading days (whether or not consecutive) during a period of 30 consecutive trading days ending on the last trading day of immediately preceding calendar quarter is greater than or equal to 130% of the conversion price on each trading day; (2) during the five-business day period after any five-consecutive trading day period in which the trading price per \$1,000 principal amount of the 2024 Notes for each trading day of such period is less than 98% of the product of the last reported sale price of our common stock and the conversion rate on each such trading day, or (3) if specified corporate events occur. Upon conversion, the 2024 Notes will be settled in cash, shares of our common stock or a combination thereof, at our election. If a fundamental change occurs prior to the maturity date, holders of the 2024 Notes may require us to repurchase all or a portion of their 2024 Notes for cash at a repurchase price equal to 100% of the principal amount plus any accrued and unpaid interest. In addition, if specific corporate events occur prior to the maturity date, we would increase the conversion rate for a holder who elects to convert its 2024 Notes in connection with such an event in certain circumstances. Early conversion of notes which are scheduled to settle in the following quarter are classified as current on our consolidated balance sheets.

In accordance with GAAP relating to embedded conversion features, we initially valued and bifurcated the conversion feature associated with the 2024 Notes. We recorded to stockholders' equity \$491 million for the conversion feature. The resulting debt discount was being amortized to interest expense at an effective interest rate of 8.68%, which is no longer applicable under ASU 2020-06.

In connection with the offering of the 2024 Notes, we entered into convertible note hedge transactions whereby we had the option to purchase 29.7 million shares of our common stock at a price of \$61.97 per share. The cost of the convertible note hedge transactions was \$476 million. In addition, we sold warrants whereby the holders of the warrants have the option to purchase 29.7 million shares of our common stock at a price of \$121.50 per share. We received \$174 million in cash proceeds from the sale of these warrants. Taken together, the purchase of the convertible note hedges and the sale of the warrants are intended to reduce potential dilution from the conversion of the 2024 Notes and to effectively increase the overall conversion price from \$61.97 to \$121.50 per share. As these transactions meet certain accounting criteria, the convertible note hedges and warrants are recorded in stockholders' equity and are not accounted for as derivatives. The net cost incurred in connection with the convertible note hedge and warrant transactions was recorded as a reduction to additional paid-in capital on the consolidated balance sheet.

The closing price of our common stock exceeded 130% of the applicable conversion price on at least 20 of the last 30 consecutive trading days of each quarter in 2021, causing the 2024 Notes to be convertible by their holders in the subsequent quarter. During the year ended December 31, 2021, \$1.19 billion in aggregate principal amount of the 2024 Notes was early converted and settled in cash for the par amount and 17.6 million shares of our common stock were issued for the applicable conversion premium. The note hedges we entered into in connection with the issuance of the 2024 Notes were automatically settled with the respective conversions of the 2024 Notes, resulting in the receipt of 17.6 million shares of our common stock during the same period. Additionally, during the year ended December 31, 2021, we partially settled the warrants entered into in connection with the issuance of the 2024 Notes, resulting in the issuance of 21.4 million shares of our common stock. As of December 31, 2021, the if-converted value of the notes exceeds the outstanding principal amount by \$1.46 billion.

## **2025 Notes**

In August 2017, we issued \$1.80 billion in aggregate principal amount of the 2025 Notes pursuant to Rule 144A and Regulation S under the Securities Act. The net proceeds from the issuance, after deducting transaction costs, were \$1.77 billion. During the year ended December 31, 2021, we fully repaid the \$1.80 billion in aggregate principal of the 2025 Notes and recorded an extinguishment of debt charge of \$60 million related to the redemption in Interest expense in the consolidated statement of operations.

## **Credit Agreement**

In June 2015, we entered into a senior asset-based revolving credit agreement (as amended from time to time, the "Credit Agreement") with a syndicate of banks. Borrowed funds bear interest, at our option, at an annual rate of (a) 1% plus LIBOR or (b) the highest of (i) the federal funds rate plus

0.50%, (ii) the lenders' "prime rate" or (iii) 1% plus LIBOR. The fee for undrawn amounts is 0.25% per annum. The Credit Agreement is secured by certain of our accounts receivable, inventory and equipment. Availability under the Credit Agreement is based on the value of such assets, as reduced by certain reserves.

### ***Automotive Asset-backed Notes***

From time to time, we transfer receivables or beneficial interests related to certain leased vehicles into special purpose entities (“SPEs”) and issue Automotive Asset-backed Notes, backed by these automotive assets to investors. The SPEs are consolidated in the financial statements. The cash flows generated by these automotive assets are used to service the principal and interest payments on the Automotive Asset-backed Notes and satisfy the SPEs’ expenses, and any remaining cash is distributed to the owners of the SPEs. We recognize revenue earned from the associated customer lease contracts in accordance with our revenue recognition policy. The SPEs’ assets and cash flows are not available to our other creditors, and the creditors of the SPEs, including the Automotive Asset-backed Note holders, have no recourse to our other assets.

During the year ended December 31, 2021, we transferred beneficial interests related to certain leased vehicles into SPEs and issued \$1.98 billion in aggregate principal amount of Automotive Asset-backed Notes, with terms similar to our other, previously issued, Automotive Asset-backed Notes. The proceeds from the issuances, net of discounts and fees, were \$1.97 billion.

### ***Solar Asset and Loan-backed Notes***

Our subsidiaries pooled and transferred qualifying solar energy systems and the associated customer contracts, our interests in certain financing funds or certain MyPower customer notes receivable into SPEs and issued Solar Asset and Loan-backed Notes backed by these solar assets, interests to investors or MyPower customer notes receivable. The SPEs are wholly owned by us and are consolidated in the financial statements. The cash flows generated by these solar assets and notes receivable, or distributed by the underlying financing funds to certain SPEs are used to service the principal and interest payments on the Solar Asset and Loan-backed Notes and satisfy the SPEs’ expenses, and any remaining cash is distributed to us. The SPEs’ assets and cash flows are not available to our other creditors, and the creditors of the SPEs, including the Solar Asset and Loan-backed Note holders, have no recourse to our other assets. We contracted with certain SPEs to provide operations & maintenance and administrative services for the solar energy systems. As of December 31, 2021, solar assets pledged as collateral for Solar Asset and Loan-backed Notes had a carrying value of \$257 million and are included within Solar energy systems, net, on the consolidated balance sheet.

During the year ended December 31, 2021, we early repaid \$374 million in aggregate principal of the Solar Asset and Loan-backed Notes and recorded an extinguishment of debt charge of \$16 million related to the early repayments in Interest expense in the consolidated statement of operations.

### ***China Loan Agreements***

In December 2019, one of our subsidiaries entered into loan agreements with a syndicate of lenders in China for a secured term loan facility of up to RMB 9.0 billion or the equivalent amount drawn in U.S. dollars (the “Fixed Asset Facility”) to be used in connection with our construction of our Gigafactory Shanghai. Outstanding borrowings pursuant to the Fixed Asset Facility accrued interest at a rate equal to: (i) for RMB-denominated loans, the market quoted interest rate published by the People’s Bank of China minus 0.7625%, and (ii) for U.S. dollar-denominated loans, the sum of one-year LIBOR plus 1.3%. The Fixed Asset Facility was secured by certain real property relating to Gigafactory Shanghai and is non-recourse to our other assets. During the year ended December 31, 2021, we fully repaid the \$614 million in aggregate principal of the Fixed Asset Facility and the facility was terminated.

In May 2020, one of our subsidiaries entered into an additional Working Capital Loan Contract (the “2020 China Working Capital Facility”) with a lender in China for an unsecured revolving facility of up to RMB 4.00 billion (or the equivalent amount drawn in U.S. dollars), to be used for expenditures related to production at our Gigafactory Shanghai. Borrowed funds bear interest at an annual rate of: (i) for RMB-denominated loans, the market quoted interest rate published by an authority designated by the People’s Bank of China minus 0.35%, (ii) for U.S. dollar-denominated loans, the sum of one-year LIBOR plus 0.8%. The 2020 China Working Capital Facility is non-recourse to our assets. During the year ended December 31, 2021, the 2020 China Working Capital Facility matured and the facility was terminated.

### ***Cash Equity Debt***

In connection with the cash equity financing deals closed in 2016, our subsidiaries issued \$502 million in aggregate principal amount of debt that bears interest at fixed rates. This debt is secured by, among other things, our interests in certain financing funds and is non-recourse to our other assets.

### ***Warehouse Agreement***

In August 2016, our subsidiaries entered into a loan and security agreement (as amended from time to time, the “Warehouse Agreement”) for borrowings secured by the future cash flows arising from certain leases and the associated leased vehicles. Amounts drawn under the Warehouse Agreement generally bore interest at a fixed margin above (i) LIBOR or (ii) the commercial paper rate. The Warehouse Agreement was non-recourse to our other assets.



During the year ended December 31, 2021, we repaid the remaining outstanding balance of the Warehouse Agreement and terminated the facility.

### ***Solar Term Loan***

Our subsidiaries had entered into agreements for term loans with various financial institutions. The term loans were secured by substantially all of the assets of the subsidiaries, including its interests in certain financing funds, and were non-recourse to our other assets.

During the year ended December 31, 2021, the remaining Solar Term Loan matured and was repaid.

### ***Automotive Lease-backed Credit Facilities***

Our subsidiaries have entered into various credit agreements for borrowings secured by our interests in certain vehicle leases. These facilities are non-recourse to our other assets. During the year ended December 31, 2021, we fully repaid \$32 million in aggregate principal of our Automotive Lease-backed Credit Facilities and terminated one of the facilities.

### ***Solar Revolving Credit Facility and other Loans***

Our subsidiaries entered into various solar revolving credit facility and other loan agreements with various financial institutions. The solar revolving credit facility was secured by certain assets of the subsidiary and is non-recourse to our other assets. During the year ended December 31, 2021, we fully repaid the \$67 million in aggregate principal of the remaining Solar Revolving Credit Facility and the facility was terminated.

### ***Interest Expense***

The following table presents the interest expense related to the contractual interest coupon, the amortization of debt issuance costs and the amortization of debt discounts on our convertible senior notes with cash conversion features, which include the 2021 Notes, the 2022 Notes and the 2024 Notes (in millions):

	Year Ended December 31,		
	2021	2020	2019
Contractual interest coupon	\$ 12	\$ 73	\$ 65
Amortization of debt issuance costs	5	7	7
Amortization of debt discounts (1)	—	173	148
Losses on extinguishment of debt (1)	—	105	—
Total	<u>\$ 17</u>	<u>\$ 358</u>	<u>\$ 220</u>

(1) Under the modified retrospective method of adoption of ASU 2020-06, there was neither amortization of debt discounts, nor losses on extinguishment of debt recognized for the year ended December 31, 2021. Refer to discussion above for further details.

### ***Pledged Assets***

As of December 31, 2021 and 2020, we had pledged or restricted \$5.25 billion and \$6.04 billion of our assets (consisting principally of restricted cash, receivables, inventory, SRECs, solar energy systems, operating lease vehicles, land use rights, property and equipment and equity interests in certain SPEs) as collateral for our outstanding debt.

### ***Schedule of Principal Maturities of Debt***

The future scheduled principal maturities of debt as of December 31, 2021 were as follows (in millions):

	Recourse debt	Non-recourse debt	Total
2022	\$ 30	\$ 1,065	\$ 1,095
2023	1,250	1,206	2,456
2024	90	970	1,060
2025	4	174	178
2026	—	64	64
Thereafter	3	524	527
Total	<u>\$ 1,377</u>	<u>\$ 4,003</u>	<u>\$ 5,380</u>

## Note 12 – Leases

We have entered into various operating and finance lease agreements for certain of our offices, manufacturing and warehouse facilities, retail and service locations, equipment, vehicles, and solar energy systems, worldwide. We determine if an arrangement is a lease, or contains a lease, at inception and record the leases in our financial statements upon lease commencement, which is the date when the underlying asset is made available for use by the lessor.

We have lease agreements with lease and non-lease components, and have elected to utilize the practical expedient to account for lease and non-lease components together as a single combined lease component, from both a lessee and lessor perspective with the exception of direct sales-type leases and production equipment classes embedded in supply agreements. From a lessor perspective, the timing and pattern of transfer are the same for the non-lease components and associated lease component and, the lease component, if accounted for separately, would be classified as an operating lease.

We have elected not to present short-term leases on the consolidated balance sheet as these leases have a lease term of 12 months or less at lease inception and do not contain purchase options or renewal terms that we are reasonably certain to exercise. All other lease assets and lease liabilities are recognized based on the present value of lease payments over the lease term at commencement date. Because most of our leases do not provide an implicit rate of return, we used our incremental borrowing rate based on the information available at lease commencement date in determining the present value of lease payments.

Our leases, where we are the lessee, often include options to extend the lease term for up to 10 years. Some of our leases also include options to terminate the lease prior to the end of the agreed upon lease term. For purposes of calculating lease liabilities, lease terms include options to extend or terminate the lease when it is reasonably certain that we will exercise such options.

Lease expense for operating leases is recognized on a straight-line basis over the lease term as cost of revenues or operating expenses depending on the nature of the leased asset. Certain operating leases provide for annual increases to lease payments based on an index or rate. We calculate the present value of future lease payments based on the index or rate at the lease commencement date for new leases commencing after January 1, 2019. For historical leases, we used the index or rate as of January 1, 2019. Differences between the calculated lease payment and actual payment are expensed as incurred. Amortization of finance lease assets is recognized over the lease term as cost of revenues or operating expenses depending on the nature of the leased asset. Interest expense on finance lease liabilities is recognized over the lease term in interest expense.

The balances for the operating and finance leases where we are the lessee are presented as follows (in millions) within our consolidated balance sheets:

	December 31, 2021	December 31, 2020
<b>Operating leases:</b>		
Operating lease right-of-use assets	\$ 2,016	\$ 1,558
Accrued liabilities and other	\$ 368	\$ 286
Other long-term liabilities	1,671	1,254
Total operating lease liabilities	<u>\$ 2,039</u>	<u>\$ 1,540</u>
<b>Finance leases:</b>		
Solar energy systems, net	\$ 27	\$ 29
Property, plant and equipment, net	1,536	1,465
Total finance lease assets	<u>\$ 1,563</u>	<u>\$ 1,494</u>
Current portion of long-term debt and finance leases	\$ 501	\$ 374
Long-term debt and finance leases, net of current portion	991	1,094
Total finance lease liabilities	<u>\$ 1,492</u>	<u>\$ 1,468</u>

The components of lease expense are as follows (in millions) within our consolidated statements of operations:

	Year Ended December 31,		
	2021	2020	2019
<b>Operating lease expense:</b>			
Operating lease expense (1)	\$ 627	\$ 451	\$ 426
<b>Finance lease expense:</b>			
Amortization of leased assets	\$ 415	\$ 348	\$ 299
Interest on lease liabilities	89	100	104
Total finance lease expense	\$ 504	\$ 448	\$ 403
Total lease expense	\$ 1,131	\$ 899	\$ 829

(1) Includes short-term leases and variable lease costs, which are immaterial.

Other information related to leases where we are the lessee is as follows:

	December 31, 2021	December 31, 2020
<b>Weighted-average remaining lease term:</b>		
Operating leases	6.5 years	6.2 years
Finance leases	4.2 years	4.9 years
<b>Weighted-average discount rate:</b>		
Operating leases	5.0 %	5.8 %
Finance leases	5.8 %	6.5 %

Supplemental cash flow information related to leases where we are the lessee is as follows (in millions):

	Year Ended December 31,		
	2021	2020	2019
<b>Cash paid for amounts included in the measurement of lease liabilities:</b>			
Operating cash outflows from operating leases	\$ 616	\$ 456	\$ 396
Operating cash outflows from finance leases (interest payments)	\$ 89	\$ 100	\$ 104
Financing cash outflows from finance leases	\$ 439	\$ 338	\$ 321
Leased assets obtained in exchange for finance lease liabilities	\$ 486	\$ 188	\$ 616
Leased assets obtained in exchange for operating lease liabilities	\$ 818	\$ 553	\$ 202

As of December 31, 2021, the maturities of our operating and finance lease liabilities (excluding short-term leases) are as follows (in millions):

	Operating Leases	Finance Leases
2022	\$ 458	\$ 587
2023	412	524
2024	366	381
2025	319	102
2026	232	45
Thereafter	595	9
Total minimum lease payments	2,382	1,648
Less: Interest	343	156
Present value of lease obligations	2,039	1,492
Less: Current portion	368	501
Long-term portion of lease obligations	\$ 1,671	\$ 991

## Operating Lease and Sales-type Lease Receivables

We are the lessor of certain vehicle and solar energy system arrangements as described in Note 2, *Summary of Significant Accounting Policies*. As of December 31, 2021, maturities of our operating lease and sales-type lease receivables from customers for each of the next five years and thereafter were as follows (in millions):

	Operating Leases	Sales-type Leases
2022	\$ 1,024	\$ 91
2023	779	91
2024	458	100
2025	218	95
2026	192	39
Thereafter	1,906	11
Gross lease receivables	<u>\$ 4,577</u>	<u>\$ 427</u>

The above table does not include vehicle sales to customers or leasing partners with a resale value guarantee as the cash payments were received upfront. For our solar PPA arrangements, customers are charged solely based on actual power produced by the installed solar energy system at a predefined rate per kilowatt-hour of power produced. The future payments from such arrangements are not included in the above table as they are a function of the power generated by the related solar energy systems in the future.

## Net Investment in Sales-type Leases

Net investment in sales-type leases, which is the sum of the present value of the future contractual lease payments, is presented on the consolidated balance sheets as a component of Prepaid expenses and other current assets for the current portion and as Other non-current assets for the long-term portion. Lease receivables relating to sales-type leases are presented on the consolidated balance sheets as follows (in millions):

	December 31, 2021	December 31, 2020
Gross lease receivables	\$ 427	\$ 102
Unearned interest income	(50)	(11)
Allowance for expected credit losses	(1)	—
Net investment in sales-type leases	<u>\$ 376</u>	<u>\$ 91</u>
<b>Reported as:</b>		
Prepaid expenses and other current assets	\$ 73	\$ 17
Other non-current assets	303	74
Net investment in sales-type leases	<u>\$ 376</u>	<u>\$ 91</u>

## Lease Pass-Through Financing Obligation

As of December 31, 2021, we have six transactions referred to as “lease pass-through fund arrangements”. Under these arrangements, our wholly owned subsidiaries finance the cost of solar energy systems with investors through arrangements contractually structured as master leases for an initial term ranging between 10 and 25 years. These solar energy systems are subject to lease or PPAs with customers with an initial term not exceeding 25 years.

Under a lease pass-through fund arrangement, the investor makes a large upfront payment to the lessor, which is one of our subsidiaries, and in some cases, subsequent periodic payments. As of December 31, 2021, the future minimum master lease payments to be received from investors, for each of the next five years and thereafter, were as follows (in millions):

2022	\$ 33
2023	26
2024	18
2025	27
2026	28
Thereafter	395
Total	<u>\$ 527</u>

## Note 13 – Equity Incentive Plans

In June 2019, we adopted the 2019 Equity Incentive Plan (the “2019 Plan”). The 2019 Plan provides for the grant of stock options, restricted stock, RSUs, stock appreciation rights, performance units and performance shares to our employees, directors and consultants. Stock options granted under the 2019 Plan may be either incentive stock options or nonstatutory stock options. Incentive stock options may only be granted to our employees. Nonstatutory stock options may be granted to our employees, directors and consultants. Generally, our stock options and RSUs vest over four years and our stock options are exercisable over a maximum period of 10 years from their grant dates. Vesting typically terminates when the employment or consulting relationship ends.

As of December 31, 2021, 49.0 million shares were reserved and available for issuance under the 2019 Plan.

The following table summarizes our stock option and RSU activity for the year ended December 31, 2021:

	Stock Options				RSUs	
	Number of Options (in thousands)	Weighted-Average Exercise Price	Weighted-Average Remaining Contractual Life (years)	Aggregate Intrinsic Value (in billions)	Number of RSUs (in thousands)	Weighted-Average Grant Date Fair Value
Beginning of period	146,933	\$ 68.26			18,789	\$ 136.49
Granted	925	\$ 830.83			2,192	\$ 784.00
Exercised or released	(27,359)	\$ 16.82			(7,877)	\$ 115.36
Cancelled	(1,459)	\$ 195.10			(1,667)	\$ 208.37
End of period	<u>119,040</u>	<u>\$ 84.46</u>	<u>5.98</u>	<u>\$ 115.75</u>	<u>11,437</u>	<u>\$ 264.68</u>
Vested and expected to vest, December 31, 2021	115,794	\$ 83.15	6.11	\$ 112.74	11,181	\$ 250.49
Exercisable and vested, December 31, 2021 (1)	67,828	\$ 74.47	5.96	\$ 66.63		

(1) Branch 8 of the 2018 CEO Performance Award, which represents 8.4 million stock options, was achieved in the fourth quarter of 2021 and will vest upon expected certification following the filing of this Annual Report on Form 10-K.

The weighted-average grant date fair value of RSUs granted in the years ended December 31, 2021, 2020 and 2019 was \$784.00, \$300.51 and \$56.55, respectively. The aggregate release date fair value of RSUs in the years ended December 31, 2021, 2020 and 2019 was \$5.70 billion, \$3.25 billion and \$502 million, respectively.

The aggregate intrinsic value of options exercised in the years ended December 31, 2021, 2020, and 2019 was \$26.88 billion, \$1.55 billion and \$237 million, respectively. During the year ended December 31, 2021, our CEO exercised all of the remaining vested options from the 2012 CEO Performance Award, which amounted to an intrinsic value of \$23.45 billion.

## ESPP

Our employees are eligible to purchase our common stock through payroll deductions of up to 15% of their eligible compensation, subject to any plan limitations. The purchase price would be 85% of the lower of the fair market value on the first and last trading days of each six-month offering period. During the years ended December 31, 2021, 2020 and 2019, we issued 0.5 million, 1.8 million and 2.5 million shares under the ESPP. There were 33.8 million shares available for issuance under the ESPP as of December 31, 2021.

## Fair Value Assumptions

We use the fair value method in recognizing stock-based compensation expense. Under the fair value method, we estimate the fair value of each stock option award with service or service and performance conditions and the ESPP on the grant date generally using the Black-Scholes option pricing model. The weighted-average assumptions used in the Black-Scholes model for stock options are as follows:

	Year Ended December 31,		
	2021	2020	2019
Risk-free interest rate	0.66 %	0.26 %	2.4 %
Expected term (in years)	4.3	3.9	4.5
Expected volatility	59 %	69 %	48 %
Dividend yield	0.0 %	0.0 %	0.0 %
Grant date fair value per share	\$ 384.07	\$ 216.14	\$ 22.32



The fair value of RSUs with service or service and performance conditions is measured on the grant date based on the closing fair market value of our common stock. The risk-free interest rate is based on the U.S. Treasury yield for zero-coupon U.S. Treasury notes with maturities approximating each grant's expected life. We use our historical data in estimating the expected term of our employee grants. The expected volatility is based on the average of the implied volatility of publicly traded options for our common stock and the historical volatility of our common stock.

## 2018 CEO Performance Award

In March 2018, our stockholders approved the Board of Directors' grant of 101.3 million stock option awards, as adjusted to give effect to the five-for-one stock split effected in the form of a stock dividend in August 2020 ("Stock Split"), to our CEO (the "2018 CEO Performance Award"). The 2018 CEO Performance Award consists of 12 vesting tranches with a vesting schedule based entirely on the attainment of both operational milestones (performance conditions) and market conditions, assuming continued employment either as the CEO or as both Executive Chairman and Chief Product Officer and service through each vesting date. Each of the 12 vesting tranches of the 2018 CEO Performance Award will vest upon certification by the Board of Directors that both (i) the market capitalization milestone for such tranche, which begins at \$100.0 billion for the first tranche and increases by increments of \$50.0 billion thereafter (based on both a six calendar month trailing average and a 30 calendar day trailing average, counting only trading days), has been achieved, and (ii) any one of the following eight operational milestones focused on total revenue or any one of the eight operational milestones focused on Adjusted EBITDA have been achieved for the four consecutive fiscal quarters on an annualized basis and subsequently reported by us in our consolidated financial statements filed with our Forms 10-Q and/or 10-K. Adjusted EBITDA is defined as net income (loss) attributable to common stockholders before interest expense, provision (benefit) for income taxes, depreciation and amortization and stock-based compensation. Upon vesting and exercise, including the payment of the exercise price of \$70.01 per share, our CEO must hold shares that he acquires for five years post-exercise, other than a cashless exercise where shares are simultaneously sold to pay for the exercise price and any required tax withholding.

The achievement status of the operational milestones as of December 31, 2021 is provided below. Although an operational milestone is deemed achieved in the last quarter of the relevant annualized period, it may be certified only after the financial statements supporting its achievement have been filed with our Forms 10-Q and/or 10-K.

Total Annualized Revenue			Annualized Adjusted EBITDA		
Milestone (in billions)	Achievement Status		Milestone (in billions)	Achievement Status	
\$ 20.0	Achieved		\$ 1.5	Achieved	
\$ 35.0	Achieved		\$ 3.0	Achieved	
\$ 55.0	Probable		\$ 4.5	Achieved	
\$ 75.0	Probable		\$ 6.0	Achieved	
\$ 100.0	-		\$ 8.0	Achieved	
\$ 125.0	-		\$ 10.0	Achieved (1)	
\$ 150.0	-		\$ 12.0	Probable	
\$ 175.0	-		\$ 14.0	Probable	

(1) Achieved in the fourth quarter of 2021 and expected to be certified following the filing of this Annual Report on Form 10-K.

Stock-based compensation under the 2018 CEO Performance Award represents a non-cash expense and is recorded as a Selling, general, and administrative operating expense in our consolidated statement of operations. In each quarter since the grant of the 2018 CEO Performance Award, we have recognized expense, generally on a pro-rated basis, for only the number of tranches (up to the maximum of 12 tranches) that corresponds to the number of operational milestones that have been achieved or have been determined probable of being achieved in the future, in accordance with the following principles.

On the grant date, a Monte Carlo simulation was used to determine for each tranche (i) a fixed amount of expense for such tranche and (ii) the future time when the market capitalization milestone for such tranche was expected to be achieved, or its “expected market capitalization milestone achievement time.” Separately, based on a subjective assessment of our future financial performance, each quarter we determine whether it is probable that we will achieve each operational milestone that has not previously been achieved or deemed probable of achievement and if so, the future time when we expect to achieve that operational milestone, or its “expected operational milestone achievement time.” When we first determine that an operational milestone has become probable of being achieved, we allocate the entire expense for the related tranche over the number of quarters between the grant date and the then-applicable “expected full achievement time.” The “expected full achievement time” at any given time is the later of (i) the expected operational milestone achievement time (if the related operational milestone has not yet been achieved) and (ii) the expected market capitalization milestone achievement time (if the related market capitalization milestone had not yet been achieved). We immediately recognize a catch-up expense for all accumulated expense for the quarters from the grant date through the quarter in which the operational milestone was first deemed probable of being achieved. Each quarter thereafter, we recognize the prorated portion of the then-remaining expense for the tranche based on the number of quarters between such quarter and the then-applicable expected full achievement time, except that upon the achievement of both a market capitalization milestone and operational milestone with respect to a tranche, all remaining expense for that tranche is immediately recognized.

As a result, we have experienced significant catch-up expenses in quarters when one or more operational milestones were first determined to be probable of achievement. Historically, the expected market capitalization achievement times were generally later than the related expected operational milestone achievement times. Therefore, when market capitalization milestones were achieved earlier than originally forecasted due to periods of rapid stock price appreciation, we had higher catch-up expenses and the remaining expenses were being recognized over shorter periods of time at a higher per-quarter rate. All market capitalization milestones were achieved as of the second quarter of 2021.

During the year ended December 31, 2021, five operational milestones became probable of achievement and consequently, we recognized an aggregate catch-up expense of \$571 million.

As of December 31, 2021, we had \$65 million of total unrecognized stock-based compensation expense remaining, which will be recognized over a weighted-average period of 0.6 years. For the years ended December 31, 2021, 2020 and 2019, we recorded stock-based compensation expense of \$910 million, \$838 million and \$296 million, respectively, related to the 2018 CEO Performance Award.

## **Other Performance-Based Grants**

### *2012 CEO Performance Award*

In August 2012, our Board of Directors granted 26.4 million stock option awards to our CEO (the “2012 CEO Performance Award”), as adjusted to give effect to the Stock Split. The 2012 CEO Performance Award consists of 10 vesting tranches with a vesting schedule based entirely on the attainment of both performance conditions and market conditions, assuming continued employment and service through each vesting date. During the year ended December 31, 2021, our CEO exercised all of the remaining 22.9 million vested options from the 2012 CEO Performance Award.

As of December 31, 2021, the performance milestone of gross margin of 30% or more for four consecutive quarters was considered not probable of achievement for which the unrecognized stock-based compensation is immaterial. For the years ended December 31, 2021, 2020 and 2019, we did not record any stock-based compensation expense related to the 2012 CEO Performance Award.

### *2014 Performance-Based Stock Option Awards*

In 2014, to create incentives for continued long-term success beyond the Model S program and to closely align executive pay with our stockholders’ interests in the achievement of significant milestones by us, the Compensation Committee of our Board of Directors granted stock option awards to certain employees (excluding our CEO) to purchase an aggregate of 5.4 million shares of our common stock, as adjusted to give effect to the Stock Split. Each award consisted of four vesting tranches with the vesting schedule based entirely on the attainment of the future performance milestones, assuming continued employment and service through each vesting date.

As of December 31, 2021, the performance milestone of annualized gross margin of greater than 30% for any three-year period was considered not probable of achievement for which the unrecognized stock-based compensation is immaterial. For the years ended December 31, 2021, 2020 and 2019, we did not record any stock-based compensation expense related to this grant.





### *2021 Performance-Based Stock Option & RSU Awards*

During the fourth quarter of 2021, the Compensation Committee of our Board of Directors granted to certain employees restricted stock units and stock options to purchase an aggregate 0.7 million shares of our common stock to create incentives for continued long-term success and to closely align compensation with our stockholders' interests in the achievement of certain performance milestones by our company.

We begin recording stock-based compensation expense when the performance milestones become probable of achievement. Following achievement, vesting occurs over a two year period with continued employment. As of December 31, 2021, we had unrecognized stock-based compensation expense of \$413 million for this grant as it was not considered probable of achievement. For the year ended December 31, 2021, we did not record stock-based compensation expense related to this grant.

### **Summary Stock-Based Compensation Information**

The following table summarizes our stock-based compensation expense by line item in the consolidated statements of operations (in millions):

	Year Ended December 31,		
	2021	2020	2019
Cost of revenues	\$ 421	\$ 281	\$ 128
Research and development	448	346	285
Selling, general and administrative	1,252	1,107	482
Restructuring and other	—	—	3
Total	<u>\$ 2,121</u>	<u>\$ 1,734</u>	<u>\$ 898</u>

Our income tax benefits recognized from stock-based compensation arrangements in each of the periods presented were immaterial due to cumulative losses and valuation allowances. During the years ended December 31, 2021, 2020 and 2019, stock-based compensation expense capitalized to our consolidated balance sheets was \$182 million, \$89 million and \$52 million, respectively. As of December 31, 2021, we had \$3.43 billion of total unrecognized stock-based compensation expense related to non-performance awards, which will be recognized over a weighted-average period of 2.10 years.

## Note 14 – Income Taxes

A provision for income taxes of \$699 million, \$292 million and \$110 million has been recognized for the years ended December 31, 2021, 2020 and 2019, respectively, related primarily to our subsidiaries located outside of the U.S. Our income (loss) before provision for income taxes for the years ended December 31, 2021, 2020 and 2019 was as follows (in millions):

	Year Ended December 31,		
	2021	2020	2019
Domestic	\$ (130)	\$ (198)	\$ (287)
Noncontrolling interest and redeemable noncontrolling interest	125	141	87
Foreign	6,348	1,211	(465)
Income (loss) before income taxes	<u>\$ 6,343</u>	<u>\$ 1,154</u>	<u>\$ (665)</u>

The components of the provision for income taxes for the years ended December 31, 2021, 2020 and 2019 consisted of the following (in millions):

	Year Ended December 31,		
	2021	2020	2019
Current:			
Federal	\$ —	\$ —	\$ —
State	9	4	5
Foreign	839	248	86
Total current	<u>848</u>	<u>252</u>	<u>91</u>
Deferred:			
Federal	—	—	(4)
State	—	—	—
Foreign	(149)	40	23
Total deferred	<u>(149)</u>	<u>40</u>	<u>19</u>
Total provision for income taxes	<u>\$ 699</u>	<u>\$ 292</u>	<u>\$ 110</u>

Deferred tax assets (liabilities) as of December 31, 2021 and 2020 consisted of the following (in millions):

	December 31, 2021	December 31, 2020
<b>Deferred tax assets:</b>		
Net operating loss carry-forwards	\$ 7,607	\$ 2,172
Research and development credits	923	624
Other tax credits and attributes	335	168
Deferred revenue	546	450
Inventory and warranty reserves	377	315
Stock-based compensation	115	98
Operating lease right-of-use liabilities	430	335
Deferred GILTI tax assets	556	581
Accruals and others	191	205
Total deferred tax assets	<u>11,080</u>	<u>4,948</u>
Valuation allowance	<u>(9,074)</u>	<u>(2,930)</u>
Deferred tax assets, net of valuation allowance	<u>2,006</u>	<u>2,018</u>
<b>Deferred tax liabilities:</b>		
Depreciation and amortization	(1,279)	(1,488)
Investment in certain financing funds	(209)	(198)
Operating lease right-of-use assets	(391)	(305)
Deferred revenue	(49)	(50)
Other	(13)	(61)
Total deferred tax liabilities	<u>(1,941)</u>	<u>(2,102)</u>
Deferred tax assets (liabilities), net of valuation allowance	<u>\$ 65</u>	<u>\$ (84)</u>

As of December 31, 2021, we recorded a valuation allowance of \$9.07 billion for the portion of the deferred tax asset that we do not expect to be realized. The valuation allowance on our net deferred taxes increased by \$6.14 billion, \$974 million, and \$150 million during the years ended December 31, 2021, 2020 and 2019, respectively. The changes in valuation allowance are primarily due to additional U.S. deferred tax assets and liabilities incurred in the respective year. We have \$417 million of deferred tax assets in foreign jurisdictions, which management believes are more-likely-than-not to be fully realized given the expectation of future earnings in these jurisdictions. We did not have any material releases of valuation allowance for the years ended December 31, 2021, 2020 and 2019. We continue to monitor the realizability of the U.S. deferred tax assets taking into account multiple factors. In completing this assessment, we considered both objective and subjective factors. These factors included, but were not limited to, a history of losses in prior years, excess tax benefits related to stock-based compensation, future reversal of existing temporary differences and tax planning strategies. After evaluating all available evidence, we intend to continue maintaining a full valuation allowance on our U.S. deferred tax assets until there is sufficient evidence to support the reversal of all or some portion of these allowances. Given the improvement in our operating results and depending on the amount of stock-based compensation tax deductions available in the future, we may release the valuation allowance associated with the U.S. deferred tax assets in the next few years. Release of all, or a portion, of the valuation allowance would result in the recognition of certain deferred tax assets and a decrease to income tax expense for the period the release is recorded.

The reconciliation of taxes at the federal statutory rate to our provision for income taxes for the years ended December 31, 2021, 2020 and 2019 was as follows (in millions):

	Year Ended December 31,		
	2021	2020	2019
Tax at statutory federal rate	\$ 1,332	\$ 242	\$ (139)
State tax, net of federal benefit	6	4	5
Nondeductible executive compensations	201	184	62
Other nondeductible expenses	67	52	32
Excess tax benefits related to stock based compensation	(7,123)	(666)	(7)
Foreign income rate differential	(668)	33	189
U.S. tax credits	(328)	(181)	(107)
Noncontrolling interests and redeemable noncontrolling interests adjustment	11	5	(29)
GILTI inclusion	1,008	133	—
Convertible debt	—	—	(4)
Unrecognized tax benefits	28	1	17
Change in valuation allowance	6,165	485	91
Provision for income taxes	<u>\$ 699</u>	<u>\$ 292</u>	<u>\$ 110</u>

As of December 31, 2021, we had \$31.2 billion of federal and \$21.6 billion of state net operating loss carry-forwards available to offset future taxable income, some of which, if not utilized, will begin to expire in 2022 for federal and state purposes. A portion of these losses were generated by SolarCity and some of the companies we acquired, and therefore are subject to change of control provisions, which limit the amount of acquired tax attributes that can be utilized in a given tax year. We do not expect the change of control limitations to significantly impact our ability to utilize these attributes.

Our 2021 net operating loss included corporate income tax deductions related to our CEO's exercise of the remaining stock options from the 2012 CEO Performance Award, which resulted in a \$23.45 billion tax deduction. Such increase in net operating loss is included in our deferred income tax assets, offset by a valuation allowance. Section 162(m) of the Internal Revenue Code was amended for deductibility of executive compensation for stock grants after 2017. Therefore, we are not expecting substantial corporate income tax deductions from our CEO's subsequent option exercises.

As of December 31, 2021, we had research and development tax credits of \$738 million and \$584 million for federal and state income tax purposes, respectively. If not utilized, the federal research and development tax credits will expire in various amounts beginning in 2024. However, the state of California research and development tax credits can be carried forward indefinitely. In addition, we have other general business tax credits of \$186 million for federal income tax purposes, which will not begin to significantly expire until 2033.

Federal and state laws can impose substantial restrictions on the utilization of net operating loss and tax credit carry-forwards in the event of an "ownership change," as defined in Section 382 of the Internal Revenue Code. We have determined that no significant limitation would be placed on the utilization of our net operating loss and tax credit carry-forwards due to prior ownership changes.

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The local government of Shanghai granted a beneficial corporate income tax rate of 15% to certain eligible enterprises, compared to the 25% statutory corporate income tax rate in China. Our Gigafactory Shanghai subsidiary was granted this beneficial income tax rate of 15% for 2019 through 2023.

We constantly assess our intent to reinvest our offshore earnings. As of December 31, 2021, we no longer intend to reinvest certain undistributed earnings of our foreign entities that have been previously taxed in the U.S, while for the remainder of our undistributed earnings, we intend to indefinitely reinvest. We have recorded the taxes associated with the earnings we intend to repatriate in the future. For the earnings we intend to indefinitely reinvest, no deferred tax liabilities for foreign withholding or state taxes have been recorded. As of December 31, 2021, such undistributed earnings were approximately \$161 million. The amount of any unrecognized deferred tax liability associated with these earnings is immaterial.

### Uncertain Tax Positions

The changes to our gross unrecognized tax benefits were as follows (in millions):

December 31, 2018	\$	253
Decreases in balances related to prior year tax positions		(39)
Increases in balances related to current year tax positions		59
December 31, 2019		273
Increases in balances related to prior year tax positions		66
Increases in balances related to current year tax positions		41
December 31, 2020		380
Increases in balances related to prior year tax positions		117
Decreases in balances related to prior year tax positions		(90)
Increases in balances related to current year tax positions		124
December 31, 2021	\$	531

As of December 31, 2021, accrued interest and penalties related to unrecognized tax benefits are classified as income tax expense and were immaterial. Unrecognized tax benefits of \$473 million, if recognized, would not affect our effective tax rate since the tax benefits would increase a deferred tax asset that is currently fully offset by a valuation allowance.

We file income tax returns in the U.S., California and various state and foreign jurisdictions. We are currently under examination by the IRS for the years 2015 to 2018. Additional tax years within the periods 2004 to 2014 and 2019 to 2020 remain subject to examination for federal income tax purposes, and 2004 and subsequent tax years remain subject to examination for California income tax purposes. All net operating losses and tax credits generated to date are subject to adjustment for U.S. federal and California income tax purposes. Our returns for 2008 and subsequent tax years remain subject to examination in other U.S. state and foreign jurisdictions.

Given the uncertainty in timing and outcome of our tax examinations, an estimate of the range of the reasonably possible change in gross unrecognized tax benefits within twelve months cannot be made at this time.

## **Note 15 – Commitments and Contingencies**

### ***Operating Lease Arrangement in Buffalo, New York***

We have an operating lease through the Research Foundation for the State University of New York (the “SUNY Foundation”) with respect to Gigafactory New York. Under the lease and a related research and development agreement, we are continuing to further develop the facility.

Under this agreement, we are obligated to, among other things, meet employment targets as well as specified minimum numbers of personnel in the State of New York and in Buffalo, New York and spend or incur \$5.00 billion in combined capital, operational expenses, costs of goods sold and other costs in the State of New York during the 10-year period beginning April 30, 2018. On an annual basis during the initial lease term, as measured on each anniversary of such date, if we fail to meet these specified investment and job creation requirements, then we would be obligated to pay a \$41 million “program payment” to the SUNY Foundation for each year that we fail to meet these requirements. Furthermore, if the arrangement is terminated due to a material breach by us, then additional amounts may become payable by us.

As we temporarily suspended most of our manufacturing operations at Gigafactory New York pursuant to a New York State executive order issued in March 2020 as a result of the COVID-19 pandemic, we were granted a deferral of our obligation to be compliant with our applicable targets through December 31, 2021 in an amendment memorialized in August 2021. The amendment also extended our overall agreement to spend or incur \$5.00 billion in combined capital, operational expenses, costs of goods sold and other costs in the State of New York through December 31, 2029. As of December 31, 2021, we are currently in excess of such targets relating to investments and personnel in the State of New York and Buffalo and do not currently expect any issues meeting our applicable obligations following this expected deferral or in the years beyond. However, if our expectations as to the costs and timelines of our investment and operations at Buffalo or our production ramp of the Solar Roof prove incorrect, we may incur additional expenses or be required to make substantial payments to the SUNY Foundation.

### ***Operating Lease Arrangement in Shanghai, China***

We have an operating lease arrangement for an initial term of 50 years with the local government of Shanghai for land use rights where we are constructing Gigafactory Shanghai. Under the terms of the arrangement, we are required to spend RMB 14.08 billion in capital expenditures by the end of 2023 and to generate RMB 2.23 billion of annual tax revenues starting at the end of 2023. If we are unwilling or unable to meet such target or obtain periodic project approvals, in accordance with the Chinese government’s standard terms for such arrangements, we would be required to revert the site to the local government and receive compensation for the remaining value of the land lease, buildings and fixtures. We expect to meet the capital expenditure and tax revenue requirements based on our current level of spend and sales.

## ***Legal Proceedings***

### ***Litigation Relating to the SolarCity Acquisition***

Between September 1, 2016 and October 5, 2016, seven lawsuits were filed in the Delaware Court of Chancery by purported stockholders of Tesla challenging our acquisition of SolarCity Corporation (“SolarCity”). Following consolidation, the lawsuit names as defendants the members of Tesla’s board of directors as then constituted and alleges, among other things, that board members breached their fiduciary duties in connection with the acquisition. The complaint asserts both derivative claims and direct claims on behalf of a purported class and seeks, among other relief, unspecified monetary damages, attorneys’ fees and costs. On January 27, 2017, defendants filed a motion to dismiss the operative complaint. Rather than respond to the defendants’ motion, the plaintiffs filed an amended complaint. On March 17, 2017, defendants filed a motion to dismiss the amended complaint. On December 13, 2017, the Court heard oral argument on the motion. On March 28, 2018, the Court denied defendants’ motion to dismiss. Defendants filed a request for interlocutory appeal, and the Delaware Supreme Court denied that request without ruling on the merits but electing not to hear an appeal at this early stage of the case. Defendants filed their answer on May 18, 2018, and mediations were held on June 10, 2019. Plaintiffs and defendants filed respective motions for summary judgment on August 25, 2019, and further mediations were held on October 3, 2019. The Court held a hearing on the motions for summary judgment on November 4, 2019. On January 22, 2020, all of the director defendants except Elon Musk reached a settlement to resolve the lawsuit against them for an amount to be paid entirely under the applicable insurance policy. The settlement, which does not involve an admission of any wrongdoing by any party, was approved by the Court on August 17, 2020. Tesla received payment of approximately \$43 million on September 16, 2020, which has been recognized in our consolidated statement of operations as a reduction to Selling, general and administrative operating expenses for costs previously incurred related to the acquisition of SolarCity. On February 4, 2020, the Court issued a ruling that denied plaintiffs’ previously-filed motion for summary judgment and granted in part and denied in part defendants’ previously-filed motion for summary judgment. The case was set for trial in March 2020 until it was postponed by the Court due to safety precautions concerning COVID-19. The trial was held from July 12 to July 23, 2021 and on August 16, 2021. On October 22, 2021, the Court approved the parties’ joint stipulation that (a) the class is decertified and the action shall continue exclusively as a derivative action under Court of Chancery Rule 23.1; and (b) the direct claims against Elon Musk are dismissed with prejudice. Following post-trial briefing, post-trial argument was held on January 18, 2022. The matter is now submitted, and a decision is expected by middle of 2022.

These plaintiffs and others filed parallel actions in the U.S. District Court for the District of Delaware on or about April 21, 2017. They include claims for violations of the federal securities laws and breach of fiduciary duties by Tesla’s board of directors. Those actions have been consolidated and stayed pending the above-referenced Chancery Court litigation.

### ***Litigation Relating to 2018 CEO Performance Award***

On June 4, 2018, a purported Tesla stockholder filed a putative class and derivative action in the Delaware Court of Chancery against Elon Musk and the members of Tesla’s board of directors as then constituted, alleging corporate waste, unjust enrichment and that such board members breached their fiduciary duties by approving the stock-based compensation plan awarded to Elon Musk in 2018. The complaint seeks, among other things, monetary damages and rescission or reformation of the stock-based compensation plan. On August 31, 2018, defendants filed a motion to dismiss the complaint; plaintiff filed its opposition brief on November 1, 2018; and defendants filed a reply brief on December 13, 2018. The hearing on the motion to dismiss was held on May 9, 2019. On September 20, 2019, the Court granted the motion to dismiss as to the corporate waste claim but denied the motion as to the breach of fiduciary duty and unjust enrichment claims. Defendants’ answer was filed on December 3, 2019.

On January 25, 2021, the Court conditionally certified certain claims and a class of Tesla stockholders as a class action. On September 30, 2021, plaintiff filed a motion for leave to file a verified amended derivative complaint. On October 1, 2021, defendants Kimbal Musk and Steve Jurvetson moved for summary judgment as to the claims against them. Following the motion, plaintiff agreed to voluntarily dismiss the claims against Kimbal Musk and Steve Jurvetson. Plaintiff also moved for summary judgment on October 1, 2021. On October 27, 2021, the Court approved the parties’ joint stipulation that, among other things, (a) all claims against Kimbal Musk and Steve Jurvetson in the Complaint are dismissed with prejudice; (b) the class is decertified and the action shall continue exclusively as a derivative action under Court of Chancery Rule 23.1; and (c) the direct claims against the remaining defendants are dismissed with prejudice. On November 18, 2021, the remaining defendants (a) moved for partial summary judgment, (b) opposed plaintiff’s summary judgment motion, and (c) opposed the plaintiff’s motion to amend his complaint. Oral argument on summary judgment and the motion to amend were set for January 6, 2022, however, it was canceled by the Court. The case was recently assigned to a different judge. Trial is currently set for April 18-22, 2022.



*Litigation Related to Directors' Compensation*

On June 17, 2020, a purported Tesla stockholder filed a derivative action in the Delaware Court of Chancery, purportedly on behalf of Tesla, against certain of Tesla's current and former directors regarding compensation awards granted to Tesla's directors, other than Elon Musk, between 2017 and 2020. The suit asserts claims for breach of fiduciary duty and unjust enrichment and seeks declaratory and injunctive relief, unspecified damages and other relief. Defendants filed their answer on September 17, 2020. Trial is set for September 11, 2023.

### *Litigation Relating to Potential Going Private Transaction*

Between August 10, 2018 and September 6, 2018, nine purported stockholder class actions were filed against Tesla and Elon Musk in connection with Mr. Musk's August 7, 2018 Twitter post that he was considering taking Tesla private. All of the suits are now pending in the U.S. District Court for the Northern District of California. Although the complaints vary in certain respects, they each purport to assert claims for violations of federal securities laws related to Mr. Musk's statement and seek unspecified compensatory damages and other relief on behalf of a purported class of purchasers of Tesla's securities. Plaintiffs filed their consolidated complaint on January 16, 2019 and added as defendants the members of Tesla's board of directors. The now-consolidated purported stockholder class action was stayed while the issue of selection of lead counsel was briefed and argued before the Ninth Circuit. The Ninth Circuit ruled regarding lead counsel. Defendants filed a motion to dismiss the complaint on November 22, 2019. The hearing on the motion was held on March 6, 2020. On April 15, 2020, the Court denied defendants' motion to dismiss. The parties stipulated to certification of a class of stockholders, which the court granted on November 25, 2020. On January 11, 2022, plaintiff filed a motion for partial summary judgment which is currently pending before the Court. Trial is set for May 2022.

Between October 17, 2018 and March 8, 2021, seven derivative lawsuits were filed in the Delaware Court of Chancery, purportedly on behalf of Tesla, against Mr. Musk and the members of Tesla's board of directors, as constituted at relevant times, in relation to statements made and actions connected to a potential going private transaction, with certain of the lawsuits challenging additional Twitter posts by Mr. Musk, among other things. Five of those actions were consolidated, and all seven actions have been stayed pending resolution of the above-referenced consolidated purported stockholder class action. In addition to these cases, two derivative lawsuits were filed on October 25, 2018 and February 11, 2019 in the U.S. District Court for the District of Delaware, purportedly on behalf of Tesla, against Mr. Musk and the members of the Tesla board of directors as then constituted. Those cases have also been consolidated and stayed pending resolution of the above-referenced consolidated purported stockholder class action.

Unless otherwise stated, the individual defendants named in the stockholder proceedings described above and the Company with respect to the stockholder class action proceedings described above believe that the claims in such proceedings have no merit and intend to defend against them vigorously. We are unable to estimate the possible loss or range of loss, if any, associated with these claims.

On November 15, 2021, JPMorgan Chase Bank ("JP Morgan") filed a lawsuit against Tesla in the Southern District of New York alleging breach of a stock warrant agreement that was entered into as part of a convertible notes offering in 2014. In 2018, JP Morgan informed Tesla that it had adjusted the strike price based upon Mr. Musk's August 7, 2018 Twitter post that he was considering taking Tesla private. Tesla disputed JP Morgan's adjustment as a violation of the parties' agreement. In 2021 Tesla delivered shares to JP Morgan per the agreement, which they duly accepted. JP Morgan now alleges that it is owed approximately \$162 million as the value of additional shares that it claims should have been delivered as a result of the adjustment to the strike price in 2018. On January 24, 2022, Tesla filed multiple counterclaims as part of its answer to the underlying lawsuit, asserting among other points that JP Morgan should have terminated the stock warrant agreement in 2018 rather than make an adjustment to the strike price that it should have known would lead to a commercially unreasonable result. Tesla believes that the adjustments made by JP Morgan were neither proper nor commercially reasonable, as required under the stock warrant agreements.

### *Litigation and Investigations Relating to Alleged Race Discrimination*

On October 4, 2021, in a case captioned *Diaz v. Tesla*, a jury in the Northern District of California returned a verdict of \$136.9 million against Tesla on claims by a former contingent worker that he was subjected to race discrimination while assigned to work at Tesla's Fremont Factory from 2015-2016. The Company does not believe that the facts and law justify the verdict. On November 16, 2021, Tesla filed a post-trial motion for relief that included a request for a new trial or reduction of the jury's damages. The court held a hearing on Tesla's motion on January 19, 2022, and a decision is expected soon. Tesla will pursue next steps, including an appeal, if necessary.

On January 3, 2022, the California Department of Fair Employment and Housing ("DFEH") issued Tesla a Notice of Cause Finding and Mandatory Dispute Resolution following an investigation into undisclosed allegations of race discrimination and harassment at unspecified Tesla locations. The DFEH gave notice that, based upon the evidence collected, it believes that it has grounds to file a civil complaint against Tesla.

### *Certain Investigations and Other Matters*

We receive requests for information from regulators and governmental authorities, such as the National Highway Traffic Safety Administration, the National Transportation Safety Board, the SEC, the Department of

Justice (“DOJ”) and various state, federal, and international agencies. We routinely cooperate with such regulatory and governmental requests, including subpoenas, formal and informal requests and other investigations and inquiries.

For example, the SEC had issued subpoenas to Tesla in connection with Elon Musk's prior statement that he was considering taking Tesla private. The take-private investigation was resolved and closed with a settlement entered into with the SEC in September 2018 and as further clarified in April 2019 in an amendment. More recently, on November 16, 2021, the SEC issued a subpoena to us seeking information on our governance processes around compliance with the SEC settlement, as amended.

On December 4, 2019, the SEC issued a subpoena seeking information concerning certain financial data and contracts including Tesla's regular financing arrangements. On December 16, 2021, the SEC informed us that it closed this investigation. Separately, the DOJ had also asked us to voluntarily provide it with information about the above matter related to taking Tesla private and Model 3 production rates. We have not received any further requests from DOJ on these matters since we last provided information in May 2019. There have not been any additional developments in these matters that we deem to be material, and to our knowledge no government agency in any ongoing investigation has concluded that any wrongdoing occurred. As is our normal practice, we have been cooperating and will continue to cooperate with government authorities. We cannot predict the outcome or impact of any ongoing matters. Should the government decide to pursue an enforcement action, there exists the possibility of a material adverse impact on our business, results of operation, prospects, cash flows and financial position.

We are also subject to various other legal proceedings and claims that arise from the normal course of business activities. If an unfavorable ruling or development were to occur, there exists the possibility of a material adverse impact on our business, results of operations, prospects, cash flows, financial position and brand.

### ***Indemnification and Guaranteed Returns***

We are contractually obligated to compensate certain fund investors for any losses that they may suffer in certain limited circumstances resulting from reductions in investment tax credits claimed under U.S. federal laws for the installation of solar power facilities and energy storage systems that are charged from a co-sited solar power facility. We believe that any payments to the fund investors in excess of the amounts already recognized by us for this obligation are not probable or material based on the facts known at the filing date.

We are eligible to receive certain state and local incentives that are associated with renewable energy generation. The amount of incentives that can be claimed is based on the projected or actual solar energy system size and/or the amount of solar energy produced. We also currently participate in one state's incentive program that is based on either the fair market value or the tax basis of solar energy systems placed in service. State and local incentives received are allocated between us and fund investors in accordance with the contractual provisions of each fund. We are not contractually obligated to indemnify any fund investor for any losses they may incur due to a shortfall in the amount of state or local incentives actually received.

### ***Letters of Credit***

As of December 31, 2021, we had \$286 million of unused letters of credit outstanding.

### **Note 16 – Variable Interest Entity Arrangements**

We have entered into various arrangements with investors to facilitate the funding and monetization of our solar energy systems and vehicles. In particular, our wholly owned subsidiaries and fund investors have formed and contributed cash and assets into various financing funds and entered into related agreements. We have determined that the funds are variable interest entities ("VIEs") and we are the primary beneficiary of these VIEs by reference to the power and benefits criterion under ASC 810, *Consolidation*. We have considered the provisions within the agreements, which grant us the power to manage and make decisions that affect the operation of these VIEs, including determining the solar energy systems and the associated customer contracts to be sold or contributed to these VIEs, redeploying solar energy systems and managing customer receivables. We consider that the rights granted to the fund investors under the agreements are more protective in nature rather than participating.

As the primary beneficiary of these VIEs, we consolidate in the financial statements the financial position, results of operations and cash flows of these VIEs, and all intercompany balances and transactions between us and these VIEs are eliminated in the consolidated financial statements. Cash distributions of income and other receipts by a fund, net of agreed upon expenses, estimated expenses, tax benefits and detriments of income and loss and tax credits, are allocated to the fund investor and our subsidiary as specified in the agreements.

Generally, our subsidiary has the option to acquire the fund investor's interest in the fund for an amount based on the market value of the fund or the formula specified in the agreements.

Upon the sale or liquidation of a fund, distributions would occur in the order and priority specified in the agreements.

Pursuant to management services, maintenance and warranty arrangements, we have been contracted to provide services to the funds, such as operations and maintenance support, accounting, lease servicing and performance reporting. In some instances, we have guaranteed payments to the fund investors as specified in the agreements. A fund's creditors have no recourse to our general credit or to that of other funds. None of the assets of the funds had been pledged as collateral for their obligations.

The aggregate carrying values of the VIEs' assets and liabilities, after elimination of any intercompany transactions and balances, in the consolidated balance sheets were as follows (in millions):

	December 31, 2021	December 31, 2020
<b>Assets</b>		
Current assets		
Cash and cash equivalents	\$ 79	\$ 87
Accounts receivable, net	22	28
Prepaid expenses and other current assets	152	105
Total current assets	253	220
Solar energy systems, net	4,108	4,749
Other non-current assets	265	182
Total assets	<u>\$ 4,626</u>	<u>\$ 5,151</u>
<b>Liabilities</b>		
Current liabilities		
Accrued liabilities and other	\$ 74	\$ 63
Deferred revenue	10	11
Customer deposits	—	14
Current portion of debt and finance leases	1,031	797
Total current liabilities	1,115	885
Deferred revenue, net of current portion	153	168
Debt and finance leases, net of current portion	2,093	1,346
Other long-term liabilities	11	19
Total liabilities	<u>\$ 3,372</u>	<u>\$ 2,418</u>

#### Note 17 – Related Party Transactions

In May 2019, our CEO purchased from us 514,400 shares of our common stock in a public offering at the public offering price for an aggregate \$25 million.

In February 2020, our CEO and a member of our Board of Directors purchased from us 65,185 and 6,250 shares, respectively, of our common stock in a public offering at the public offering price for an aggregate \$10 million and \$1 million, respectively.

In June 2020, our CEO entered into an indemnification agreement with us for an interim term of 90 days. During the interim term, we resumed our annual evaluation of all available options for providing directors' and officers' indemnity coverage, which we had suspended during the height of shelter-in-place requirements related to the COVID-19 pandemic. As part of such process, we obtained a binding market quote for a directors' and officers' liability insurance policy with an aggregate coverage limit of \$100 million.

Pursuant to the indemnification agreement, our CEO provided, from his personal funds, directors' and officers' indemnity coverage to us during the interim term in the event such coverage is not indemnifiable by us, up to a total of \$100 million. In return, we paid our CEO a total of \$3 million, which represents the market-based premium for the market quote described above as prorated for 90 days and further discounted by 50%. Following the lapse of the 90-day period, we did not extend the term of the indemnification agreement with our CEO and instead bound a customary directors' and officers' liability insurance policy with third-party carriers.

In relation to our CEO's exercise of stock options and sale of common stock from the 2012 CEO Performance Award, Tesla withheld the appropriate amount of taxes. However, given the significant amounts involved, our CEO entered into an indemnification agreement with us in November 2021 for additional taxes owed, if any.

**Note 18 – Segment Reporting and Information about Geographic Areas**

We have two operating and reportable segments: (i) automotive and (ii) energy generation and storage. The automotive segment includes the design, development, manufacturing, sales and leasing of electric vehicles as well as sales of automotive regulatory credits. Additionally, the automotive segment is also comprised of services and other, which includes non-warranty after-sales vehicle services, sales of used vehicles, retail merchandise, sales by our acquired subsidiaries to third party customers and vehicle insurance revenue. The energy generation and storage segment includes the design, manufacture, installation, sales and leasing of solar energy generation and energy storage products and related services and sales of solar energy systems incentives. Our CODM does not evaluate operating segments using asset or liability information. The following table presents revenues and gross profit by reportable segment (in millions):

	Year Ended December 31,		
	2021	2020	2019
Automotive segment			
Revenues	\$ 51,034	\$ 29,542	\$ 23,047
Gross profit	\$ 13,735	\$ 6,612	\$ 3,879
Energy generation and storage segment			
Revenues	\$ 2,789	\$ 1,994	\$ 1,531
Gross profit	\$ (129)	\$ 18	\$ 190

The following table presents revenues by geographic area based on the sales location of our products (in millions):

	Year Ended December 31,		
	2021	2020	2019
United States	\$ 23,973	\$ 15,207	\$ 12,653
China	13,844	6,662	2,979
Other	16,006	9,667	8,946
Total	<u>\$ 53,823</u>	<u>\$ 31,536</u>	<u>\$ 24,578</u>

The following table presents long-lived assets by geographic area (in millions):

	December 31, 2021	December 31, 2020
United States	\$ 19,026	\$ 15,989
Germany	2,606	894
China	2,415	1,479
Other International	602	364
Total	<u>\$ 24,649</u>	<u>\$ 18,726</u>

**Note 19 – Restructuring and Other**

During the year ended December 31, 2021, we recorded \$101 million of impairment losses on bitcoin. We also realized gains of \$128 million in connection with selling a portion of our holdings in March 2021.

During the year ended December 31, 2019, we carried out certain restructuring actions in order to reduce costs and improve efficiency. As a result, we recognized \$50 million of costs primarily related to employee termination expenses and losses from closing certain stores impacting both segments. We recognized \$47 million in impairment related to the in-process research and development intangible asset as we abandoned further development efforts and \$15 million for the related equipment within the energy generation and storage segment. We also incurred a loss of \$37 million for closing operations in certain facilities. On the statement of cash flows, the amounts were presented in the captions in which such amounts would have been recorded absent the impairment charges. The employee termination expenses were substantially paid by December 31, 2019, while the remaining amounts were non-cash.



## **ITEM 9. CHANGES IN AND DISAGREEMENTS WITH ACCOUNTANTS ON ACCOUNTING AND FINANCIAL DISCLOSURE**

None.

### **ITEM 9A. CONTROLS AND PROCEDURES**

#### *Evaluation of Disclosure Controls and Procedures*

Our management, with the participation of our Chief Executive Officer and our Chief Financial Officer, evaluated the effectiveness of our disclosure controls and procedures pursuant to Rule 13a-15 under the Securities Exchange Act of 1934, as amended (the “Exchange Act”). In designing and evaluating the disclosure controls and procedures, our management recognizes that any controls and procedures, no matter how well designed and operated, can provide only reasonable assurance of achieving the desired control objectives. In addition, the design of disclosure controls and procedures must reflect the fact that there are resource constraints and that our management is required to apply its judgment in evaluating the benefits of possible controls and procedures relative to their costs.

Based on this evaluation, our Chief Executive Officer and our Chief Financial Officer concluded that, as of December 31, 2021, our disclosure controls and procedures were designed at a reasonable assurance level and were effective to provide reasonable assurance that the information we are required to disclose in reports that we file or submit under the Exchange Act is recorded, processed, summarized and reported within the time periods specified in the SEC rules and forms, and that such information is accumulated and communicated to our management, including our Chief Executive Officer and our Chief Financial Officer, as appropriate, to allow timely decisions regarding required disclosures.

#### *Management’s Report on Internal Control over Financial Reporting*

Our management is responsible for establishing and maintaining adequate internal control over financial reporting. Internal control over financial reporting is a process designed by, or under the supervision of, our Chief Executive Officer and Chief Financial Officer to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles and includes those policies and procedures that (1) pertain to the maintenance of records that in reasonable detail accurately and fairly reflect the transactions and dispositions of our assets; (2) provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with generally accepted accounting principles, and that our receipts and expenditures are being made only in accordance with authorizations of our management and directors and (3) provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use or disposition of our assets that could have a material effect on the financial statements.

Under the supervision and with the participation of our management, including our Chief Executive Officer and Chief Financial Officer, we conducted an evaluation of the effectiveness of our internal control over financial reporting based on criteria established in Internal Control – Integrated Framework (2013) issued by the Committee of Sponsoring Organizations of the Treadway Commission (“COSO”). Our management concluded that our internal control over financial reporting was effective as of December 31, 2021.

Our independent registered public accounting firm, PricewaterhouseCoopers LLP, has audited the effectiveness of our internal control over financial reporting as of December 31, 2021, as stated in their report which is included herein.

#### *Limitations on the Effectiveness of Controls*

Because of inherent limitations, internal control over financial reporting may not prevent or detect misstatements and projections of any evaluation of effectiveness to future periods are subject to the risk that controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate.

#### *Changes in Internal Control over Financial Reporting*

There was no change in our internal control over financial reporting that occurred during the quarter ended December 31, 2021, which has materially affected, or is reasonably likely to materially affect, our internal control over financial reporting.

### **ITEM 9B. OTHER INFORMATION**

None.

**ITEM 9C. DISCLOSURE REGARDING FOREIGN JURISDICTIONS THAT PREVENT INSPECTIONS**

Not applicable.

## **PART III**

### **ITEM 10. DIRECTORS, EXECUTIVE OFFICERS AND CORPORATE GOVERNANCE**

The information required by this Item 10 of Form 10-K will be included in our 2022 Proxy Statement to be filed with the Securities and Exchange Commission in connection with the solicitation of proxies for our 2022 Annual Meeting of Stockholders and is incorporated herein by reference. The 2022 Proxy Statement will be filed with the Securities and Exchange Commission within 120 days after the end of the fiscal year to which this report relates.

### **ITEM 11. EXECUTIVE COMPENSATION**

The information required by this Item 11 of Form 10-K will be included in our 2022 Proxy Statement and is incorporated herein by reference.

### **ITEM 12. SECURITY OWNERSHIP OF CERTAIN BENEFICIAL OWNERS AND MANAGEMENT AND RELATED STOCKHOLDER MATTERS**

The information required by this Item 12 of Form 10-K will be included in our 2022 Proxy Statement and is incorporated herein by reference.

### **ITEM 13. CERTAIN RELATIONSHIPS AND RELATED TRANSACTIONS AND DIRECTOR INDEPENDENCE**

The information required by this Item 13 of Form 10-K will be included in our 2022 Proxy Statement and is incorporated herein by reference.

### **ITEM 14. PRINCIPAL ACCOUNTANT FEES AND SERVICES**

The information required by this Item 14 of Form 10-K will be included in our 2022 Proxy Statement and is incorporated herein by reference.

## **PART IV**

### **ITEM 15. EXHIBITS AND FINANCIAL STATEMENT SCHEDULES**

1. Financial statements (see *Index to Consolidated Financial Statements* in Part II, Item 8 of this report)
2. All financial statement schedules have been omitted since the required information was not applicable or was not present in amounts sufficient to require submission of the schedules, or because the information required is included in the consolidated financial statements or the accompanying notes
3. The exhibits listed in the following *Index to Exhibits* are filed or incorporated by reference as part of this report

## INDEX TO EXHIBITS

Exhibit Number	Exhibit Description	Incorporated by Reference				Filed Herewith
		Form	File No.	Exhibit	Filing Date	
3.1	<u>Amended and Restated Certificate of Incorporation of the Registrant.</u>	10-K	001-34756	3.1	March 1, 2017	
3.2	<u>Certificate of Amendment to the Amended and Restated Certificate of Incorporation of the Registrant.</u>	10-K	001-34756	3.2	March 1, 2017	
3.3	<u>Amended and Restated Bylaws of the Registrant.</u>	8-K	001-34756	3.2	February 1, 2017	
4.1	<u>Specimen common stock certificate of the Registrant.</u>	10-K	001-34756	4.1	March 1, 2017	
4.2	<u>Fifth Amended and Restated Investors' Rights Agreement, dated as of August 31, 2009, between Registrant and certain holders of the Registrant's capital stock named therein.</u>	S-1	333-164593	4.2	January 29, 2010	
4.3	<u>Amendment to Fifth Amended and Restated Investors' Rights Agreement, dated as of May 20, 2010, between Registrant and certain holders of the Registrant's capital stock named therein.</u>	S-1/A	333-164593	4.2A	May 27, 2010	
4.4	<u>Amendment to Fifth Amended and Restated Investors' Rights Agreement between Registrant, Toyota Motor Corporation and certain holders of the Registrant's capital stock named therein.</u>	S-1/A	333-164593	4.2B	May 27, 2010	
4.5	<u>Amendment to Fifth Amended and Restated Investor's Rights Agreement, dated as of June 14, 2010, between Registrant and certain holders of the Registrant's capital stock named therein.</u>	S-1/A	333-164593	4.2C	June 15, 2010	
4.6	<u>Amendment to Fifth Amended and Restated Investor's Rights Agreement, dated as of November 2, 2010, between Registrant and certain holders of the Registrant's capital stock named therein.</u>	8-K	001-34756	4.1	November 4, 2010	
4.7	<u>Waiver to Fifth Amended and Restated Investor's Rights Agreement, dated as of May 22, 2011, between Registrant and certain holders of the Registrant's capital stock named therein.</u>	S-1/A	333-174466	4.2E	June 2, 2011	
4.8	<u>Amendment to Fifth Amended and Restated Investor's Rights Agreement, dated as of May 30, 2011, between Registrant and certain holders of the Registrant's capital stock named therein.</u>	8-K	001-34756	4.1	June 1, 2011	
4.9	<u>Sixth Amendment to Fifth Amended and Restated Investors' Rights Agreement, dated as of May 15, 2013 among the Registrant, the Elon Musk Revocable Trust dated July 22, 2003 and certain other holders of the capital stock of the Registrant named therein.</u>	8-K	001-34756	4.1	May 20, 2013	

Exhibit Number	Exhibit Description	Incorporated by Reference				Filed Herewith
		Form	File No.	Exhibit	Filing Date	
4.10	<u>Waiver to Fifth Amended and Restated Investor's Rights Agreement, dated as of May 14, 2013, between the Registrant and certain holders of the capital stock of the Registrant named therein.</u>	8-K	001-34756	4.2	May 20, 2013	
4.11	<u>Waiver to Fifth Amended and Restated Investor's Rights Agreement, dated as of August 13, 2015, between the Registrant and certain holders of the capital stock of the Registrant named therein.</u>	8-K	001-34756	4.1	August 19, 2015	
4.12	<u>Waiver to Fifth Amended and Restated Investors' Rights Agreement, dated as of May 18, 2016, between the Registrant and certain holders of the capital stock of the Registrant named therein.</u>	8-K	001-34756	4.1	May 24, 2016	
4.13	<u>Waiver to Fifth Amended and Restated Investors' Rights Agreement, dated as of March 15, 2017, between the Registrant and certain holders of the capital stock of the Registrant named therein.</u>	8-K	001-34756	4.1	March 17, 2017	
4.14	<u>Waiver to Fifth Amended and Restated Investors' Rights Agreement, dated as of May 1, 2019, between the Registrant and certain holders of the capital stock of the Registrant named therein.</u>	8-K	001-34756	4.1	May 3, 2019	
4.15	<u>Indenture, dated as of May 22, 2013, by and between the Registrant and U.S. Bank National Association.</u>	8-K	001-34756	4.1	May 22, 2013	
4.16	<u>Third Supplemental Indenture, dated as of March 5, 2014, by and between the Registrant and U.S. Bank National Association.</u>	8-K	001-34756	4.4	March 5, 2014	
4.17	<u>Form of 1.25% Convertible Senior Note Due March 1, 2021 (included in Exhibit 4.16).</u>	8-K	001-34756	4.4	March 5, 2014	
4.18	<u>Fourth Supplemental Indenture, dated as of March 22, 2017, by and between the Registrant and U.S. Bank National Association.</u>	8-K	001-34756	4.2	March 22, 2017	
4.19	<u>Form of 2.375% Convertible Senior Note Due March 15, 2022 (included in Exhibit 4.18).</u>	8-K	001-34756	4.2	March 22, 2017	
4.20	<u>Fifth Supplemental Indenture, dated as of May 7, 2019, by and between Registrant and U.S. Bank National Association, related to 2.00% Convertible Senior Notes due May 15, 2024.</u>	8-K	001-34756	4.2	May 8, 2019	
4.21	<u>Form of 2.00% Convertible Senior Notes due May 15, 2024 (included in Exhibit 4.20).</u>	8-K	001-34756	4.2	May 8, 2019	
4.22	<u>Indenture, dated as of August 18, 2017, by and among the Registrant, SolarCity, and U.S. Bank National Association, as trustee.</u>	8-K	001-34756	4.1	August 23, 2017	
4.23	<u>Form of 5.30% Senior Note due August 15, 2025.</u>	8-K	001-34756	4.2	August 23, 2017	



Exhibit Number	Exhibit Description	Incorporated by Reference				Filed Herewith
		Form	File No.	Exhibit	Filing Date	
4.24	<u>Indenture, dated as of October 15, 2014, between SolarCity and U.S. Bank National Association, as trustee.</u>	S-3ASR(1)	333-199321	4.1	October 15, 2014	
4.25	<u>Eighth Supplemental Indenture, dated as of January 29, 2015, by and between SolarCity and the Trustee, related to SolarCity's 4.00% Solar Bonds, Series 2015/4-7.</u>	8-K(1)	001-35758	4.5	January 29, 2015	
4.26	<u>Tenth Supplemental Indenture, dated as of March 9, 2015, by and between SolarCity and the Trustee, related to SolarCity's 5.00% Solar Bonds, Series 2015/6-10.</u>	8-K(1)	001-35758	4.3	March 9, 2015	
4.27	<u>Eleventh Supplemental Indenture, dated as of March 9, 2015, by and between SolarCity and the Trustee, related to SolarCity's 5.75% Solar Bonds, Series 2015/7-15.</u>	8-K(1)	001-35758	4.4	March 9, 2015	
4.28	<u>Fifteenth Supplemental Indenture, dated as of March 19, 2015, by and between SolarCity and the Trustee, related to SolarCity's 4.70% Solar Bonds, Series 2015/C4-10.</u>	8-K(1)	001-35758	4.5	March 19, 2015	
4.29	<u>Sixteenth Supplemental Indenture, dated as of March 19, 2015, by and between SolarCity and the Trustee, related to SolarCity's 5.45% Solar Bonds, Series 2015/C5-15.</u>	8-K(1)	001-35758	4.6	March 19, 2015	
4.30	<u>Twentieth Supplemental Indenture, dated as of March 26, 2015, by and between SolarCity and the Trustee, related to SolarCity's 4.70% Solar Bonds, Series 2015/C9-10.</u>	8-K(1)	001-35758	4.5	March 26, 2015	
4.31	<u>Twenty-First Supplemental Indenture, dated as of March 26, 2015, by and between SolarCity and the Trustee, related to SolarCity's 5.45% Solar Bonds, Series 2015/C10-15.</u>	8-K(1)	001-35758	4.6	March 26, 2015	
4.32	<u>Twenty-Sixth Supplemental Indenture, dated as of April 2, 2015, by and between SolarCity and the Trustee, related to SolarCity's 4.70% Solar Bonds, Series 2015/C14-10.</u>	8-K(1)	001-35758	4.5	April 2, 2015	
4.33	<u>Thirtieth Supplemental Indenture, dated as of April 9, 2015, by and between SolarCity and the Trustee, related to SolarCity's 4.70% Solar Bonds, Series 2015/C19-10.</u>	8-K(1)	001-35758	4.5	April 9, 2015	
4.34	<u>Thirty-First Supplemental Indenture, dated as of April 9, 2015, by and between SolarCity and the Trustee, related to SolarCity's 5.45% Solar Bonds, Series 2015/C20-15.</u>	8-K(1)	001-35758	4.6	April 9, 2015	
4.35	<u>Thirty-Fifth Supplemental Indenture, dated as of April 14, 2015, by and between SolarCity and the Trustee, related to SolarCity's 4.70% Solar Bonds, Series 2015/C24-10.</u>	8-K(1)	001-35758	4.5	April 14, 2015	



4.36	<u>Thirty-Sixth Supplemental Indenture, dated as of April 14, 2015, by and between SolarCity and the Trustee, related to SolarCity's 5.45% Solar Bonds, Series 2015/C25-15.</u>	8-K(1)	001-35758	4.6	April 14, 2015
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Exhibit Number	Exhibit Description	Incorporated by Reference				Filed Herewith
		Form	File No.	Exhibit	Filing Date	
4.37	<u>Thirty-Eighth Supplemental Indenture, dated as of April 21, 2015, by and between SolarCity and the Trustee, related to SolarCity's 4.70% Solar Bonds, Series 2015/C27-10.</u>	8-K(1)	001-35758	4.3	April 21, 2015	
4.38	<u>Thirty-Ninth Supplemental Indenture, dated as of April 21, 2015, by and between SolarCity and the Trustee, related to SolarCity's 5.45% Solar Bonds, Series 2015/C28-15.</u>	8-K(1)	001-35758	4.4	April 21, 2015	
4.39	<u>Forty-Third Supplemental Indenture, dated as of April 27, 2015, by and between SolarCity and the Trustee, related to SolarCity's 4.70% Solar Bonds, Series 2015/C32-10.</u>	8-K(1)	001-35758	4.5	April 27, 2015	
4.40	<u>Forty-Fourth Supplemental Indenture, dated as of April 27, 2015, by and between SolarCity and the Trustee, related to SolarCity's 5.45% Solar Bonds, Series 2015/C33-15.</u>	8-K(1)	001-35758	4.6	April 27, 2015	
4.41	<u>Forty-Eighth Supplemental Indenture, dated as of May 1, 2015, by and between SolarCity and the Trustee, related to SolarCity's 5.00% Solar Bonds, Series 2015/12-10.</u>	8-K(1)	001-35758	4.5	May 1, 2015	
4.42	<u>Forty-Ninth Supplemental Indenture, dated as of May 1, 2015, by and between SolarCity and the Trustee, related to SolarCity's 5.75% Solar Bonds, Series 2015/13-15.</u>	8-K(1)	001-35758	4.6	May 1, 2015	
4.43	<u>Fifty-Second Supplemental Indenture, dated as of May 11, 2015, by and between SolarCity and the Trustee, related to SolarCity's 4.70% Solar Bonds, Series 2015/C36-10.</u>	8-K(1)	001-35758	4.4	May 11, 2015	
4.44	<u>Fifty-Third Supplemental Indenture, dated as of May 11, 2015, by and between SolarCity and the Trustee, related to SolarCity's 5.45% Solar Bonds, Series 2015/C37-15.</u>	8-K(1)	001-35758	4.5	May 11, 2015	
4.45	<u>Fifty-Seventh Supplemental Indenture, dated as of May 18, 2015, by and between SolarCity and the Trustee, related to SolarCity's 4.70% Solar Bonds, Series 2015/C40-10.</u>	8-K(1)	001-35758	4.4	May 18, 2015	
4.46	<u>Fifty-Eighth Supplemental Indenture, dated as of May 18, 2015, by and between SolarCity and the Trustee, related to SolarCity's 5.45% Solar Bonds, Series 2015/C41-15.</u>	8-K(1)	001-35758	4.5	May 18, 2015	
4.47	<u>Sixty-First Supplemental Indenture, dated as of May 26, 2015, by and between SolarCity and the Trustee, related to SolarCity's 4.70% Solar Bonds, Series 2015/C44-10.</u>	8-K(1)	001-35758	4.4	May 26, 2015	
4.48		8-K(1)	001-35758	4.5	May 26, 2015	

Sixty-Second Supplemental Indenture,  
dated as of May 26, 2015, by and  
between SolarCity and the Trustee,  
related to SolarCity's 5.45% Solar  
Bonds, Series 2015/C45-15.

Exhibit Number	Exhibit Description	Incorporated by Reference				Filed Herewith
		Form	File No.	Exhibit	Filing Date	
4.49	<u>Seventieth Supplemental Indenture, dated as of June 16, 2015, by and between SolarCity and the Trustee, related to SolarCity's 4.70% Solar Bonds, Series 2015/C52-10.</u>	8-K(1)	001-35758	4.4	June 16, 2015	
4.50	<u>Seventy-First Supplemental Indenture, dated as of June 16, 2015, by and between SolarCity and the Trustee, related to SolarCity's 5.45% Solar Bonds, Series 2015/C53-15.</u>	8-K(1)	001-35758	4.5	June 16, 2015	
4.51	<u>Seventy-Fourth Supplemental Indenture, dated as of June 22, 2015, by and between SolarCity and the Trustee, related to SolarCity's 4.70% Solar Bonds, Series 2015/C56-10.</u>	8-K(1)	001-35758	4.4	June 23, 2015	
4.52	<u>Seventy-Fifth Supplemental Indenture, dated as of June 22, 2015, by and between SolarCity and the Trustee, related to SolarCity's 5.45% Solar Bonds, Series 2015/C57-15.</u>	8-K(1)	001-35758	4.5	June 23, 2015	
4.53	<u>Eightieth Supplemental Indenture, dated as of June 29, 2015, by and between SolarCity and the Trustee, related to SolarCity's 4.70% Solar Bonds, Series 2015/C61-10.</u>	8-K(1)	001-35758	4.5	June 29, 2015	
4.54	<u>Eighty-First Supplemental Indenture, dated as of June 29, 2015, by and between SolarCity and the Trustee, related to SolarCity's 5.45% Solar Bonds, Series 2015/C62-15.</u>	8-K(1)	001-35758	4.6	June 29, 2015	
4.55	<u>Ninetieth Supplemental Indenture, dated as of July 20, 2015, by and between SolarCity and the Trustee, related to SolarCity's 4.70% Solar Bonds, Series 2015/C71-10.</u>	8-K(1)	001-35758	4.5	July 21, 2015	
4.56	<u>Ninety-First Supplemental Indenture, dated as of July 20, 2015, by and between SolarCity and the Trustee, related to SolarCity's 5.45% Solar Bonds, Series 2015/C72-15.</u>	8-K(1)	001-35758	4.6	July 21, 2015	
4.57	<u>Ninety-Fifth Supplemental Indenture, dated as of July 31, 2015, by and between SolarCity and the Trustee, related to SolarCity's 5.00% Solar Bonds, Series 2015/20-10.</u>	8-K(1)	001-35758	4.5	July 31, 2015	
4.58	<u>Ninety-Sixth Supplemental Indenture, dated as of July 31, 2015, by and between SolarCity and the Trustee, related to SolarCity's 5.75% Solar Bonds, Series 2015/21-15.</u>	8-K(1)	001-35758	4.6	July 31, 2015	
4.59	<u>One Hundred-and-Fifth Supplemental Indenture, dated as of August 10, 2015, by and between SolarCity and the Trustee, related to SolarCity's 4.70% Solar Bonds, Series 2015/C81-10.</u>	8-K(1)	001-35758	4.5	August 10, 2015	
4.60	<u>One Hundred-and-Eleventh Supplemental Indenture, dated as of</u>	8-K(1)	001-35758	4.6	August 17, 2015	

August 17, 2015, by and between  
SolarCity and the Trustee, related to  
SolarCity's 5.45% Solar Bonds, Series  
2015/C87-15.

Exhibit Number	Exhibit Description	Incorporated by Reference				Filed Herewith
		Form	File No.	Exhibit	Filing Date	
4.61	<u>One Hundred-and-Sixteenth Supplemental Indenture, dated as of August 24, 2015, by and between SolarCity and the Trustee, related to SolarCity's 5.45% Solar Bonds, Series 2015/C92-15.</u>	8-K(1)	001-35758	4.6	August 24, 2015	
4.62	<u>One Hundred-and-Twenty-First Supplemental Indenture, dated as of August 31, 2015, by and between SolarCity and the Trustee, related to SolarCity's 5.45% Solar Bonds, Series 2015/C97-15.</u>	8-K(1)	001-35758	4.6	August 31, 2015	
4.63	<u>One Hundred-and-Twenty-Eighth Supplemental Indenture, dated as of September 14, 2015, by and between SolarCity and the Trustee, related to SolarCity's 4.70% Solar Bonds, Series 2015/C101-10.</u>	8-K(1)	001-35758	4.5	September 15, 2015	
4.64	<u>One Hundred-and-Twenty-Ninth Supplemental Indenture, dated as of September 14, 2015, by and between SolarCity and the Trustee, related to SolarCity's 5.45% Solar Bonds, Series 2015/C102-15.</u>	8-K(1)	001-35758	4.6	September 15, 2015	
4.65	<u>One Hundred-and-Thirty-Third Supplemental Indenture, dated as of September 28, 2015, by and between SolarCity and the Trustee, related to SolarCity's 4.70% Solar Bonds, Series 2015/C106-10.</u>	8-K(1)	001-35758	4.5	September 29, 2015	
4.66	<u>One Hundred-and-Thirty-Fourth Supplemental Indenture, dated as of September 28, 2015, by and between SolarCity and the Trustee, related to SolarCity's 5.45% Solar Bonds, Series 2015/C107-15.</u>	8-K(1)	001-35758	4.6	September 29, 2015	
4.67	<u>One Hundred-and-Thirty-Eighth Supplemental Indenture, dated as of October 13, 2015, by and between SolarCity and the Trustee, related to SolarCity's 4.70% Solar Bonds, Series 2015/C111-10.</u>	8-K(1)	001-35758	4.5	October 13, 2015	
4.68	<u>One Hundred-and-Forty-Third Supplemental Indenture, dated as of October 30, 2015, by and between SolarCity and the Trustee, related to SolarCity's 5.00% Solar Bonds, Series 2015/25-10.</u>	8-K(1)	001-35758	4.5	October 30, 2015	
4.69	<u>One Hundred-and-Forty-Fourth Supplemental Indenture, dated as of October 30, 2015, by and between SolarCity and the Trustee, related to SolarCity's 5.75% Solar Bonds, Series 2015/26-15.</u>	8-K(1)	001-35758	4.6	October 30, 2015	
4.70	<u>One Hundred-and-Forty-Eighth Supplemental Indenture, dated as of November 4, 2015, by and between SolarCity and the Trustee, related to</u>	8-K(1)	001-35758	4.5	November 4, 2015	

SolarCity's 4.70% Solar Bonds, Series  
2015/C116-10.

Exhibit Number	Exhibit Description	Incorporated by Reference				Filed Herewith
		Form	File No.	Exhibit	Filing Date	
4.71	<u>One Hundred-and-Fifty-Third Supplemental Indenture, dated as of November 16, 2015, by and between SolarCity and the Trustee, related to SolarCity's 4.70% Solar Bonds, Series 2015/C121-10.</u>	8-K(1)	001-35758	4.5	November 17, 2015	
4.72	<u>One Hundred-and-Fifty-Fourth Supplemental Indenture, dated as of November 16, 2015, by and between SolarCity and the Trustee, related to SolarCity's 5.45% Solar Bonds, Series 2015/C122-15.</u>	8-K(1)	001-35758	4.6	November 17, 2015	
4.73	<u>One Hundred-and-Fifty-Eighth Supplemental Indenture, dated as of November 30, 2015, by and between SolarCity and the Trustee, related to SolarCity's 4.70% Solar Bonds, Series 2015/C126-10.</u>	8-K(1)	001-35758	4.5	November 30, 2015	
4.74	<u>One Hundred-and-Fifty-Ninth Supplemental Indenture, dated as of November 30, 2015, by and between SolarCity and the Trustee, related to SolarCity's 5.45% Solar Bonds, Series 2015/C127-15.</u>	8-K(1)	001-35758	4.6	November 30, 2015	
4.75	<u>One Hundred-and-Sixty-Third Supplemental Indenture, dated as of December 14, 2015, by and between SolarCity and the Trustee, related to SolarCity's 4.70% Solar Bonds, Series 2015/C131-10.</u>	8-K(1)	001-35758	4.5	December 14, 2015	
4.76	<u>One Hundred-and-Sixty-Fourth Supplemental Indenture, dated as of December 14, 2015, by and between SolarCity and the Trustee, related to SolarCity's 5.45% Solar Bonds, Series 2015/C132-15.</u>	8-K(1)	001-35758	4.6	December 14, 2015	
4.77	<u>One Hundred-and-Sixty-Eighth Supplemental Indenture, dated as of December 28, 2015, by and between SolarCity and the Trustee, related to SolarCity's 4.70% Solar Bonds, Series 2015/C136-10.</u>	8-K(1)	001-35758	4.5	December 28, 2015	
4.78	<u>One Hundred-and-Sixty-Ninth Supplemental Indenture, dated as of December 28, 2015, by and between SolarCity and the Trustee, related to SolarCity's 5.45% Solar Bonds, Series 2015/C137-15.</u>	8-K(1)	001-35758	4.6	December 28, 2015	
4.79	<u>One Hundred-and-Seventy-Third Supplemental Indenture, dated as of January 29, 2016, by and between SolarCity and the Trustee, related to SolarCity's 5.00% Solar Bonds, Series 2016/4-10.</u>	8-K(1)	001-35758	4.5	January 29, 2016	
4.80	<u>One Hundred-and-Seventy-Fourth Supplemental Indenture, dated as of January 29, 2016, by and between SolarCity and the Trustee, related to</u>	8-K(1)	001-35758	4.6	January 29, 2016	



SolarCity's 5.75% Solar Bonds, Series  
2016/5-15.

4.81	<u>Description of Registrant's Securities</u>	10-K	001-34756	4.119	February 13, 2020
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Exhibit Number	Exhibit Description	Incorporated by Reference				Filed Herewith
		Form	File No.	Exhibit	Filing Date	
10.1**	<u>Form of Indemnification Agreement between the Registrant and its directors and officers.</u>	S-1/A	333-164593	10.1	June 15, 2010	
10.2**	<u>2003 Equity Incentive Plan.</u>	S-1/A	333-164593	10.2	May 27, 2010	
10.3**	<u>Form of Stock Option Agreement under 2003 Equity Incentive Plan.</u>	S-1	333-164593	10.3	January 29, 2010	
10.4**	<u>Amended and Restated 2010 Equity Incentive Plan.</u>	10-K	001-34756	10.4	February 23, 2018	
10.5**	<u>Form of Stock Option Agreement under 2010 Equity Incentive Plan.</u>	10-K	001-34756	10.6	March 1, 2017	
10.6**	<u>Form of Restricted Stock Unit Award Agreement under 2010 Equity Incentive Plan.</u>	10-K	001-34756	10.7	March 1, 2017	
10.7**	<u>Amended and Restated 2010 Employee Stock Purchase Plan, effective as of February 1, 2017.</u>	10-K	001-34756	10.8	March 1, 2017	
10.8**	<u>2019 Equity Incentive Plan.</u>	S-8	333-232079	4.2	June 12, 2019	
10.9**	<u>Form of Stock Option Agreement under 2019 Equity Incentive Plan.</u>	S-8	333-232079	4.3	June 12, 2019	
10.10**	<u>Form of Restricted Stock Unit Award Agreement under 2019 Equity Incentive Plan.</u>	S-8	333-232079	4.4	June 12, 2019	
10.11**	<u>Employee Stock Purchase Plan, effective as of June 12, 2019.</u>	S-8	333-232079	4.5	June 12, 2019	
10.12**	<u>2007 SolarCity Stock Plan and form of agreements used thereunder.</u>	S-1(1)	333-184317	10.2	October 5, 2012	
10.13**	<u>2012 SolarCity Equity Incentive Plan and form of agreements used thereunder.</u>	S-1(1)	333-184317	10.3	October 5, 2012	
10.14**	<u>2010 Zep Solar, Inc. Equity Incentive Plan and form of agreements used thereunder.</u>	S-8(1)	333-192996	4.5	December 20, 2013	
10.15**	<u>Offer Letter between the Registrant and Elon Musk dated October 13, 2008.</u>	S-1	333-164593	10.9	January 29, 2010	
10.16**	<u>Performance Stock Option Agreement between the Registrant and Elon Musk dated January 21, 2018.</u>	DEF 14A	001-34756	Appendix A	February 8, 2018	
10.17**	<u>Maxwell Technologies, Inc. 2005 Omnibus Equity Incentive Plan, as amended through May 6, 2010</u>	8-K(2)	001-15477	10.1	May 10, 2010	
10.18**	<u>Maxwell Technologies, Inc. 2013 Omnibus Equity Incentive Plan</u>	DEF 14A(2)	001-15477	Appendix A	June 2, 2017	
10.19	<u>Indemnification Agreement, effective as of June 23, 2020, between Registrant and Elon R. Musk.</u>	10-Q	001-34756	10.4	July 28, 2020	
10.20	<u>Indemnification Agreement, dated as of February 27, 2014, by and between the Registrant and J.P. Morgan Securities LLC.</u>	8-K	001-34756	10.1	March 5, 2014	
10.21	<u>Form of Call Option Confirmation relating to 1.25% Convertible Senior Notes Due March 1, 2021.</u>	8-K	001-34756	10.3	March 5, 2014	



Exhibit Number	Exhibit Description	Incorporated by Reference				Filed Herewith
		Form	File No.	Exhibit	Filing Date	
10.22	<u>Form of Warrant Confirmation relating to 1.25% Convertible Senior Notes Due March 1, 2021.</u>	8-K	001-34756	10.5	March 5, 2014	
10.23	<u>Form of Call Option Confirmation relating to 2.375% Convertible Notes due March 15, 2022.</u>	8-K	001-34756	10.1	March 22, 2017	
10.24	<u>Form of Warrant Confirmation relating to 2.375% Convertible Notes due March 15, 2022.</u>	8-K	001-34756	10.2	March 22, 2017	
10.25	<u>Form of Call Option Confirmation relating to 2.00% Convertible Senior Notes due May 15, 2024.</u>	8-K	001-34756	10.1	May 3, 2019	
10.26	<u>Form of Warrant Confirmation relating to 2.00% Convertible Senior Notes due May 15, 2024.</u>	8-K	001-34756	10.2	May 3, 2019	
10.27†	<u>Supply Agreement between Panasonic Corporation and the Registrant dated October 5, 2011.</u>	10-K	001-34756	10.50	February 27, 2012	
10.28†	<u>Amendment No. 1 to Supply Agreement between Panasonic Corporation and the Registrant dated October 29, 2013.</u>	10-K	001-34756	10.35A	February 26, 2014	
10.29	<u>Agreement between Panasonic Corporation and the Registrant dated July 31, 2014.</u>	10-Q	001-34756	10.1	November 7, 2014	
10.30†	<u>General Terms and Conditions between Panasonic Corporation and the Registrant dated October 1, 2014.</u>	8-K	001-34756	10.2	October 11, 2016	
10.31	<u>Letter Agreement, dated as of February 24, 2015, regarding addition of co-party to General Terms and Conditions, Production Pricing Agreement and Investment Letter Agreement between Panasonic Corporation and the Registrant.</u>	10-K	001-34756	10.25A	February 24, 2016	
10.32†	<u>Amendment to Gigafactory General Terms, dated March 1, 2016, by and among the Registrant, Panasonic Corporation and Panasonic Energy Corporation of North America.</u>	8-K	001-34756	10.1	October 11, 2016	
10.33††	<u>Amended and Restated General Terms and Conditions for Gigafactory, entered into on June 10, 2020, by and among Registrant, Tesla Motors Netherlands B.V., Panasonic Corporation and Panasonic Corporation of North America.</u>	10-Q	001-34756	10.2	July 28, 2020	
10.34†	<u>Production Pricing Agreement between Panasonic Corporation and the Registrant dated October 1, 2014.</u>	10-Q	001-34756	10.3	November 7, 2014	
10.35†	<u>Investment Letter Agreement between Panasonic Corporation and the Registrant dated October 1, 2014.</u>	10-Q	001-34756	10.4	November 7, 2014	

Exhibit Number	Exhibit Description	Incorporated by Reference				Filed Herewith
		Form	File No.	Exhibit	Filing Date	
10.36	<u>Amendment to Gigafactory Documents, dated April 5, 2016, by and among the Registrant, Panasonic Corporation, Panasonic Corporation of North America and Panasonic Energy Corporation of North America.</u>	10-Q	001-34756	10.2	May 10, 2016	
10.37††	<u>2019 Pricing Agreement (Japan Cells) with respect to 2011 Supply Agreement, executed September 20, 2019, by and among the Registrant, Tesla Motors Netherlands B.V., Panasonic Corporation and SANYO Electric Co., Ltd.</u>	10-Q	001-34756	10.6	October 29, 2019	
10.38††	<u>2020 Pricing Agreement (Gigafactory 2170 Cells), entered into on June 9, 2020, by and among Registrant, Tesla Motors Netherlands B.V., Panasonic Corporation and Panasonic Corporation of North America.</u>	10-Q	001-34756	10.3	July 28, 2020	
10.39††	<u>2021 Pricing Agreement (Japan Cells) with respect to 2011 Supply Agreement, executed December 29, 2020, by and among the Registrant, Tesla Motors Netherlands B.V., Panasonic Corporation of North America and SANYO Electric Co., Ltd.</u>	10-K	001-34756	10.39	February 8, 2021	
10.40††	<u>Amended and Restated Factory Lease, executed as of March 26, 2019, by and between the Registrant and Panasonic Energy North America, a division of Panasonic Corporation of North America, as tenant.</u>	10-Q	001-34756	10.3	July 29, 2019	
10.41††	<u>Lease Amendment, executed September 20, 2019, by and among the Registrant, Panasonic Corporation of North America, on behalf of its division Panasonic Energy of North America, with respect to the Amended and Restated Factory Lease, executed as of March 26, 2019.</u>	10-Q	001-34756	10.7	October 29, 2019	
10.42††	<u>Second Lease Amendment, entered into on June 9, 2020, by and between the Registrant and Panasonic Energy of North America, a division of Panasonic Corporation of North America, with respect to the Amended and Restated Factory Lease dated January 1, 2017.</u>	10-Q	001-34756	10.1	July 28, 2020	
10.43	<u>Amendment and Restatement in respect of ABL Credit Agreement, dated as of March 6, 2019, by and among certain of the Registrant's and Tesla Motors Netherlands B.V.'s direct or indirect subsidiaries from time to time party thereto, as borrowers, Wells Fargo Bank, National Association, as documentation agent, JPMorgan Chase Bank, N.A., Goldman Sachs Bank USA, Morgan Stanley Senior Funding Inc. and Bank of America, N.A., as syndication agents, the lenders from time to time party thereto,</u>	S-4/A	333-229749	10.68	April 3, 2019	

and Deutsche Bank AG New York  
Branch, as administrative agent and  
collateral agent.

Exhibit Number	Exhibit Description	Incorporated by Reference				Filed Herewith
		Form	File No.	Exhibit	Filing Date	
10.44	<u>First Amendment to Amended and Restated ABL Credit Agreement, dated as of December 23, 2020, in respect of the Amended and Restated ABL Credit Agreement, dated as of March 6, 2019, by and among certain of the Registrant's and Tesla Motors Netherlands B.V.'s direct or indirect subsidiaries from time to time party thereto, as borrowers, Wells Fargo Bank, National Association, as documentation agent, JPMorgan Chase Bank, N.A., Goldman Sachs Bank USA, Morgan Stanley Senior Funding Inc. and Bank of America, N.A., as syndication agents, the lenders from time to time party thereto, and Deutsche Bank AG New York Branch, as administrative agent and collateral agent.</u>	10-K	001-34756	10.44	February 8, 2021	
10.45†	<u>Agreement for Tax Abatement and Incentives, dated as of May 7, 2015, by and between Tesla Motors, Inc. and the State of Nevada, acting by and through the Nevada Governor's Office of Economic Development.</u>	10-Q	001-34756	10.1	August 7, 2015	
10.46††	<u>Second Amended and Restated Loan and Security Agreement, dated as of August 28, 2020, by and among Tesla 2014 Warehouse SPV LLC, Tesla Finance LLC, the Lenders and Group Agents from time to time party thereto, Deutsche Bank Trust Company Americas, as Paying Agent, and Deutsche Bank AG, New York Branch, as Administrative Agent.</u>	10-Q	001-34756	10.2	October 26, 2020	
10.47	<u>Amendment No. 1 to Second Amended and Restated Loan and Security Agreement, dated as of March 15, 2021, by and among Tesla 2014 Warehouse SPV LLC, Tesla Finance LLC, the Lenders and Group Agents from time to time party thereto, Deutsche Bank Trust Company Americas, as Paying Agent, and Deutsche Bank AG, New York Branch, as Administrative Agent.</u>	10-Q	001-34756	10.1	April 28, 2021	
10.48††	<u>Amendment No. 2 to Second Amended and Restated Loan and Security Agreement, dated as of June 8, 2021, by and among Tesla 2014 Warehouse SPV LLC, Tesla Finance LLC, the Lenders and Group Agents from time to time party thereto, Deutsche Bank Trust Company Americas, as Paying Agent, and Deutsche Bank AG, New York Branch, as Administrative Agent.</u>	10-Q	001-34756	10.1	July 27, 2021	

Exhibit Number	Exhibit Description	Incorporated by Reference				Filed Herewith
		Form	File No.	Exhibit	Filing Date	
10.49†	<u>Loan and Security Agreement, executed on December 28, 2018, by and among LML 2018 Warehouse SPV, LLC, Tesla Finance LLC, the Lenders and Group Agents from time to time party thereto, Deutsche Bank Trust Company Americas, as Paying Agent, and Deutsche Bank AG, New York Branch, as Administrative Agent.</u>	10-K	001-34756	10.55	February 19, 2019	
10.50††	<u>Letter of Consent, dated as of June 14, 2019, by and among LML 2018 Warehouse SPV, LLC, Deutsche Bank AG, New York Branch, as Administrative Agent, and the Group Agents party thereto, in respect of the Loan and Security Agreement, dated as of August 17, 2017 and as amended from time to time, by and among LML Warehouse SPV, LLC, Tesla Finance LLC, and the Lenders, Group Agents and Administrative Agent from time to time party thereto.</u>	10-Q	001-34756	10.1	July 29, 2019	
10.51††	<u>Amendment No. 1 to Loan and Security Agreement, dated as of August 16, 2019, by and among LML 2018 Warehouse SPV, LLC, Deutsche Bank Trust Company Americas, as Paying Agent, and Deutsche Bank AG, New York Branch, as Administrative Agent, and the Lenders and Group Agents from time to time party thereto.</u>	10-Q	001-34756	10.2	October 29, 2019	
10.52	<u>Amendment No. 2 to Loan and Security Agreement, dated as of December 13, 2019, by and among LML 2018 Warehouse SPV, LLC, Deutsche Bank Trust Company Americas, as Paying Agent, and Deutsche Bank AG, New York Branch, as Administrative Agent, and the Lenders and Group Agents from time to time party thereto.</u>	10-K	001-34756	10.69	February 13, 2020	



Exhibit Number	Exhibit Description	Incorporated by Reference				Filed Herewith
		Form	File No.	Exhibit	Filing Date	
10.53	<u>Letter of Consent, dated February 18, 2020, by and among LML 2018 Warehouse SPV, LLC, Tesla 2014 Warehouse SPV LLC, LLC and Deutsche Bank AG, New York Branch, as Administrative Agent and as Group Agent under the 2018 Loan Agreement and the 2014 Loan Agreement, and the Group Agents party thereto, in respect of (i) the Loan and Security Agreement, dated December 27, 2018 and as amended from time to time, among LML 2018 Warehouse SPV, LLC, Tesla Finance LLC, Deutsche Bank Trust Company Americans, as Paying Agent, Deutsche Bank AG, New York Branch, as Administrative Agent, the lenders parties and agent parties thereto, and (ii) the Amended and Restated Loan and Security Agreement, dated August 17, 2017 and as amended from time to time, among Tesla 2014 Warehouse SPV LLC, Tesla Finance LLC, the lenders and group agents party thereto, Deutsche Bank Trust Company Americas, as Paying Agent, and Deutsche Bank AG, New York Branch, as Administrative Agent.</u>	10-Q	001-34756	10.1	April 30, 2020	
10.54††	<u>Letter of Consent, dated as of August 14, 2020, by and among LML 2018 Warehouse SPV, LLC, Tesla 2014 Warehouse SPV LLC, Deutsche Bank AG, New York Branch, as Administrative Agent and Group Agent, and the Group Agents party thereto, in respect of (i) the Loan and Security Agreement, dated as of December 27, 2018 and as amended from time to time, by and among LML 2018 Warehouse SPV, LLC, Tesla Finance LLC, and the Lenders, Group Agents, Paying Agent and Administrative Agent from time to time party thereto, and (ii) the Amended and Restated Loan and Security Agreement, dated as of August 17, 2017 and as amended from time to time, by and among LML Warehouse SPV, LLC, Tesla Finance LLC, and the Lenders, Group Agents and Administrative Agent from time to time party thereto.</u>	10-Q	001-34756	10.1	October 26, 2020	
10.55	<u>Payoff and Termination Letter, executed on August 28, 2020, by and among LML 2018 Warehouse SPV, LLC, the Lenders and Group Agents from time to time party thereto, Deutsche Bank Trust Company Americas, as Paying Agent and Deutsche Bank AG, New York Branch, as Administrative Agent, relating to Loan and Security Agreement.</u>	10-Q	001-34756	10.3	October 26, 2020	
10.56	<u>Purchase Agreement, dated as of August 11, 2017, by and among the Registrant, SolarCity and Goldman Sachs &amp; Co.</u>	8-K	001-34756	10.1	August 23, 2017	

LLC and Morgan Stanley & Co. LLC as  
representatives of the several initial  
purchasers named therein.

Exhibit Number	Exhibit Description	Incorporated by Reference				Filed Herewith
		Form	File No.	Exhibit	Filing Date	
10.57	<u>Amended and Restated Agreement For Research &amp; Development Alliance on Triex Module Technology, effective as of September 2, 2014, by and between The Research Foundation For The State University of New York, on behalf of the College of Nanoscale Science and Engineering of the State University of New York, and Silevo, Inc.</u>	10-Q(1)	001-35758	10.16	November 6, 2014	
10.58	<u>First Amendment to Amended and Restated Agreement For Research &amp; Development Alliance on Triex Module Technology, effective as of October 31, 2014, by and between The Research Foundation For The State University of New York, on behalf of the College of Nanoscale Science and Engineering of the State University of New York, and Silevo, Inc.</u>	10-K(1)	001-35758	10.16a	February 24, 2015	
10.59	<u>Second Amendment to Amended and Restated Agreement For Research &amp; Development Alliance on Triex Module Technology, effective as of December 15, 2014, by and between The Research Foundation For The State University of New York, on behalf of the College of Nanoscale Science and Engineering of the State University of New York, and Silevo, Inc.</u>	10-K(1)	001-35758	10.16b	February 24, 2015	
10.60	<u>Third Amendment to Amended and Restated Agreement For Research &amp; Development Alliance on Triex Module Technology, effective as of February 12, 2015, by and between The Research Foundation For The State University of New York, on behalf of the College of Nanoscale Science and Engineering of the State University of New York, and Silevo, Inc.</u>	10-Q(1)	001-35758	10.16c	May 6, 2015	
10.61	<u>Fourth Amendment to Amended and Restated Agreement For Research &amp; Development Alliance on Triex Module Technology, effective as of March 30, 2015, by and between The Research Foundation For The State University of New York, on behalf of the College of Nanoscale Science and Engineering of the State University of New York, and Silevo, Inc.</u>	10-Q(1)	001-35758	10.16d	May 6, 2015	
10.62	<u>Fifth Amendment to Amended and Restated Agreement For Research &amp; Development Alliance on Triex Module Technology, effective as of June 30, 2015, by and between The Research Foundation For The State University of New York, on behalf of the College of Nanoscale Science and Engineering of the State University of New York, and Silevo, LLC.</u>	10-Q(1)	001-35758	10.16e	July 30, 2015	



Exhibit Number	Exhibit Description	Incorporated by Reference				Filed Herewith
		Form	File No.	Exhibit	Filing Date	
10.63	<u>Sixth Amendment to Amended and Restated Agreement For Research &amp; Development Alliance on Triex Module Technology, effective as of September 1, 2015, by and between The Research Foundation For The State University of New York, on behalf of the College of Nanoscale Science and Engineering of the State University of New York, and Silevo, LLC.</u>	10-Q(1)	001-35758	10.16f	October 30, 2015	
10.64	<u>Seventh Amendment to Amended and Restated Agreement For Research &amp; Development Alliance on Triex Module Technology, effective as of October 9, 2015, by and between The Research Foundation For The State University of New York, on behalf of the College of Nanoscale Science and Engineering of the State University of New York, and Silevo, LLC.</u>	10-Q(1)	001-35758	10.16g	October 30, 2015	
10.65	<u>Eighth Amendment to Amended and Restated Agreement For Research &amp; Development Alliance on Triex Module Technology, effective as of October 26, 2015, by and between The Research Foundation For The State University of New York, on behalf of the College of Nanoscale Science and Engineering of the State University of New York, and Silevo, LLC.</u>	10-Q(1)	001-35758	10.16h	October 30, 2015	
10.66	<u>Ninth Amendment to Amended and Restated Agreement For Research &amp; Development Alliance on Triex Module Technology, effective as of December 9, 2015, by and between The Research Foundation For The State University of New York, on behalf of the College of Nanoscale Science and Engineering of the State University of New York, and Silevo, LLC.</u>	10-K(1)	001-35758	10.16i	February 10, 2016	
10.67	<u>Tenth Amendment to Amended and Restated Agreement For Research &amp; Development Alliance on Triex Module Technology, effective as of March 31, 2017, by and between The Research Foundation For The State University of New York, on behalf of the Colleges of Nanoscale Science and Engineering of the State University of New York, and Silevo, LLC.</u>	10-Q	001-34756	10.8	May 10, 2017	
10.68	<u>Eleventh Amendment to Amended and Restated Agreement for Research &amp; Development Alliance on Triex Module Technology, effective as of July 22, 2020, among the Research Foundation for the State University of New York, Silevo, LLC and Tesla Energy Operations, Inc.</u>	10-Q	001-34756	10.6	July 28, 2020	

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Exhibit Number	Exhibit Description	Incorporated by Reference				Filed Herewith
		Form	File No.	Exhibit	Filing Date	
10.69	<u>Twelfth Amendment to Amended and Restated Agreement for Research &amp; Development Alliance on Triex Module Technology, effective as of May 1, 2021, among the Research Foundation for the State University of New York, Silevo, LLC and Tesla Energy Operations, Inc.</u>	10-Q	001-34756	10.1	October 25, 2021	
10.70††	<u>Grant Contract for State-Owned Construction Land Use Right, dated as of October 17, 2018, by and between Shanghai Planning and Land Resource Administration Bureau, as grantor, and Tesla (Shanghai) Co., Ltd., as grantee (English translation).</u>	10-Q	001-34756	10.2	July 29, 2019	
10.71††	<u>Facility Agreement, dated as of September 26, 2019, by and between China Merchants Bank Co., Ltd. Beijing Branch and Tesla Automobile (Beijing) Co., Ltd. (English translation).</u>	10-Q	001-34756	10.3	October 29, 2019	
10.72††	<u>Statement Letter to China Merchants Bank Co., Ltd. Beijing Branch from Tesla Automobile (Beijing) Co., Ltd., dated as of September 26, 2019 (English translation).</u>	10-Q	001-34756	10.4	October 29, 2019	
10.73††	<u>Fixed Asset Syndication Loan Agreement, dated as of December 18, 2019, by and among Tesla (Shanghai) Co., Ltd., China Construction Bank Corporation, China (Shanghai) Pilot Free Trade Zone Special Area Branch, Agricultural Bank of China Shanghai Changning Sub-branch, Shanghai Pudong Development Bank Co., Ltd., Shanghai Branch, and Industrial and Commercial Bank of China Limited, China (Shanghai) Pilot Free Trade Zone Special Area Branch (English translation).</u>	10-K	001-34756	10.85	February 13, 2020	
10.74††	<u>Fixed Asset Syndication Loan Agreement and Supplemental Agreement, dated as of December 18, 2019, by and among Tesla (Shanghai) Co., Ltd., China Construction Bank Corporation, China (Shanghai) Pilot Free Trade Zone Special Area Branch, Agricultural Bank of China Shanghai Changning Sub-branch, Shanghai Pudong Development Bank Co., Ltd., Shanghai Branch, and Industrial and Commercial Bank of China Limited, China (Shanghai) Pilot Free Trade Zone Special Area Branch (English translation).</u>	10-K	001-34756	10.86	February 13, 2020	

Exhibit Number	Exhibit Description	Incorporated by Reference				Filed Herewith
		Form	File No.	Exhibit	Filing Date	
10.75††	<u>Syndication Revolving Loan Agreement, dated as of December 18, 2019, by and among Tesla (Shanghai) Co., Ltd. China Construction Bank Corporation, China (Shanghai) Pilot Free Trade Zone Special Area Branch, Agricultural Bank of China Shanghai Changning Sub-branch, Shanghai Pudong Development Bank Co., Ltd., Shanghai Branch, and Industrial and Commercial Bank of China Limited, China (Shanghai) Pilot Free Trade Zone Special Area Branch (English translation).</u>	10-K	001-34756	10.87	February 13, 2020	
10.76††	<u>Working Capital Loan Contact, dated as of May 7, 2020, between Industrial and Commercial Bank of China, China (Shanghai) Pilot Free Trade Zone Lingang Special Area Branch and Tesla (Shanghai) Co., Ltd.</u>	10-Q	001-34756	10.5	July 28, 2020	
21.1	<u>List of Subsidiaries of the Registrant</u>	—	—	—	—	X
23.1	<u>Consent of PricewaterhouseCoopers LLP, Independent Registered Public Accounting Firm</u>	—	—	—	—	X
31.1	<u>Rule 13a-14(a) / 15(d)-14(a) Certification of Principal Executive Officer</u>	—	—	—	—	X
31.2	<u>Rule 13a-14(a) / 15(d)-14(a) Certification of Principal Financial Officer</u>	—	—	—	—	X
32.1*	<u>Section 1350 Certifications</u>	—	—	—	—	X
101.INS	Inline XBRL Instance Document	—	—	—	—	X
101.SCH	Inline XBRL Taxonomy Extension Schema Document	—	—	—	—	X
101.CAL	Inline XBRL Taxonomy Extension Calculation Linkbase Document.	—	—	—	—	X
101.DEF	Inline XBRL Taxonomy Extension Definition Linkbase Document	—	—	—	—	X
101.LAB	Inline XBRL Taxonomy Extension Label Linkbase Document	—	—	—	—	X
101.PRE	Inline XBRL Taxonomy Extension Presentation Linkbase Document	—	—	—	—	X
104	Cover Page Interactive Data File (formatted as inline XBRL with applicable taxonomy extension information contained in Exhibits 101)					

\* Furnished herewith

\*\* Indicates a management contract or compensatory plan or arrangement

† Confidential treatment has been requested for portions of this exhibit

†† Portions of this exhibit have been redacted in compliance with Regulation S-K Item 601(b)(10).

(1) Indicates a filing of SolarCity

(2) Indicates a filing of Maxwell Technologies, Inc.

## ITEM 16. SUMMARY



None

## SIGNATURES

Pursuant to the requirements of Section 13 or 15(d) the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned, thereunto duly authorized.

Tesla, Inc.

Date: February 4, 2022

\_\_\_\_\_  
/s/ Elon Musk  
Elon Musk  
Chief Executive Officer  
(Principal Executive Officer)

Pursuant to the requirements of the Securities Exchange Act of 1934, this report has been signed below by the following persons on behalf of the registrant and in the capacities and on the dates indicated.

Signature	Title	Date
_____ /s/ Elon Musk Elon Musk	Chief Executive Officer and Director (Principal Executive Officer)	February 4, 2022
_____ /s/ Zachary J. Kirkhorn Zachary J. Kirkhorn	Chief Financial Officer (Principal Financial Officer)	February 4, 2022
_____ /s/ Vaibhav Taneja Vaibhav Taneja	Chief Accounting Officer (Principal Accounting Officer)	February 4, 2022
_____ /s/ Robyn Denholm Robyn Denholm	Director	February 4, 2022
_____ /s/ Ira Ehrenpreis Ira Ehrenpreis	Director	February 4, 2022
_____ /s/ Lawrence J. Ellison Lawrence J. Ellison	Director	February 4, 2022
_____ /s/ Hiromichi Mizuno Hiromichi Mizuno	Director	February 4, 2022
_____ /s/ James Murdoch James Murdoch	Director	February 4, 2022
_____ /s/ Kimbal Musk Kimbal Musk	Director	February 4, 2022
_____ /s/ Kathleen Wilson-Thompson Kathleen Wilson-Thompson	Director	February 4, 2022

**UNITED STATES  
SECURITIES AND EXCHANGE COMMISSION**  
Washington, D.C. 20549

**FORM 10-K**

(Mark One)

☒

**ANNUAL REPORT PURSUANT TO SECTION 13  
OR 15(d) OF THE SECURITIES EXCHANGE  
ACT OF 1934**

For the fiscal year ended December 31, 2020

OR

☐

**TRANSITION REPORT PURSUANT TO SECTION 13  
OR 15(d) OF THE SECURITIES EXCHANGE  
ACT OF 1934**

For the transition period from \_\_\_\_\_ to \_\_\_\_\_

Commission File Number: 001-34756

**Tesla, Inc.**

(Exact name of registrant as specified in its charter)

Delaware  
(State or other jurisdiction of  
incorporation or organization)

3500 Deer Creek Road  
Palo Alto, California  
(Address of principal executive offices)

91-2197729  
(I.R.S. Employer  
Identification No.)

94304  
(Zip Code)

(650) 681-5000

(Registrant's telephone number, including area code)

Securities registered pursuant to Section 12(b) of the Act:

Title of each class	Trading Symbol(s)	Name of each exchange on which registered
Common stock	TSLA	The Nasdaq Global Select Market

Securities registered pursuant to Section 12(g) of the Act:

None

Indicate by check mark whether the registrant is a well-known seasoned issuer, as defined in Rule 405 of the Securities Act. Yes ☒ No ☐

Indicate by check mark if the registrant is not required to file reports pursuant to Section 13 or 15(d) of the Act. Yes ☐ No ☒

Indicate by check mark whether the registrant (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 ("Exchange Act") during the preceding 12 months (or for such shorter period that the registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days. Yes ☒ No ☐

Indicate by check mark whether the registrant has submitted electronically every Interactive Data File required to be submitted pursuant to Rule 405 of Regulation S-T (§ 232.405 of this chapter) during the preceding 12 months (or for such shorter period that the registrant was required to submit such files). Yes ☒ No ☐

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, a smaller reporting company or an emerging growth company. See the definitions of "large accelerated filer," "accelerated filer," "smaller reporting company" and "emerging growth company" in Rule 12b-2 of the Exchange Act:

Large accelerated filer	<input checked="" type="checkbox"/>	Accelerated filer	<input type="checkbox"/>
Non-accelerated filer	<input type="checkbox"/>	Smaller reporting company	<input type="checkbox"/>
Emerging growth company	<input type="checkbox"/>		

If an emerging growth company, indicate by check mark if the registrant has elected not to use the extended transition period for complying with any new or revised financial accounting standards provided pursuant to Section 13(a) of the Exchange Act. ☐

Indicate by check mark whether the Registrant has filed a report on and attestation to its management's assessment of the effectiveness of its internal control over financial reporting under Section 404(b) of the Sarbanes-Oxley Act (15 U.S.C. 7262(b)) by the registered public accounting firm that prepared or issued its audit report. ☒

Indicate by check mark whether the registrant is a shell company (as defined in Rule 12b-2 of the Exchange Act). Yes ☐ No ☒

The aggregate market value of voting stock held by non-affiliates of the registrant, as of June 30, 2020, the last day of the registrant's most recently completed second fiscal quarter, was \$160.57 billion (based on the closing price for shares of the registrant's Common Stock as reported by the NASDAQ Global Select Market on June 30, 2020). Shares of Common Stock held by each executive officer, director, and holder of 5% or more of the outstanding Common Stock have been excluded in that such persons may be deemed to be affiliates. This determination of affiliate status is not necessarily a conclusive determination for other purposes.

As of February 1, 2021, there were 959,853,504 shares of the registrant's Common Stock outstanding.

**DOCUMENTS INCORPORATED BY REFERENCE**

Portions of the registrant's Proxy Statement for the 2021 Annual Meeting of Stockholders are incorporated herein by reference in Part III of this Annual Report on Form 10-K to the extent stated herein. Such proxy statement will be filed with the Securities and Exchange Commission within 120 days of the registrant's fiscal year ended December 31, 2020.

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TESLA, INC.

ANNUAL REPORT ON FORM 10-K FOR THE YEAR ENDED DECEMBER 31, 2020

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## **Forward-Looking Statements**

*The discussions in this Annual Report on Form 10-K contain forward-looking statements reflecting our current expectations that involve risks and uncertainties. These forward-looking statements include, but are not limited to, statements concerning any potential future impact of the coronavirus disease (“COVID-19”) pandemic on our business, our strategy, future operations, future financial position, future revenues, projected costs, profitability, expected cost reductions, capital adequacy, expectations regarding demand and acceptance for our technologies, growth opportunities and trends in the market in which we operate, prospects and plans and objectives of management. The words “anticipates,” “believes,” “could,” “estimates,” “expects,” “intends,” “may,” “plans,” “projects,” “will,” “would” and similar expressions are intended to identify forward-looking statements, although not all forward-looking statements contain these identifying words. We may not actually achieve the plans, intentions or expectations disclosed in our forward-looking statements and you should not place undue reliance on our forward-looking statements. Actual results or events could differ materially from the plans, intentions and expectations disclosed in the forward-looking statements that we make. These forward-looking statements involve risks and uncertainties that could cause our actual results to differ materially from those in the forward-looking statements, including, without limitation, the risks set forth in Part I, Item 1A, “Risk Factors” in this Annual Report on Form 10-K and in our other filings with the Securities and Exchange Commission. We do not assume any obligation to update any forward-looking statements.*

## **PART I**

### **ITEM 1. BUSINESS**

#### **Overview**

We design, develop, manufacture, sell and lease high-performance fully electric vehicles and energy generation and storage systems, and offer services related to our sustainable energy products. We generally sell our products directly to customers, including through our website and retail locations. We also continue to grow our customer-facing infrastructure through a global network of vehicle service centers, Mobile Service technicians, body shops, Supercharger stations and Destination Chargers to accelerate the widespread adoption of our products. We emphasize performance, attractive styling and the safety of our users and workforce in the design and manufacture of our products and are continuing to develop full self-driving technology for improved safety. We also strive to lower the cost of ownership for our customers through continuous efforts to reduce manufacturing costs and by offering financial services tailored to our products. Our mission to accelerate the world's transition to sustainable energy, engineering expertise, vertically integrated business model and focus on user experience differentiate us from other companies.

#### **Segment Information**

We operate as two reportable segments: (i) automotive and (ii) energy generation and storage.

The automotive segment includes the design, development, manufacturing, sales and leasing of electric vehicles as well as sales of automotive regulatory credits. Additionally, the automotive segment is also comprised of services and other, which includes non-warranty after-sales vehicle services, sales of used vehicles, retail merchandise, sales by our acquired subsidiaries to third party customers and vehicle insurance revenue. The energy generation and storage segment includes the design, manufacture, installation, sales and leasing of solar energy generation and energy storage products and related services and sales of solar energy systems incentives.

#### **Our Products and Services**

##### **Automotive**

###### ***Model 3***

Model 3 is a four-door mid-size sedan that we designed for manufacturability with a base price for mass-market appeal, which we began delivering in July 2017. We currently manufacture Model 3 at the Fremont Factory and at Gigafactory Shanghai.

###### ***Model Y***

Model Y is a compact sport utility vehicle ("SUV") built on the Model 3 platform with seating for up to seven adults, which we began delivering in March 2020. We currently manufacture Model Y at the Fremont Factory and at Gigafactory Shanghai.

###### ***Model S and Model X***

Model S is a four-door full-size sedan that we began delivering in June 2012. Model X is a mid-size SUV with seating for up to seven adults, which we began delivering in September 2015. Model S and Model X feature the highest performance characteristics and longest ranges that we offer in a sedan and SUV, respectively, and we manufacture both models at the Fremont Factory.

###### ***Future Consumer and Commercial Electric Vehicles***

We have also announced several planned electric vehicles to address additional vehicle markets, including specialized consumer electric vehicles in Cybertruck and the new Tesla Roadster and a commercial electric vehicle in Tesla Semi. We also plan to introduce in the future a lower-cost vehicle to leverage developments in our proprietary Full Self-Driving ("FSD"), battery cell and other technologies.

##### **Energy Generation and Storage**

###### ***Energy Storage Products***

We began deliveries of the most recent generations of Powerwall, Powerpack and Megapack, which are our lithium-ion battery energy storage products integrated with inverters and control technology, in 2016, 2017 and 2019, respectively. Powerwall is designed to store energy at a home or small commercial facility. Megapack and Powerpack are energy storage solutions for commercial, industrial, utility and energy generation customers, which may be grouped together to form larger installations capable of reaching gigawatt hours ("GWh") or greater. We also offer integrated systems combining energy generation and storage. Our energy storage products are currently assembled at Gigafactory Nevada.





We have also developed software capabilities for remotely controlling and dispatching our energy storage systems across a wide range of markets and applications, including through our real-time energy trading platform.

### ***Solar Energy Offerings***

We sell retrofit solar energy systems to customers and channel partners and also make them available through lease and power purchase agreement (“PPA”) arrangements and a subscription-based sale of solar power, which is currently available in limited U.S. markets. We purchase most of the components for our retrofit solar energy systems from multiple sources to ensure competitive pricing and adequate supply. We also design and manufacture certain components for our solar energy products.

In 2019, we commenced direct customer and channel partner sales of the third generation of our Solar Roof, which combines premium glass roof tiles with energy generation. We are ramping the volume production of Solar Roof at Gigafactory New York, and we are improving our installation capability and efficiency.

## **Technology**

### **Automotive**

#### ***Battery and Powertrain***

Our core vehicle technology competencies include powertrain engineering and manufacturing and our ability to design vehicles that utilize the unique advantages of an electric powertrain. We have designed our proprietary powertrain systems to be adaptable, efficient, reliable and cost-effective while withstanding the rigors of an automotive environment. We offer dual motor powertrain vehicles, which use two electric motors to maximize traction and performance in an all-wheel drive configuration, and are introducing vehicle powertrain technology featuring three electric motors for further increased performance.

Among other things, we maintain extensive testing and R&D capabilities for battery cells, packs and systems, and have built an expansive body of knowledge on lithium-ion cell chemistry types and performance characteristics. In order to enable a greater supply of cells for our products with higher energy density at lower costs, we are currently using our expertise to develop a new proprietary lithium-ion battery cell and improved manufacturing processes.

#### ***Vehicle Control and Infotainment Software***

The performance and safety systems of our vehicles and their battery packs require sophisticated control software. Control systems in our vehicles optimize performance, customize vehicle behavior, manage charging and control all infotainment functions. We develop almost all of this software, including most of the user interfaces, internally and update our vehicles’ software regularly through over-the-air updates.

#### ***Self-Driving Development***

We have expertise in developing technologies, systems and software to enable self-driving vehicles using primarily vision and radar-based sensors. Our FSD Computer runs our neural networks in our vehicles, and we are also developing additional computer hardware to better enable the massive amounts of field data captured by our vehicles to continually train and improve these neural networks for real-world performance.

Currently, we offer in our vehicles certain advanced driver assist systems under our Autopilot and FSD options. Although at present the driver is ultimately responsible for controlling the vehicle, our systems provide safety and convenience functionality that relieves drivers of the most tedious and potentially dangerous aspects of road travel much like the system that airplane pilots use, when conditions permit. As with other vehicle systems, we improve these functions in our vehicles over time through over-the-air updates.

We intend to establish in the future an autonomous Tesla ride-hailing network, which we expect would also allow us to access a new customer base even as modes of transportation evolve.

## **Energy Generation and Storage**

### ***Energy Storage Products***

We leverage many of the component-level technologies from our vehicles in our energy storage products. By taking a modular approach to the design of battery systems, we can optimize manufacturing capacity among our energy storage products. Additionally, our expertise in power electronics enables us to interconnect our battery systems seamlessly with global electricity grids while providing fast-acting systems for power injection and absorption. We have also developed the software to remotely control and dispatch our energy storage systems using our real-time energy trading platform.



## ***Solar Energy Systems***

We have engineered Solar Roof over numerous iterations to combine aesthetic appeal and durability with power generation. The efficiency of our solar energy products is aided by our own solar inverter, which also incorporates our power electronics technologies. We designed both products to integrate with Powerwall.

## **Design and Engineering**

### **Automotive**

We have established significant in-house capabilities in the design and test engineering of electric vehicles and their components and systems. Our team has core competencies in computer aided design as well as durability, strength and crash test simulations, which reduces the product development time of new models. Additionally, our team has expertise in selecting and working with a range of materials for our vehicles to balance performance, cost and durability in ways that are best suited for our vehicles' target demographics and utility. We have also used our capabilities to achieve complex engineering feats in stamping, casting and thermal systems, and are currently developing designs that integrate batteries directly with vehicle body structures without separate battery packs to optimize manufacturability, weight, range and cost characteristics.

We are also expanding our manufacturing operations globally while exploring ways to localize our vehicle designs and production for particular markets, including country-specific market demands and factory optimizations for local workforces. As we increase our capabilities, particularly in the areas of automation, die-making and line-building, we are also making strides in the simulations modeling these capabilities prior to construction.

### **Energy Generation and Storage**

Our expertise in electrical, mechanical, civil and software engineering allows us to design and manufacture our energy generation and storage products and components. We also employ our design and engineering expertise to customize solutions including our energy storage products, solar energy systems and/or Solar Roof for customers to meet their specific needs. We have developed software that simplifies and expedites the design process and maximizes the energy production of each solar energy system, as well as mounting hardware that facilitates solar panel installation.

## **Sales and Marketing**

Historically, we have been able to generate significant media coverage of our company and our products, and we believe we will continue to do so. Such media coverage and word of mouth are the current primary drivers of our sales leads and have helped us achieve sales without traditional advertising and at relatively low marketing costs.

### **Automotive**

#### ***Direct Sales***

Our vehicle sales channels currently include our website and an international network of company-owned stores. In some jurisdictions, we also have galleries to educate and inform customers about our products, but such locations do not actually transact in the sale of vehicles. We believe this infrastructure enables us to better control costs of inventory, manage warranty service and pricing, educate consumers about electric vehicles, maintain and strengthen the Tesla brand and obtain rapid customer feedback.

We reevaluate our sales strategy both globally and at a location-by-location level from time to time to optimize our current sales channels. Sales of vehicles in the automobile industry tend to be cyclical in many markets, which may expose us to volatility from time to time.

#### ***Used Vehicle Sales***

Our used vehicle business supports new vehicle sales by integrating the trade-in of a customer's existing Tesla or non-Tesla vehicle with the sale of a new or used Tesla vehicle. The Tesla and non-Tesla vehicles we acquire as trade-ins are subsequently remarketed, either directly by us or through third parties. We also remarket used Tesla vehicles acquired from other sources including lease returns.

#### ***Public Charging***

We have a growing global network of Tesla Superchargers, which are our industrial grade, high-speed vehicle chargers. Where possible, we co-locate Superchargers with our solar and energy storage systems to reduce costs and promote renewable power. Supercharger stations are typically placed along well-traveled routes and in and around dense city centers to allow Tesla vehicle owners the ability to enjoy quick, reliable and ubiquitous charging with convenient, minimal stops. Use of the Supercharger network either requires payment of a fee or is free under certain sales programs.



We also work with a wide variety of hospitality, retail and public destinations, as well as businesses with commuting employees, to offer additional charging options for our customers. These Destination Charging and workplace locations deploy Tesla Wall Connectors to provide charging to Tesla vehicle owners who patronize or are employed at their businesses. We also work with single-family homeowners and multi-family residential entities to deploy home charging solutions.

### ***In-App Upgrades***

As our vehicles are capable of being updated remotely over-the-air, our customers may purchase additional paid options and features through the Tesla app. We expect that this functionality will also allow us to offer certain options and features on a subscription basis in the future.

### **Energy Generation and Storage**

We market and sell our solar and energy storage products to residential, commercial and industrial customers and utilities through a variety of channels. We emphasize simplicity, standardization and accessibility to make it easy and cost-effective for customers to adopt clean energy, while reducing our customer acquisition costs.

In the U.S., we offer residential solar and energy storage products directly through our website, stores and galleries, as well as through our network of channel partners. Outside of the U.S., we use our international sales organization and a network of channel partners to market and sell these products for the residential market. We also sell Powerwall directly to utilities. In the case of products sold to utilities or channel partners, such partners typically sell the product and manage the installation in customer homes.

We sell our commercial and utility-scale energy storage systems to customers through our U.S. and international sales organization and our channel partner network. In certain jurisdictions, we also sell installed solar energy systems (with or without energy storage) to commercial customers through cash, lease and PPA transactions.

### **Service and Warranty**

#### **Automotive**

##### ***Service***

We provide service for our electric vehicles at our company-owned service locations and through Tesla Mobile Service technicians who perform work remotely at customers' homes or other locations. Performing vehicle service ourselves provides us with the capability to identify problems and implement solutions and improvements faster, and optimize logistics and inventory better, than traditional automobile manufacturers and their dealer networks. The connectivity of our vehicles also allows us to diagnose and remedy many problems remotely and proactively.

##### ***Vehicle Limited Warranties and Extended Service Plans***

We provide a manufacturer's limited warranty on all new and used Tesla vehicles we sell, which may include separate limited warranties on certain components, specific types of damage or battery capacity retention. We also currently offer extended service plans that provide coverage beyond the new vehicle limited warranties for certain models in specified regions.

### **Energy Generation and Storage**

We provide service and repairs to our energy product customers, including under warranty where applicable.

#### ***Energy Storage Systems***

We generally provide manufacturer's limited warranties with every new energy storage product and offer certain extended limited warranties that are available at the time of purchase of the system. If we install a system, we also provide certain limited warranties on our installation workmanship. As part of our energy storage system contracts, we may provide the customer with performance guarantees that warrant that the underlying system will meet or exceed the minimum energy performance requirements specified in the contract.

#### ***Solar Energy Systems***

For retrofit solar energy systems, we provide separate limited warranties for workmanship and against roof leaks, and for Solar Roof, we provide limited warranties for defects and weatherization. For components not manufactured by us, we generally pass-through the applicable manufacturers' warranties. As part of our solar energy system contracts, we may provide the customer with performance guarantees that warrant that the underlying system will meet or exceed the minimum energy generation requirements specified in the contract.

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## **Financial Services**

### **Automotive**

#### ***Purchase Financing and Leases***

We offer leasing and/or loan financing arrangements for our vehicles in certain jurisdictions in North America, Europe and Asia through various financial institutions. Under certain of such programs, we have provided resale value guarantees or buyback guarantees that may obligate us to repurchase the subject vehicles at pre-determined values. We also offer vehicle financing arrangements in certain markets for specified vehicle models directly through our local subsidiaries.

#### ***Insurance***

In August 2019, we launched an insurance product designed for our customers, which offers rates that are often better than other alternatives. This product is currently available in California, and we plan to expand both the markets in which we offer insurance products and our ability to offer such products, as part of our ongoing effort to decrease the total cost of ownership for our customers.

### **Energy Generation and Storage**

#### ***Energy Storage Systems***

We currently offer certain loan, lease and/or PPA options to residential or commercial customers who pair energy storage systems with solar energy systems. We intend to introduce financial services offerings for customers who purchase standalone energy storage products in the future.

#### ***Solar Energy Systems***

We offer various financing options to our solar customers. Our solar loan offers third-party financing to enable the customer to purchase and own a solar energy system. We are not a party to the loan agreement, and the third-party lender has no recourse against us with respect to the loan. Our solar lease offers customers a fixed monthly fee at rates that typically translate into lower monthly utility bills and an electricity production guarantee. Our solar PPA charges customers a fee per kilowatt-hour based on the amount of electricity produced by our solar energy systems. We monetize the customer payments we receive from our leases and PPAs through funds we have formed with investors. We also intend to introduce financial services offerings for our Solar Roof customers in the future.

## **Manufacturing**

### **Manufacturing Facilities in the Bay Area, California**

We manufacture and test our vehicles at our manufacturing facilities in the Bay Area in California, including the Fremont Factory and other local manufacturing facilities. We also manufacture and develop certain parts and components that are critical to our intellectual property and quality standards, such as Model S and Model X battery packs and our proprietary lithium-ion battery cells, at these locations.

### **Gigafactory Nevada near Reno, Nevada**

We have integrated battery material, cell, module and battery pack production for Model 3, Model Y and our energy products in one location at Gigafactory Nevada. In addition, we manufacture vehicle drive units and our energy storage products there. Gigafactory Nevada allows us to access high volumes of lithium-ion battery cells manufactured by our partner Panasonic there while achieving a significant reduction in the cost of our battery packs. We continue to invest in Gigafactory Nevada to achieve additional output there, including through our agreement with Panasonic.

### **Gigafactory New York in Buffalo, New York**

We use Gigafactory New York for the development and production of our Solar Roof and other solar products and components, energy storage components and Supercharger components, and for other lessor-approved functions.

### **Gigafactory Shanghai in China**

We established Gigafactory Shanghai to increase the affordability of our vehicles for customers in local markets by reducing transportation and manufacturing costs and eliminating the impact of unfavorable tariffs. We continue to increase the degree of localized procurement and manufacturing there. Gigafactory Shanghai is representative of our plan to iteratively improve our manufacturing operations as we establish new factories, as we implemented the learnings from our Model 3 ramp at the Fremont Factory to commence and ramp our production there quickly and cost-effectively.





## **Other Manufacturing**

Generally, we continue to expand production capacity at our existing facilities. We also intend to further increase cost-competitiveness in our significant markets by strategically adding local manufacturing, including at Gigafactory Berlin in Germany and Gigafactory Texas in Austin, Texas, which are under construction.

## **Supply Chain**

Our products use thousands of purchased parts that are sourced from hundreds of suppliers across the world. We have developed close relationships with vendors of key parts such as battery cells, electronics and complex vehicle assemblies. Certain components purchased from these suppliers are shared or are similar across many product lines, allowing us to take advantage of pricing efficiencies from economies of scale.

As is the case for most automotive companies, most of our procured components and systems are sourced from single suppliers. Where multiple sources are available for certain key components, we work to qualify multiple suppliers for them where it is sensible to do so in order to minimize production risks owing to disruptions in their supply. We also mitigate risk by maintaining safety stock for key parts and assemblies and die banks for components with lengthy procurement lead times.

Our products use various raw materials including aluminum, steel, cobalt, lithium, nickel and copper. Pricing for these materials is governed by market conditions and may fluctuate due to various factors outside of our control, such as supply and demand and market speculation. We strive to execute long-term supply contracts for such materials at competitive pricing when feasible, and we currently believe that we have adequate access to raw materials supplies in order to meet the needs of our operations.

## **Governmental Programs, Incentives and Regulations**

Globally, both the operation of our business by us and the ownership of our products by our customers are impacted by various government programs, incentives and other arrangements. Our business and products are also subject to numerous governmental regulations that vary among jurisdictions.

### **Programs and Incentives**

#### ***California Alternative Energy and Advanced Transportation Financing Authority Tax Incentives***

We have agreements with the California Alternative Energy and Advanced Transportation Financing Authority that provide multi-year sales tax exclusions on purchases of manufacturing equipment that will be used for specific purposes, including the expansion and ongoing development of electric vehicles and powertrain production in California.

#### ***Gigafactory Nevada—Nevada Tax Incentives***

In connection with the construction of Gigafactory Nevada, we entered into agreements with the State of Nevada and Storey County in Nevada that provide abatements for specified taxes, discounts to the base tariff energy rates and transferable tax credits in consideration of capital investment and hiring targets that were met at Gigafactory Nevada. These incentives are available until June 2024 or June 2034, depending on the incentive.

#### ***Gigafactory New York—New York State Investment and Lease***

We have a lease through the Research Foundation for the State University of New York (the “SUNY Foundation”) with respect to Gigafactory New York. Under the lease and a related research and development agreement, we are continuing to designate further buildouts at the facility. We are required to comply with certain covenants, including hiring and cumulative investment targets.

As we temporarily suspended most of our manufacturing operations at Gigafactory New York pursuant to a New York State executive order issued in March 2020 as a result of the COVID-19 pandemic, we were granted a one-year deferral of our obligation to be compliant with our applicable targets under such agreement on April 30, 2020, which was memorialized in an amendment to our agreement with the SUNY Foundation in July 2020.

#### ***Gigafactory Shanghai—Land Use Rights and Economic Benefits***

We have an agreement with the local government of Shanghai for land use rights at Gigafactory Shanghai. Under the terms of the arrangement, we are required to meet a cumulative capital expenditure target and an annual tax revenue target starting at the end of 2023. In addition, the Shanghai government has granted to our Gigafactory Shanghai subsidiary in 2019 and 2020 certain incentives to be used in connection with eligible capital investments at Gigafactory Shanghai. Finally, the Shanghai government granted a beneficial corporate income tax rate of 15% to

certain eligible enterprises, which is lower than the 25% statutory corporate income tax rate in China. Our Gigafactory Shanghai subsidiary was granted this lower rate for 2019 through 2023.

### ***Gigafactory Berlin – Pending Grant***

We have applied for a grant with the German government to improve the design, chemistry, manufacturing technology and recycling of lithium-ion battery cells for Gigafactory Berlin. The grant was approved by the European Commission in January 2021 and its implementation will be subject to a grant agreement with the German government.

### ***Gigafactory Texas – Tax Incentives***

In connection with the construction of Gigafactory Texas, we entered into a 20-year agreement with Travis County in Texas pursuant to which we would receive grant funding equal to 70-80% of property taxes paid by us to Travis County and a separate 10-year agreement with the Del Valle Independent School District in Texas pursuant to which a portion of the taxable value of our property would be capped at a specified amount, in each case subject to our meeting certain minimum economic development metrics through our construction and operations at Gigafactory Texas.

### ***Regulatory Credits***

We earn tradable credits in the operation of our business under various regulations related to zero-emission vehicles (“ZEVs”), greenhouse gas, fuel economy, renewable energy and clean fuel. We sell these credits to other regulated entities who can use the credits to comply with emission standards, renewable energy procurement standards and other regulatory requirements.

### ***Energy Storage System Incentives and Policies***

While the regulatory regime for energy storage projects is still under development, there are various policies, incentives and financial mechanisms at the federal, state and local levels that support the adoption of energy storage.

For example, energy storage systems that are charged using solar energy may be eligible for the solar energy-related U.S. federal tax credits described below. The Federal Energy Regulatory Commission (“FERC”) has also taken steps to enable the participation of energy storage in wholesale energy markets. In addition, California and a number of other states have adopted procurement targets for energy storage, and behind-the-meter energy storage systems qualify for funding under the California Self Generation Incentive Program.

### ***Solar Energy System Incentives and Policies***

U.S. federal, state and local governments have established various policies, incentives and financial mechanisms to reduce the cost of solar energy and to accelerate the adoption of solar energy. These incentives include tax credits, cash grants, tax abatements and rebates.

In particular, Sections 48 and 25D of the U.S. Internal Revenue Code currently provide a tax credit of 26% of qualified commercial or residential expenditures for solar energy systems, which may be claimed by our customers for systems they purchase, or by us for arrangements where we own the systems. These tax credits are currently scheduled to decline and/or expire in 2023 and beyond.

## **Regulations**

### ***Vehicle Safety and Testing***

In the U.S., our vehicles are subject to regulation by the National Highway Traffic Safety Administration (“NHTSA”), including all applicable Federal Motor Vehicle Safety Standards (“FMVSS”) and the NHTSA bumper standard. Numerous FMVSS apply to our vehicles, such as crash-worthiness requirements, crash avoidance requirements and electric vehicle requirements. While our current vehicles fully comply and we expect that our vehicles in the future will fully comply with all applicable FMVSS with limited or no exemptions, FMVSS are subject to change from time to time. As a manufacturer, we must self-certify that our vehicles meet all applicable FMVSS and the NHTSA bumper standard, or otherwise are exempt, before the vehicles may be imported or sold in the U.S.

We are also required to comply with other federal laws administered by NHTSA, including the CAFE standards, Theft Prevention Act requirements, consumer information labeling requirements, Early Warning Reporting requirements regarding warranty claims, field reports, death and injury reports and foreign recalls, owner’s manual requirements and additional requirements for cooperating with safety investigations and defect and recall reporting. The U.S. Automobile Information and Disclosure Act also requires manufacturers of motor vehicles to disclose certain information regarding the manufacturer’s suggested retail price, optional equipment and pricing. In addition, federal law requires inclusion of fuel economy ratings, as determined by the U.S. Department of Transportation and the Environmental Protection Agency (the “EPA”), and 5-star safety ratings as determined by NHTSA, if available.



Our vehicles sold outside of the U.S. are subject to similar foreign safety, environmental and other regulations. Many of those regulations are different from those applicable in the U.S. and may require redesign and/or retesting. Some of those regulations impact or prevent the rollout of new vehicle features. Additionally, the European Union has established new rules regarding additional compliance oversight that commenced in 2020, and there is also regulatory uncertainty related to the United Kingdom's withdrawal from the European Union.

### ***Self-Driving Vehicles***

Generally, laws pertaining to self-driving vehicles are evolving globally, and in some cases may create restrictions on self-driving features that we develop. While there are currently no federal U.S. regulations specifically pertaining to self-driving vehicles or self-driving equipment, NHTSA has published recommended guidelines on self-driving vehicles, and retains the authority to investigate and/or take action on the safety of any vehicle, equipment or features operating on public roads. Certain U.S. states have legal restrictions on the operation, registration or licensure of self-driving vehicles, and many other states are considering them. This regulatory patchwork increases the legal complexity with respect to self-driving vehicles in the U.S.

In markets that follow the regulations of the United Nations Economic Commission for Europe, some requirements restrict the design of advanced driver-assistance or self-driving features, which can compromise or prevent their use entirely. Other applicable laws, both current and proposed, may hinder the path and timeline to introducing self-driving vehicles for sale and use in the markets where they apply.

Other key markets, including China, continue to consider self-driving regulation. Any implemented regulations may differ materially from those in the U.S. and Europe, which may further increase the legal complexity of self-driving vehicles and limit or prevent certain features.

### ***Automobile Manufacturer and Dealer Regulation***

In the U.S., state laws regulate the manufacture, distribution, sale and service of automobiles, and generally require motor vehicle manufacturers and dealers to be licensed in order to sell vehicles directly to residents. Certain states have asserted that the laws in such states do not permit automobile manufacturers to be licensed as dealers or to act in the capacity of a dealer, or that they otherwise restrict a manufacturer's ability to deliver or service vehicles. To sell vehicles to residents of states where we are not licensed as a dealer, we generally conduct the transfer of title out of the state. In certain such states, we have opened "galleries" that serve an educational purpose and where the title transfer may not occur.

Some automobile dealer trade associations have both challenged the legality of our operations in court and used administrative and legislative processes to attempt to prohibit or limit our ability to operate existing stores or expand to new locations. Certain dealer associations have also actively lobbied state licensing agencies and legislators to interpret existing laws or enact new laws in ways not favorable to our ownership and operation of our own retail and service locations. We expect such challenges to continue, and we intend to actively fight any such efforts.

### ***Battery Safety and Testing***

Our battery packs are subject to various U.S. and international regulations that govern transport of "dangerous goods," defined to include lithium-ion batteries, which may present a risk in transportation. We conduct testing to demonstrate our compliance with such regulations.

We use lithium-ion cells in our high voltage battery packs in our vehicles and energy storage products. The use, storage and disposal of our battery packs are regulated under existing laws and are the subject of ongoing regulatory changes that may add additional requirements in the future. We have agreements with third party battery recycling companies to recycle our battery packs and we are also piloting our own recycling technology.

### ***Solar Energy—General***

We are not a "regulated utility" in the U.S., although we are subject to certain state and federal regulations applicable to solar and battery storage providers. To operate our systems, we enter into standard interconnection agreements with applicable utilities. Sales of electricity and non-sale equipment leases by third parties, such as our leases, PPAs and subscription agreements, have faced regulatory challenges in some states and jurisdictions.

### ***Solar Energy—Net Metering***

Most states in the U.S. make net energy metering, or net metering, available to solar customers. Net metering typically allows solar customers to interconnect their solar energy systems to the utility grid and offset their utility electricity purchases by receiving a bill credit for excess energy generated by their solar energy system that is exported to the grid. In certain jurisdictions, regulators or utilities have reduced or eliminated the benefit available under net metering or have proposed to do so.



## **Competition**

### **Automotive**

The worldwide automotive market is highly competitive and we expect it will become even more competitive in the future as we introduce additional vehicles in a broader cross-section of the passenger and commercial vehicle market and expand our vehicles' capabilities.

We believe that our vehicles compete in the market both based on their traditional segment classification as well as based on their propulsion technology. For example, Model S and Model X compete primarily with premium sedans and premium SUVs and Model 3 and Model Y compete with small to medium-sized sedans and compact SUVs, which are extremely competitive markets. Competing products typically include internal combustion vehicles from more established automobile manufacturers; however, many established and new automobile manufacturers have entered or have announced plans to enter the market for electric and other alternative fuel vehicles. Overall, we believe these announcements and vehicle introductions promote the development of the electric vehicle market by highlighting the attractiveness of electric vehicles relative to the internal combustion vehicle. Many major automobile manufacturers have electric vehicles available today in major markets including the U.S., China and Europe, and other current and prospective automobile manufacturers are also developing electric vehicles. In addition, several manufacturers offer hybrid vehicles, including plug-in versions.

We also believe that there is increasing competition for our vehicle offerings as a platform for delivering self-driving technologies, charging solutions and other features and services, and we expect to compete in this developing market through continued progress on our Autopilot, FSD and neural network capabilities, Supercharger network and our infotainment offerings.

### **Energy Generation and Storage**

#### ***Energy Storage Systems***

The market for energy storage products is also highly competitive, and both established and emerging companies have introduced products that are similar to our product portfolio or that are alternatives to the elements of our systems. We compete with these companies based on price, energy density and efficiency. We believe that the specifications and features of our products, our strong brand and the modular, scalable nature of our energy storage products give us a competitive advantage in our markets.

#### ***Solar Energy Systems***

The primary competitors to our solar energy business are the traditional local utility companies that supply energy to our potential customers. We compete with these traditional utility companies primarily based on price and the ease by which customers can switch to electricity generated by our solar energy systems. We also compete with solar energy companies that provide products and services similar to ours. Many solar energy companies only install solar energy systems, while others only provide financing for these installations. We believe we have a significant expansion opportunity with our offerings and that the regulatory environment is increasingly conducive to the adoption of renewable energy systems.

## **Intellectual Property**

We place a strong emphasis on our innovative approach and proprietary designs which bring intrinsic value and uniqueness to our product portfolio. As part of our business, we seek to protect the underlying intellectual property rights of these innovations and designs such as with respect to patents, trademarks, copyrights, trade secrets and other measures, including through employee and third-party nondisclosure agreements and other contractual arrangements. For example, we place a high priority on obtaining patents to provide the broadest and strongest possible protection to enable our freedom to operate our innovations and designs within our products and technologies in the electric vehicle market as well as to protect and defend our product portfolio. We have also adopted a patent policy in which we irrevocably pledged that we will not initiate a lawsuit against any party for infringing our patents through activity relating to electric vehicles or related equipment for so long as such party is acting in good faith. We made this pledge in order to encourage the advancement of a common, rapidly-evolving platform for electric vehicles, thereby benefiting ourselves, other companies making electric vehicles and the world.

## **Human Capital Resources**

As of December 31, 2020, our full-time count for our and our subsidiaries' employees worldwide was 70,757. To date, we have not experienced any work stoppages as a result of labor disputes, and we consider our relationship with our employees to be good. Our key human capital objectives in managing our business include attracting, developing and retaining top talent while integrating diversity, equity and inclusion principles and practices into our core values.





We want to attract a pool of diverse and exceptional candidates and support their career growth once they become employees. Our efforts begin at the entry level with development, apprenticeship and internship programs in local high schools, community colleges and four-year colleges. In addition, we seek to hire based on talent rather than solely on educational pedigree, and have provided thousands of job openings, including in our local communities, for capable workers from various backgrounds to learn valuable skills in critical operations such as in manufacturing, vehicle service and energy product installation. We also emphasize in our evaluation and career development efforts internal mobility opportunities for employees to drive professional development. Our goal is a long-term, upward-bound career at Tesla for every employee, which we believe also drives our retention efforts.

We also believe that our ability to retain our workforce is dependent on our ability to foster an environment that is sustainably safe, respectful, fair and inclusive of everyone and promotes diversity, equity and inclusion inside and outside of our business. From our outreach to Historically Black Colleges and Universities and Hispanic Serving Institutions to sponsoring employee resource groups across numerous locations, including Asian Pacific Islanders at Tesla, Black at Tesla, Intersectionality, Latinos at Tesla, LGBTQ at Tesla, Veterans at Tesla and Women in Tesla, we engage these networks as key business resources and sources of actionable feedback. We are also working on diversity efforts in our supply chain to expand our outreach and support to small- and large-scale suppliers from underrepresented communities to emphasize this culture with our own employees.

#### **Available Information**

We file or furnish periodic reports and amendments thereto, including our Annual Reports on Form 10-K, our Quarterly Reports on Form 10-Q and Current Reports on Form 8-K, proxy statements and other information with the Securities and Exchange Commission (“SEC”). In addition, the SEC maintains a website ([www.sec.gov](http://www.sec.gov)) that contains reports, proxy and information statements, and other information regarding issuers that file electronically. Our website is located at [www.tesla.com](http://www.tesla.com), and our reports, amendments thereto, proxy statements and other information are also made available, free of charge, on our investor relations website at [ir.tesla.com](http://ir.tesla.com) as soon as reasonably practicable after we electronically file or furnish such information with the SEC. The information posted on our website is not incorporated by reference into this Annual Report on Form 10-K.

## ITEM 1A. RISK FACTORS

*You should carefully consider the risks described below together with the other information set forth in this report, which could materially affect our business, financial condition and future results. The risks described below are not the only risks facing our company. Risks and uncertainties not currently known to us or that we currently deem to be immaterial also may materially adversely affect our business, financial condition and operating results.*

### **Risks Related to Our Ability to Grow Our Business**

***We may be impacted by macroeconomic conditions resulting from the global COVID-19 pandemic.***

Since the first quarter of 2020, there has been a worldwide impact from the COVID-19 pandemic. Government regulations and shifting social behaviors have limited or closed non-essential transportation, government functions, business activities and person-to-person interactions. In some cases, the relaxation of such trends has recently been followed by actual or contemplated returns to stringent restrictions on gatherings or commerce, including in parts of the U.S. and a number of areas in Europe.

We temporarily suspended operations at each of our manufacturing facilities worldwide for a part of the first half of 2020. Some of our suppliers and partners also experienced temporary suspensions before resuming, including Panasonic, which manufactures battery cells for our products at our Gigafactory Nevada. We also instituted temporary employee furloughs and compensation reductions while our U.S. operations were scaled back. Reduced operations or closures at motor vehicle departments, vehicle auction houses and municipal and utility company inspectors have resulted in challenges in or postponements for our new vehicle deliveries, used vehicle sales and energy product deployments. Global trade conditions and consumer trends may further adversely impact us and our industries. For example, pandemic-related issues have exacerbated port congestion and intermittent supplier shutdowns and delays, resulting in additional expenses to expedite delivery of critical parts. Similarly, increased demand for personal electronics has created a shortfall of microchip supply, and it is yet unknown how we may be impacted. Sustaining our production trajectory will require the readiness and solvency of our suppliers and vendors, a stable and motivated production workforce and ongoing government cooperation, including for travel and visa allowances. The contingencies inherent in the construction of and ramp at new facilities such as Gigafactory Shanghai, Gigafactory Berlin and Gigafactory Texas may be exacerbated by these challenges.

We cannot predict the duration or direction of current global trends, the sustained impact of which is largely unknown, is rapidly evolving and has varied across geographic regions. Ultimately, we continue to monitor macroeconomic conditions to remain flexible and to optimize and evolve our business as appropriate, and we will have to accurately project demand and infrastructure requirements globally and deploy our production, workforce and other resources accordingly. If current global market conditions continue or worsen, or if we cannot or do not maintain operations at a scope that is commensurate with such conditions or are later required to or choose to suspend such operations again, our business, prospects, financial condition and operating results may be harmed.

***We may experience delays in launching and ramping the production of our products and features, or we may be unable to control our manufacturing costs.***

We have previously experienced and may in the future experience launch and production ramp delays for new products and features. For example, we encountered unanticipated supplier issues that led to delays during the ramp of Model X and experienced challenges with a supplier and with ramping full automation for certain of our initial Model 3 manufacturing processes. In addition, we may introduce in the future new or unique manufacturing processes and design features for our products. There is no guarantee that we will be able to successfully and timely introduce and scale such processes or features.

In particular, our future business depends in large part on increasing the production of mass-market vehicles including Model 3 and Model Y, which we are planning to achieve through multiple factories worldwide. We have relatively limited experience to date in manufacturing Model 3 and Model Y at high volumes and even less experience building and ramping vehicle production lines across multiple factories in different geographies. In order to be successful, we will need to implement, maintain and ramp efficient and cost-effective manufacturing capabilities, processes and supply chains and achieve the design tolerances, high quality and output rates we have planned at our manufacturing facilities in California, Nevada, Texas, China and Germany. We will also need to hire, train and compensate skilled employees to operate these facilities. Bottlenecks and other unexpected challenges such as those we experienced in the past may arise during our production ramps, and we must address them promptly while continuing to improve manufacturing processes and reducing costs. If we are not successful in achieving these goals, we could face delays in establishing and/or sustaining our Model 3 and Model Y ramps or be unable to meet our related cost and profitability targets.

We may also experience similar future delays in launching and/or ramping production of our energy storage products and Solar Roof; new product versions or variants; new vehicles such as Tesla Semi, Cybertruck and the new Tesla Roadster; and future features and services such as new Autopilot or FSD features and the autonomous Tesla

ride-hailing network. Likewise, we may encounter delays with the design, construction and regulatory or other approvals necessary to build and bring online future manufacturing facilities and products.

Any delay or other complication in ramping the production of our current products or the development, manufacture, launch and production ramp of our future products, features and services, or in doing so cost-effectively and with high quality, may harm our brand, business, prospects, financial condition and operating results.

***We may be unable to grow our global product sales, delivery and installation capabilities and our servicing and vehicle charging networks, or we may be unable to accurately project and effectively manage our growth.***

Our success will depend on our ability to continue to expand our sales capabilities. We also frequently adjust our retail operations and product offerings in order to optimize our reach, costs, product line-up and model differentiation and customer experience. However, there is no guarantee that such steps will be accepted by consumers accustomed to traditional sales strategies. For example, marketing methods such as touchless test drives that we have pioneered in certain markets have not been proven at scale. We are targeting with Model 3 and Model Y a global mass demographic with a broad range of potential customers, in which we have relatively limited experience projecting demand and pricing our products. We currently produce numerous international variants at a limited number of factories, and if our specific demand expectations for these variants prove inaccurate, we may not be able to timely generate deliveries matched to the vehicles that we produce in the same timeframe or that are commensurate with the size of our operations in a given region. Likewise, as we develop and grow our energy products and services worldwide, our success will depend on our ability to correctly forecast demand in various markets.

Because we do not have independent dealer networks, we are responsible for delivering all of our vehicles to our customers. While we have improved our delivery logistics, we may face difficulties with deliveries at increasing volumes, particularly in international markets requiring significant transit times. For example, we saw challenges in ramping our logistics channels in China and Europe to initially deliver Model 3 there in the first quarter of 2019. We have deployed a number of delivery models, such as deliveries to customers' homes and workplaces and touchless deliveries, but there is no guarantee that such models will be scalable or be accepted globally. Likewise, as we ramp Solar Roof, we are working to substantially increase installation personnel and decrease installation times. If we are not successful in matching such capabilities with actual production, or if we experience unforeseen production delays or inaccurately forecast demand for the Solar Roof, our business, financial condition and operating results may be harmed.

Moreover, because of our unique expertise with our vehicles, we recommend that our vehicles be serviced by us or by certain authorized professionals. If we experience delays in adding such servicing capacity or servicing our vehicles efficiently, or experience unforeseen issues with the reliability of our vehicles, particularly higher-volume and newer additions to our fleet such as Model 3 and Model Y, it could overburden our servicing capabilities and parts inventory. Similarly, the increasing number of Tesla vehicles also requires us to continue to rapidly increase the number of our Supercharger stations and connectors throughout the world.

There is no assurance that we will be able to ramp our business to meet our sales, delivery, installation, servicing and vehicle charging targets globally, that our projections on which such targets are based will prove accurate or that the pace of growth or coverage of our customer infrastructure network will meet customer expectations. These plans require significant cash investments and management resources and there is no guarantee that they will generate additional sales or installations of our products, or that we will be able to avoid cost overruns or be able to hire additional personnel to support them. As we expand, we will also need to ensure our compliance with regulatory requirements in various jurisdictions applicable to the sale, installation and servicing of our products, the sale or dispatch of electricity related to our energy products and the operation of Superchargers. If we fail to manage our growth effectively, it may harm our brand, business, prospects, financial condition and operating results.

***Our future growth and success are dependent upon consumers' demand for electric vehicles and specifically our vehicles in an automotive industry that is generally competitive, cyclical and volatile.***

If the market for electric vehicles in general and Tesla vehicles in particular does not develop as we expect, develops more slowly than we expect, or if demand for our vehicles decreases in our markets or our vehicles compete with each other, our business, prospects, financial condition and operating results may be harmed.

We are still at an earlier stage and have limited resources and production relative to established competitors that offer internal combustion engine vehicles. In addition, electric vehicles still comprise a small percentage of overall vehicle sales. As a result, the market for our vehicles could be negatively affected by numerous factors, such as:

- perceptions about electric vehicle features, quality, safety, performance and cost;
- perceptions about the limited range over which electric vehicles may be driven on a single battery charge, and access to charging facilities;
- competition, including from other types of alternative fuel vehicles, plug-in hybrid electric vehicles and high fuel-economy internal combustion engine vehicles;

- volatility in the cost of oil and gasoline, such as wide fluctuations in crude oil prices during 2020;

- government regulations and economic incentives; and
- concerns about our future viability.

Finally, the target demographics for our vehicles, particularly Model 3 and Model Y, are highly competitive. Sales of vehicles in the automotive industry tend to be cyclical in many markets, which may expose us to further volatility as we expand and adjust our operations and retail strategies. Moreover, the COVID-19 pandemic may negatively impact the transportation and automotive industries long-term. It is uncertain as to how such macroeconomic factors will impact us as a company that has been experiencing growth and increasing market share in an industry that has globally been experiencing a recent decline in sales.

***Our suppliers may fail to deliver components according to schedules, prices, quality and volumes that are acceptable to us, or we may be unable to manage these components effectively.***

Our products contain thousands of parts that we purchase globally from hundreds of mostly single-source direct suppliers, generally without long-term supply agreements. This exposes us to multiple potential sources of component shortages, such as those that we experienced in 2012 and 2016 with our Model S and Model X ramps. Unexpected changes in business conditions, materials pricing, labor issues, wars, governmental changes, tariffs, natural disasters such as the March 2011 earthquakes in Japan, health epidemics such as the global COVID-19 pandemic, trade and shipping disruptions and other factors beyond our or our suppliers' control could also affect these suppliers' ability to deliver components to us or to remain solvent and operational. For example, a global shortage of microchips has been reported since early 2021, and the impact to us is yet unknown. The unavailability of any component or supplier could result in production delays, idle manufacturing facilities, product design changes and loss of access to important technology and tools for producing and supporting our products. Moreover, significant increases in our production, such as for Model 3 and Model Y, or product design changes by us have required and may in the future require us to procure additional components in a short amount of time. Our suppliers may not be willing or able to sustainably meet our timelines or our cost, quality and volume needs, or to do so may cost us more, which may require us to replace them with other sources. Finally, we have limited vehicle manufacturing experience outside of the Fremont Factory and we may experience issues increasing the level of localized procurement at our Gigafactory Shanghai and at future factories such as Gigafactory Berlin and Gigafactory Texas. While we believe that we will be able to secure additional or alternate sources or develop our own replacements for most of our components, there is no assurance that we will be able to do so quickly or at all. Additionally, we may be unsuccessful in our continuous efforts to negotiate with existing suppliers to obtain cost reductions and avoid unfavorable changes to terms, source less expensive suppliers for certain parts and redesign certain parts to make them less expensive to produce. Any of these occurrences may harm our business, prospects, financial condition and operating results.

As the scale of our vehicle production increases, we will also need to accurately forecast, purchase, warehouse and transport components at high volumes to our manufacturing facilities and servicing locations internationally. If we are unable to accurately match the timing and quantities of component purchases to our actual needs or successfully implement automation, inventory management and other systems to accommodate the increased complexity in our supply chain and parts management, we may incur unexpected production disruption, storage, transportation and write-off costs, which may harm our business and operating results.

***We may be unable to meet our projected construction timelines, costs and production ramps at new factories, or we may experience difficulties in generating and maintaining demand for products manufactured there.***

Our ability to increase production of our vehicles on a sustained basis, make them affordable globally by accessing local supply chains and workforces and streamline delivery logistics is dependent on the construction and ramp of Gigafactory Shanghai, Gigafactory Berlin and Gigafactory Texas. The construction of and commencement and ramp of production at these factories are subject to a number of uncertainties inherent in all new manufacturing operations, including ongoing compliance with regulatory requirements, procurement and maintenance of construction, environmental and operational licenses and approvals for additional expansion, potential supply chain constraints, hiring, training and retention of qualified employees and the pace of bringing production equipment and processes online with the capability to manufacture high-quality units at scale. For example, we are currently constructing Gigafactory Berlin under conditional permits. Moreover, we intend to incorporate sequential design and manufacturing changes into vehicles manufactured at each new factory. We have limited experience to date with developing and implementing vehicle manufacturing innovations outside of the Fremont Factory, as we only recently began production at Gigafactory Shanghai. In particular, the majority of our design and engineering resources are currently located in California. In order to meet our expectations for our new factories, we must expand and manage localized design and engineering talent and resources. If we experience any issues or delays in meeting our projected timelines, costs, capital efficiency and production capacity for our new factories, expanding and managing teams to implement iterative design and production changes there, maintaining and complying with the terms of any debt financing that we obtain to fund them or generating and maintaining demand for the vehicles we manufacture there, our business, prospects, operating results and financial condition may be harmed.



***We will need to maintain and significantly grow our access to battery cells, including through the development and manufacture of our own cells, and control our related costs.***

We are dependent on the continued supply of lithium-ion battery cells for our vehicles and energy storage products, and we will require substantially more cells to grow our business according to our plans. Currently, we rely on suppliers such as Panasonic for these cells. However, we have to date fully qualified only a very limited number of such suppliers and have limited flexibility in changing suppliers. Any disruption in the supply of battery cells from our suppliers could limit production of our vehicles and energy storage products. In the long term, we intend to supplement cells from our suppliers with cells manufactured by us, which we believe will be more efficient, manufacturable at greater volumes and cost-effective than currently available cells. However, our efforts to develop and manufacture such battery cells have required and may require significant investments, and there can be no assurance that we will be able to achieve these targets in the timeframes that we have planned or at all. If we are unable to do so, we may have to curtail our planned vehicle and energy storage product production or procure additional cells from suppliers at potentially greater costs, either of which may harm our business and operating results.

In addition, the cost of battery cells, whether manufactured by our suppliers or by us, depends in part upon the prices and availability of raw materials such as lithium, nickel, cobalt and/or other metals. The prices for these materials fluctuate and their available supply may be unstable, depending on market conditions and global demand for these materials, including as a result of increased global production of electric vehicles and energy storage products. Any reduced availability of these materials may impact our access to cells and any increases in their prices may reduce our profitability if we cannot recoup the increased costs through increased vehicle prices. Moreover, any such attempts to increase product prices may harm our brand, prospects and operating results.

***We face strong competition for our products and services from a growing list of established and new competitors.***

The worldwide automotive market is highly competitive today and we expect it will become even more so in the future. For example, Model 3 and Model Y face competition from existing and future automobile manufacturers in the extremely competitive entry-level premium sedan and compact SUV markets. A significant and growing number of established and new automobile manufacturers, as well as other companies, have entered or are reported to have plans to enter the market for electric and other alternative fuel vehicles, including hybrid, plug-in hybrid and fully electric vehicles, as well as the market for self-driving technology and other vehicle applications and software platforms. In some cases, our competitors offer or will offer electric vehicles in important markets such as China and Europe, and/or have announced an intention to produce electric vehicles exclusively at some point in the future. Many of our competitors have significantly greater or better-established resources than we do to devote to the design, development, manufacturing, distribution, promotion, sale and support of their products. Increased competition could result in our lower vehicle unit sales, price reductions, revenue shortfalls, loss of customers and loss of market share, which may harm our business, financial condition and operating results.

We also face competition in our energy generation and storage business from other manufacturers, developers, installers and service providers of competing energy systems, as well as from large utilities. Decreases in the retail or wholesale prices of electricity from utilities or other renewable energy sources could make our products less attractive to customers and lead to an increased rate of residential customer defaults under our existing long-term leases and PPAs.

## **Risks Related to Our Operations**

***We may experience issues with lithium-ion cells or other components manufactured at Gigafactory Nevada, which may harm the production and profitability of our vehicle and energy storage products.***

Our plan to grow the volume and profitability of our vehicles and energy storage products depends on significant lithium-ion battery cell production by our partner Panasonic at Gigafactory Nevada. Although Panasonic has a long track record of producing high-quality cells at significant volume at its factories in Japan, it has relatively limited experience with cell production at Gigafactory Nevada, which began in 2017. Moreover, although Panasonic is co-located with us at Gigafactory Nevada, it is free to make its own operational decisions, such as its determination to temporarily suspend its manufacturing there in response to the COVID-19 pandemic. In addition, we produce several vehicle components, such as battery modules and packs incorporating the cells produced by Panasonic for Model 3 and Model Y and drive units (including to support Gigafactory Shanghai production), at Gigafactory Nevada, and we also manufacture energy storage products there. In the past, some of the manufacturing lines for certain product components took longer than anticipated to ramp to their full capacity, and additional bottlenecks may arise in the future as we continue to increase the production rate and introduce new lines. If we or Panasonic are unable to or otherwise do not maintain and grow our respective operations at Gigafactory Nevada production, or if



we are unable to do so cost-effectively or hire and retain highly-skilled personnel there, our ability to manufacture our products profitably would be limited, which may harm our business and operating results.

Finally, the high volumes of lithium-ion cells and battery modules and packs manufactured at Gigafactory Nevada are stored and recycled at our various facilities. Any mishandling of battery cells may cause disruption to the operation of such facilities. While

we have implemented safety procedures related to the handling of the cells, there can be no assurance that a safety issue or fire related to the cells would not disrupt our operations. Any such disruptions or issues may harm our brand and business.

***We face risks associated with maintaining and expanding our international operations, including unfavorable and uncertain regulatory, political, economic, tax and labor conditions.***

We are subject to legal and regulatory requirements, political uncertainty and social, environmental and economic conditions in numerous jurisdictions, over which we have little control and which are inherently unpredictable. Our operations in such jurisdictions, particularly as a company based in the U.S., create risks relating to conforming our products to regulatory and safety requirements and charging and other electric infrastructures; organizing local operating entities; establishing, staffing and managing foreign business locations; attracting local customers; navigating foreign government taxes, regulations and permit requirements; enforceability of our contractual rights; trade restrictions, customs regulations, tariffs and price or exchange controls; and preferences in foreign nations for domestically manufactured products. Such conditions may increase our costs, impact our ability to sell our products and require significant management attention, and may harm our business if we unable to manage them effectively.

***Our business may suffer if our products or features contain defects, fail to perform as expected or take longer than expected to become fully functional.***

If our products contain design or manufacturing defects that cause them not to perform as expected or that require repair, or certain features of our vehicles such as new Autopilot or FSD features take longer than expected to become enabled, are legally restricted or become subject to onerous regulation, our ability to develop, market and sell our products and services may be harmed, and we may experience delivery delays, product recalls, product liability, breach of warranty and consumer protection claims and significant warranty and other expenses. In particular, our products are highly dependent on software, which is inherently complex and may contain latent defects or errors or be subject to external attacks. Issues experienced by our customers have included those related to the Model S and Model X 17-inch display screen, the panoramic roof and the 12-volt battery in the Model S, the seats and doors in the Model X and the operation of solar panels installed by us. Although we attempt to remedy any issues we observe in our products as effectively and rapidly as possible, such efforts may not be timely, may hamper production or may not completely satisfy our customers. While we have performed extensive internal testing on our products and features, we currently have a limited frame of reference by which to evaluate their long-term quality, reliability, durability and performance characteristics. There can be no assurance that we will be able to detect and fix any defects in our products prior to their sale to or installation for customers.

***We may be required to defend or insure against product liability claims.***

The automobile industry generally experiences significant product liability claims, and as such we face the risk of such claims in the event our vehicles do not perform or are claimed to not have performed as expected. As is true for other automakers, our vehicles have been involved and we expect in the future will be involved in accidents resulting in death or personal injury, and such accidents where Autopilot or FSD features are engaged are the subject of significant public attention. We have experienced and we expect to continue to face claims arising from or related to misuse or claimed failures of such new technologies that we are pioneering. In addition, the battery packs that we produce make use of lithium-ion cells. On rare occasions, lithium-ion cells can rapidly release the energy they contain by venting smoke and flames in a manner that can ignite nearby materials as well as other lithium-ion cells. While we have designed our battery packs to passively contain any single cell's release of energy without spreading to neighboring cells, there can be no assurance that a field or testing failure of our vehicles or other battery packs that we produce will not occur, in particular due to a high-speed crash. Likewise, as our solar energy systems and energy storage products generate and store electricity, they have the potential to fail or cause injury to people or property. Any product liability claim may subject us to lawsuits and substantial monetary damages, product recalls or redesign efforts, and even a meritless claim may require us to defend it, all of which may generate negative publicity and be expensive and time-consuming. In most jurisdictions, we generally self-insure against the risk of product liability claims for vehicle exposure, meaning that any product liability claims will likely have to be paid from company funds and not by insurance.

***We will need to maintain public credibility and confidence in our long-term business prospects in order to succeed.***

In order to maintain and grow our business, we must maintain credibility and confidence among customers, suppliers, analysts, investors, ratings agencies and other parties in our long-term financial viability and business prospects. Maintaining such confidence may be challenging due to our limited operating history relative to established competitors; customer unfamiliarity with our products; any delays we may experience in scaling manufacturing, delivery and service operations to meet demand; competition and uncertainty regarding the future of electric vehicles or our other products and services; our quarterly production and sales performance compared with

market expectations; and other factors including those over which we have no control. In particular, Tesla's products, business, results of operations, statements and actions are well-publicized by a range of third parties. Such attention includes frequent criticism, which is often exaggerated or unfounded, such as speculation regarding the sufficiency or stability of our management team. Any such negative perceptions, whether caused by us or not, may harm our business and make it more difficult to raise additional funds if needed.

***We may be unable to effectively grow, or manage the compliance, residual value, financing and credit risks related to, our various financing programs.***

We offer financing arrangements for our vehicles in North America, Europe and Asia primarily through various financial institutions. We also currently offer vehicle financing arrangements directly through our local subsidiaries in certain markets. Depending on the country, such arrangements are available for specified models and may include operating leases directly with us under which we typically receive only a very small portion of the total vehicle purchase price at the time of lease, followed by a stream of payments over the term of the lease. We have also offered various arrangements for customers of our solar energy systems whereby they pay us a fixed payment to lease or finance the purchase of such systems or purchase electricity generated by them. If we do not successfully monitor and comply with applicable national, state and/or local financial regulations and consumer protection laws governing these transactions, we may become subject to enforcement actions or penalties.

The profitability of any directly-leased vehicles returned to us at the end of their leases depends on our ability to accurately project our vehicles' residual values at the outset of the leases, and such values may fluctuate prior to the end of their terms depending on various factors such as supply and demand of our used vehicles, economic cycles and the pricing of new vehicles. We have made in the past and may make in the future certain adjustments to our prices from time to time in the ordinary course of business, which may impact the residual values of our vehicles and reduce the profitability of our vehicle leasing program. The funding and growth of this program also relies on our ability to secure adequate financing and/or business partners. If we are unable to adequately fund our leasing program through internal funds, partners or other financing sources, and compelling alternative financing programs are not available for our customers who may expect or need such options, we may be unable to grow our vehicle deliveries. Furthermore, if our vehicle leasing business grows substantially, our business may suffer if we cannot effectively manage the resulting greater levels of residual risk.

Similarly, we have provided resale value guarantees to vehicle customers and partners for certain financing programs, under which such counterparties may sell their vehicles back to us at certain points in time at pre-determined amounts. However, actual resale values are subject to fluctuations over the term of the financing arrangements, such as from the vehicle pricing changes discussed above. If the actual resale values of any vehicles resold or returned to us pursuant to these programs are materially lower than the pre-determined amounts we have offered, our financial condition and operating results may be harmed.

Finally, our vehicle and solar energy system financing programs and our energy storage sales programs also expose us to customer credit risk. In the event of a widespread economic downturn or other catastrophic event, our customers may be unable or unwilling to satisfy their payment obligations to us on a timely basis or at all. If a significant number of our customers default, we may incur substantial credit losses and/or impairment charges with respect to the underlying assets.

***We must manage ongoing obligations under our agreement with the Research Foundation for the State University of New York relating to our Gigafactory New York.***

We are party to an operating lease and a research and development agreement through the SUNY Foundation. These agreements provide for the construction and use of our Gigafactory New York, which we have primarily used for the development and production of our Solar Roof and other solar products and components, energy storage components and Supercharger components, and for other lessor-approved functions. Under this agreement, we are obligated to, among other things, meet employment targets as well as specified minimum numbers of personnel in the State of New York and in Buffalo, New York and spend or incur \$5.00 billion in combined capital, operational expenses, costs of goods sold and other costs in the State of New York during the 10-year period beginning April 30, 2018. As we temporarily suspended most of our manufacturing operations at Gigafactory New York pursuant to a New York State executive order issued in March 2020 as a result of the COVID-19 pandemic, we were granted a one-year deferral of our obligation to be compliant with our applicable targets under such agreement on April 30, 2020, which was memorialized in an amendment to our agreement with the SUNY Foundation in July 2020. While we expect to have and grow significant operations at Gigafactory New York and the surrounding Buffalo area, any failure by us in any year over the course of the term of the agreement to meet all applicable future obligations may result in our obligation to pay a "program payment" of \$41 million to the SUNY Foundation for such year, the termination of our lease at Gigafactory New York which may require us to pay additional penalties and/or the need to adjust certain of our operations, in particular our production ramp of the Solar Roof or other components. Any of the foregoing events may harm our business, financial condition and operating results.

***If we are unable to attract, hire and retain key employees and qualified personnel, our ability to compete may be harmed.***

The loss of the services of any of our key employees or any significant portion of our workforce could disrupt our operations or delay the development, introduction and ramp of our products and services. In particular, we are highly dependent on the services of Elon Musk, our Chief Executive Officer. None of our key employees is bound by

an employment agreement for any specific term and we may not be able to successfully attract and retain senior leadership necessary to grow our business. Our future success also depends upon our ability to attract, hire and retain a large number of engineering, manufacturing, marketing, sales and delivery, service, installation, technology and support personnel, especially to support our planned high-volume product sales, market and geographical

expansion and technological innovations. Recruiting efforts, particularly for senior employees, may be time-consuming, which may delay the execution of our plans. If we are not successful in managing these risks, our business, financial condition and operating results may be harmed.

Employees may leave Tesla or choose other employers over Tesla due to various factors, such as a very competitive labor market for talented individuals with automotive or technology experience, or any negative publicity related to us. In California, Nevada and other regions where we have operations, there is increasing competition for individuals with skillsets needed for our business, including specialized knowledge of electric vehicles, software engineering, manufacturing engineering and electrical and building construction expertise. Moreover, we may be impacted by perceptions relating to reductions in force that we have conducted in the past in order to optimize our organizational structure and reduce costs and the departure of certain senior personnel for various reasons. Likewise, as a result of our temporary suspension of various U.S. manufacturing operations in the first half of 2020, in April 2020 we temporarily furloughed certain hourly employees and reduced most salaried employees' base salaries. We also compete with both mature and prosperous companies that have far greater financial resources than we do and start-ups and emerging companies that promise short-term growth opportunities.

Finally, our compensation philosophy for all of our personnel reflects our startup origins, with an emphasis on equity-based awards and benefits in order to closely align their incentives with the long-term interests of our stockholders. We periodically seek and obtain approval from our stockholders for future increases to the number of awards available under our equity incentive and employee stock purchase plans. If we are unable to obtain the requisite stockholder approvals for such future increases, we may have to expend additional cash to compensate our employees and our ability to retain and hire qualified personnel may be harmed.

***We are highly dependent on the services of Elon Musk, our Chief Executive Officer.***

We are highly dependent on the services of Elon Musk, our Chief Executive Officer and largest stockholder. Although Mr. Musk spends significant time with Tesla and is highly active in our management, he does not devote his full time and attention to Tesla. Mr. Musk also currently serves as Chief Executive Officer and Chief Technical Officer of Space Exploration Technologies Corp., a developer and manufacturer of space launch vehicles, and is involved in other emerging technology ventures.

***We must manage risks relating to our information technology systems and the threat of intellectual property theft, data breaches and cyber-attacks.***

We must continue to expand and improve our information technology systems as our operations grow, such as product data management, procurement, inventory management, production planning and execution, sales, service and logistics, dealer management, financial, tax and regulatory compliance systems. This includes the implementation of new internally developed systems and the deployment of such systems in the U.S. and abroad. We must also continue to maintain information technology measures designed to protect us against intellectual property theft, data breaches, sabotage and other external or internal cyber-attacks or misappropriation. However, the implementation, maintenance, segregation and improvement of these systems require significant management time, support and cost, and there are inherent risks associated with developing, improving and expanding our core systems as well as implementing new systems and updating current systems, including disruptions to the related areas of business operation. These risks may affect our ability to manage our data and inventory, procure parts or supplies or manufacture, sell, deliver and service products, adequately protect our intellectual property or achieve and maintain compliance with, or realize available benefits under, tax laws and other applicable regulations.

Moreover, if we do not successfully implement, maintain or expand these systems as planned, our operations may be disrupted, our ability to accurately and/or timely report our financial results could be impaired and deficiencies may arise in our internal control over financial reporting, which may impact our ability to certify our financial results. Moreover, our proprietary information or intellectual property could be compromised or misappropriated and our reputation may be adversely affected. If these systems or their functionality do not operate as we expect them to, we may be required to expend significant resources to make corrections or find alternative sources for performing these functions.

***Any unauthorized control or manipulation of our products' systems could result in loss of confidence in us and our products.***

Our products contain complex information technology systems. For example, our vehicles and energy storage products are designed with built-in data connectivity to accept and install periodic remote updates from us to improve or update their functionality. While we have implemented security measures intended to prevent unauthorized access to our information technology networks, our products and their systems, malicious entities have reportedly attempted, and may attempt in the future, to gain unauthorized access to modify, alter and use such networks, products and systems to gain control of, or to change, our products' functionality, user interface and performance characteristics or to gain access to data stored in or generated by our products. We encourage reporting of potential vulnerabilities in the security of our products through our security vulnerability reporting policy, and we aim to

remedy any reported and verified vulnerability. However, there can be no assurance that any vulnerabilities will not be exploited before they can be identified, or that our remediation efforts are or will be successful.

Any unauthorized access to or control of our products or their systems or any loss of data could result in legal claims or government investigations. In addition, regardless of their veracity, reports of unauthorized access to our products, their systems or data, as well as other factors that may result in the perception that our products, their systems or data are capable of being hacked, may harm our brand, prospects and operating results. We have been the subject of such reports in the past.

***Our business may be adversely affected by any disruptions caused by union activities.***

It is not uncommon for employees of certain trades at companies such as us to belong to a union, which can result in higher employee costs and increased risk of work stoppages. Moreover, regulations in some jurisdictions outside of the U.S. mandate employee participation in industrial collective bargaining agreements and work councils with certain consultation rights with respect to the relevant companies' operations. Although we work diligently to provide the best possible work environment for our employees, they may still decide to join or seek recognition to form a labor union, or we may be required to become a union signatory. From time to time, labor unions have engaged in campaigns to organize certain of our operations, as part of which such unions have filed unfair labor practice charges against us with the National Labor Relations Board, and they may do so in the future. In September 2019, an administrative law judge issued a recommended decision for Tesla on certain issues and against us on certain others. The National Labor Relations Board has not yet adopted the recommendation and we have appealed certain aspects of the recommended decision. Any unfavorable ultimate outcome for Tesla may have a negative impact on the perception of Tesla's treatment of our employees. Furthermore, we are directly or indirectly dependent upon companies with unionized work forces, such as suppliers and trucking and freight companies. Any work stoppages or strikes organized by such unions could delay the manufacture and sale of our products and may harm our business and operating results.

***We may choose to or be compelled to undertake product recalls or take other similar actions.***

As a manufacturing company, we must manage the risk of product recalls with respect to our products. Recalls for our vehicles have resulted from, for example, industry-wide issues with airbags from a particular supplier, concerns of corrosion in Model S and Model X power steering assist motor bolts, certain suspension failures in Model S and Model X and issues with Model S and Model X media control units. In addition to recalls initiated by us for various causes, testing of or investigations into our products by government regulators or industry groups may compel us to initiate product recalls or may result in negative public perceptions about the safety of our products, even if we disagree with the defect determination or have data that shows the actual safety risk to be non-existent. In the future, we may voluntarily or involuntarily initiate recalls if any of our products are determined by us or a regulator to contain a safety defect or be noncompliant with applicable laws and regulations, such as U.S. federal motor vehicle safety standards. Such recalls, whether voluntary or involuntary or caused by systems or components engineered or manufactured by us or our suppliers, could result in significant expense, supply chain complications and service burdens, and may harm our brand, business, prospects, financial condition and operating results.

***Our current and future warranty reserves may be insufficient to cover future warranty claims.***

We provide a manufacturer's warranty on all new and used Tesla vehicles we sell. We also provide certain warranties with respect to the energy generation and storage systems we sell, including on their installation and maintenance, and for components not manufactured by us, we generally pass through to our customers the applicable manufacturers' warranties. As part of our energy generation and storage system contracts, we may provide the customer with performance guarantees that warrant that the underlying system will meet or exceed the minimum energy generation or other energy performance requirements specified in the contract. Under these performance guarantees, we bear the risk of electricity production or other performance shortfalls, even if they result from failures in components from third party manufacturers. These risks are exacerbated in the event such manufacturers cease operations or fail to honor their warranties.

If our warranty reserves are inadequate to cover future warranty claims on our products, our financial condition and operating results may be harmed. Warranty reserves include our management's best estimates of the projected costs to repair or to replace items under warranty, which are based on actual claims incurred to date and an estimate of the nature, frequency and costs of future claims. Such estimates are inherently uncertain and changes to our historical or projected experience, especially with respect to products such as Model 3, Model Y and Solar Roof that we have recently introduced and/or that we expect to produce at significantly greater volumes than our past products, may cause material changes to our warranty reserves in the future.

***Our insurance coverage strategy may not be adequate to protect us from all business risks.***

We may be subject, in the ordinary course of business, to losses resulting from products liability, accidents, acts of God and other claims against us, for which we may have no insurance coverage. As a general matter, we do not maintain as much insurance coverage as many other companies do, and in some cases, we do not maintain any at all. Additionally, the policies that we do have may include significant deductibles or self-insured retentions, policy



limitations and exclusions, and we cannot be certain that our insurance coverage will be sufficient to cover all future losses or claims against us. A loss that is uninsured or which exceeds policy limits may require us to pay substantial amounts, which may harm our financial condition and operating results.

***There is no guarantee that we will have sufficient cash flow from our business to pay our substantial indebtedness or that we will not incur additional indebtedness.***

As of December 31, 2020, we and our subsidiaries had outstanding \$10.57 billion in aggregate principal amount of indebtedness (see Note 12, *Debt*, to the consolidated financial statements included elsewhere in this Annual Report on Form 10-K). Our substantial consolidated indebtedness may increase our vulnerability to any generally adverse economic and industry conditions. We and our subsidiaries may, subject to the limitations in the terms of our existing and future indebtedness, incur additional debt, secure existing or future debt or recapitalize our debt.

Holders of convertible senior notes issued by us or our subsidiary may convert such notes at their option prior to the scheduled maturities of the respective convertible senior notes under certain circumstances pursuant to the terms of such notes. Upon conversion of the applicable convertible senior notes, we will be obligated to deliver cash and/or shares pursuant to the terms of such notes. For example, as our stock price has significantly increased recently, we have seen higher levels of early conversions of such “in-the-money” convertible senior notes. Moreover, holders of such convertible senior notes may have the right to require us to repurchase their notes upon the occurrence of a fundamental change pursuant to the terms of such notes.

Our ability to make scheduled payments of the principal and interest on our indebtedness when due, to make payments upon conversion or repurchase demands with respect to our convertible senior notes or to refinance our indebtedness as we may need or desire, depends on our future performance, which is subject to economic, financial, competitive and other factors beyond our control. Our business may not continue to generate cash flow from operations in the future sufficient to satisfy our obligations under our existing indebtedness and any future indebtedness we may incur, and to make necessary capital expenditures. If we are unable to generate such cash flow, we may be required to adopt one or more alternatives, such as reducing or delaying investments or capital expenditures, selling assets, refinancing or obtaining additional equity capital on terms that may be onerous or highly dilutive. Our ability to refinance existing or future indebtedness will depend on the capital markets and our financial condition at such time. In addition, our ability to make payments may be limited by law, by regulatory authority or by agreements governing our future indebtedness. We may not be able to engage in these activities on desirable terms or at all, which may result in a default on our existing or future indebtedness and harm our financial condition and operating results.

***Our debt agreements contain covenant restrictions that may limit our ability to operate our business.***

The terms of certain of our credit facilities, including our senior asset-based revolving credit agreement, contain, and any of our other future debt agreements may contain, covenant restrictions that limit our ability to operate our business, including restrictions on our ability to, among other things, incur additional debt or issue guarantees, create liens, repurchase stock, or make other restricted payments, and make certain voluntary prepayments of specified debt. In addition, under certain circumstances we are required to comply with a fixed charge coverage ratio. As a result of these covenants, our ability to respond to changes in business and economic conditions and engage in beneficial transactions, including to obtain additional financing as needed, may be restricted. Furthermore, our failure to comply with our debt covenants could result in a default under our debt agreements, which could permit the holders to accelerate our obligation to repay the debt. If any of our debt is accelerated, we may not have sufficient funds available to repay it.

***Additional funds may not be available to us when we need or want them.***

Our business and our future plans for expansion are capital-intensive, and the specific timing of cash inflows and outflows may fluctuate substantially from period to period. We may need or want to raise additional funds through the issuance of equity, equity-related or debt securities or through obtaining credit from financial institutions to fund, together with our principal sources of liquidity, the costs of developing and manufacturing our current or future products, to pay any significant unplanned or accelerated expenses or for new significant strategic investments, or to refinance our significant consolidated indebtedness, even if not required to do so by the terms of such indebtedness. We cannot be certain that additional funds will be available to us on favorable terms when required, or at all. If we cannot raise additional funds when we need them, our financial condition, results of operations, business and prospects could be materially and adversely affected.

***We may be negatively impacted by any early obsolescence of our manufacturing equipment.***

We depreciate the cost of our manufacturing equipment over their expected useful lives. However, product cycles or manufacturing technology may change periodically, and we may decide to update our products or manufacturing processes more quickly than expected. Moreover, improvements in engineering and manufacturing expertise and efficiency may result in our ability to manufacture our products using less of our currently installed equipment. Alternatively, as we ramp and mature the production of our products to higher levels, we may discontinue the use of already installed equipment in favor of different or additional equipment. The useful life of any equipment

that would be retired early as a result would be shortened, causing the depreciation on such equipment to be accelerated, and our results of operations may be harmed.

***We hold and may acquire digital assets that may be subject to volatile market prices, impairment and unique risks of loss.***

In January 2021, we updated our investment policy to provide us with more flexibility to further diversify and maximize returns on our cash that is not required to maintain adequate operating liquidity. As part of the policy, which was duly approved by the Audit Committee of our Board of Directors, we may invest a portion of such cash in certain alternative reserve assets including digital assets, gold bullion, gold exchange-traded funds and other assets as specified in the future. Thereafter, we invested an aggregate \$1.50 billion in bitcoin under this policy and may acquire and hold digital assets from time to time or long-term. Moreover, we expect to begin accepting bitcoin as a form of payment for our products in the near future, subject to applicable laws and initially on a limited basis, which we may or may not liquidate upon receipt.

The prices of digital assets have been in the past and may continue to be highly volatile, including as a result of various associated risks and uncertainties. For example, the prevalence of such assets is a relatively recent trend, and their long-term adoption by investors, consumers and businesses is unpredictable. Moreover, their lack of a physical form, their reliance on technology for their creation, existence and transactional validation and their decentralization may subject their integrity to the threat of malicious attacks and technological obsolescence. Finally, the extent to which securities laws or other regulations apply or may apply in the future to such assets is unclear and may change in the future. If we hold digital assets and their values decrease relative to our purchase prices, our financial condition may be harmed.

Moreover, digital assets are currently considered indefinite-lived intangible assets under applicable accounting rules, meaning that any decrease in their fair values below our carrying values for such assets at any time subsequent to their acquisition will require us to recognize impairment charges, whereas we may make no upward revisions for any market price increases until a sale, which may adversely affect our operating results in any period in which such impairment occurs. Moreover, there is no guarantee that future changes in GAAP will not require us to change the way we account for digital assets held by us.

Finally, as intangible assets without centralized issuers or governing bodies, digital assets have been, and may in the future be, subject to security breaches, cyberattacks or other malicious activities, as well as human errors or computer malfunctions that may result in the loss or destruction of private keys needed to access such assets. While we intend to take all reasonable measures to secure any digital assets, if such threats are realized or the measures or controls we create or implement to secure our digital assets fail, it could result in a partial or total misappropriation or loss of our digital assets, and our financial condition and operating results may be harmed.

***We are exposed to fluctuations in currency exchange rates.***

We transact business globally in multiple currencies and have foreign currency risks related to our revenue, costs of revenue, operating expenses and localized subsidiary debt denominated in currencies other than the U.S. dollar, currently primarily the Chinese yuan, euro, Canadian dollar and British pound. To the extent we have significant revenues denominated in such foreign currencies, any strengthening of the U.S. dollar would tend to reduce our revenues as measured in U.S. dollars, as we have historically experienced. In addition, a portion of our costs and expenses have been, and we anticipate will continue to be, denominated in foreign currencies, including the Chinese yuan and Japanese yen. If we do not have fully offsetting revenues in these currencies and if the value of the U.S. dollar depreciates significantly against these currencies, our costs as measured in U.S. dollars as a percent of our revenues will correspondingly increase and our margins will suffer. Moreover, while we undertake limited hedging activities intended to offset the impact of currency translation exposure, it is impossible to predict or eliminate such impact. As a result, our operating results may be harmed.

***We may need to defend ourselves against intellectual property infringement claims, which may be time-consuming and expensive.***

Our competitors or other third parties may hold or obtain patents, copyrights, trademarks or other proprietary rights that could prevent, limit or interfere with our ability to make, use, develop, sell or market our products and services, which could make it more difficult for us to operate our business. From time to time, the holders of such intellectual property rights may assert their rights and urge us to take licenses and/or may bring suits alleging infringement or misappropriation of such rights, which could result in substantial costs, negative publicity and management attention, regardless of merit. While we endeavor to obtain and protect the intellectual property rights that we expect will allow us to retain or advance our strategic initiatives, there can be no assurance that we will be able to adequately identify and protect the portions of intellectual property that are strategic to our business, or mitigate the risk of potential suits or other legal demands by our competitors. Accordingly, we may consider the entering into licensing agreements with respect to such rights, although no assurance can be given that such licenses can be obtained on acceptable terms or that litigation will not occur, and such licenses and associated litigation could significantly increase our operating expenses. In addition, if we are determined to have or believe there is a high

likelihood that we have infringed upon a third party's intellectual property rights, we may be required to cease making, selling or incorporating certain components or intellectual property into the goods and services we offer, to pay substantial damages and/or license royalties, to redesign our products and services and/or to establish and maintain alternative

branding for our products and services. In the event that we are required to take one or more such actions, our brand, business, financial condition and operating results may be harmed.

***Our operations could be adversely affected by events outside of our control, such as natural disasters, wars or health epidemics.***

We may be impacted by natural disasters, wars, health epidemics or other events outside of our control. For example, our corporate headquarters, the Fremont Factory and Gigafactory Nevada are located in seismically active regions in Northern California and Nevada, and our Gigafactory Shanghai is located in a flood-prone area. If major disasters such as earthquakes, floods or other events occur, or our information system or communications network breaks down or operates improperly, our headquarters and production facilities may be seriously damaged, or we may have to stop or delay production and shipment of our products. In addition, the global COVID-19 pandemic has impacted economic markets, manufacturing operations, supply chains, employment and consumer behavior in nearly every geographic region and industry across the world, and we have been, and may in the future be, adversely affected as a result. We may incur expenses or delays relating to such events outside of our control, which could have a material adverse impact on our business, operating results and financial condition.

**Risks Related to Government Laws and Regulations**

***Demand for our products and services may be impacted by the status of government and economic incentives supporting the development and adoption of such products.***

Government and economic incentives that support the development and adoption of electric vehicles in the U.S. and abroad, including certain tax exemptions, tax credits and rebates, may be reduced, eliminated or exhausted from time to time. For example, a \$7,500 federal tax credit that was available in the U.S. for the purchase of our vehicles was reduced in phases during and ultimately ended in 2019. We believe that this sequential phase-out likely pulled forward some vehicle demand into the periods preceding each reduction. Moreover, previously available incentives favoring electric vehicles in areas including Ontario, Canada, Germany, Hong Kong, Denmark and California have expired or were cancelled or temporarily unavailable, and in some cases were not eventually replaced or reinstituted, which may have negatively impacted sales. Any similar developments could have some negative impact on demand for our vehicles, and we and our customers may have to adjust to them.

In addition, certain governmental rebates, tax credits and other financial incentives that are currently available with respect to our solar and energy storage product businesses allow us to lower our costs and encourage customers to buy our products and investors to invest in our solar financing funds. However, these incentives may expire when the allocated funding is exhausted, reduced or terminated as renewable energy adoption rates increase, sometimes without warning. For example, the U.S. federal government currently offers certain tax credits for the installation of solar power facilities and energy storage systems that are charged from a co-sited solar power facility; however, these tax credits are currently scheduled to decline and/or expire in 2023 and beyond. Likewise, in jurisdictions where net metering is currently available, our customers receive bill credits from utilities for energy that their solar energy systems generate and export to the grid in excess of the electric load they use. The benefit available under net metering has been or has been proposed to be reduced, altered or eliminated in several jurisdictions, and has also been contested and may continue to be contested before the FERC. Any reductions or terminations of such incentives may harm our business, prospects, financial condition and operating results by making our products less competitive for potential customers, increasing our cost of capital and adversely impacting our ability to attract investment partners and to form new financing funds for our solar and energy storage assets.

Finally, we and our fund investors claim these U.S. federal tax credits and certain state incentives in amounts based on independently appraised fair market values of our solar and energy storage systems. Nevertheless, the relevant governmental authorities have audited such values and in certain cases have determined that these values should be lower, and they may do so again in the future. Such determinations may result in adverse tax consequences and/or our obligation to make indemnification or other payments to our funds or fund investors.

***We are subject to evolving laws and regulations that could impose substantial costs, legal prohibitions or unfavorable changes upon our operations or products.***

As we grow our manufacturing operations in additional regions, we are or will be subject to complex environmental, manufacturing, health and safety laws and regulations at numerous jurisdictional levels in the U.S., China, Germany and other locations abroad, including laws relating to the use, handling, storage, recycling, disposal and/or human exposure to hazardous materials, product material inputs and post-consumer products and with respect to constructing, expanding and maintaining our facilities. The costs of compliance, including remediations of any discovered issues and any changes to our operations mandated by new or amended laws, may be significant, and any failures to comply could result in significant expenses, delays or fines. We are also subject to laws and regulations applicable to the supply, manufacture, import, sale and service of automobiles both domestically and abroad. For

example, in countries outside of the U.S., we are required to meet standards relating to vehicle safety, fuel economy and

emissions that are often materially different from requirements in the U.S., thus resulting in additional investment into the vehicles and systems to ensure regulatory compliance in those countries. This process may include official review and certification of our vehicles by foreign regulatory agencies prior to market entry, as well as compliance with foreign reporting and recall management systems requirements.

In particular, we offer in our vehicles Autopilot and FSD features that today assist drivers with certain tedious and potentially dangerous aspects of road travel, but which currently require drivers to remain fully engaged in the driving operation. We are continuing to develop our FSD technology with the goal of achieving full self-driving capability in the future. There are a variety of international, federal and state regulations that may apply to self-driving vehicles, which include many existing vehicle standards that were not originally intended to apply to vehicles that may not have a driver. Such regulations continue to rapidly change, which increases the likelihood of a patchwork of complex or conflicting regulations, or may delay products or restrict self-driving features and availability, which could adversely affect our business.

Finally, as a manufacturer, installer and service provider with respect to solar generation and energy storage systems and a supplier of electricity generated and stored by the solar energy and energy storage systems we install for customers, we are impacted by federal, state and local regulations and policies concerning electricity pricing, the interconnection of electricity generation and storage equipment with the electric grid and the sale of electricity generated by third party-owned systems. If regulations and policies that adversely impact the interconnection or use of our solar and energy storage systems are introduced, they could deter potential customers from purchasing our solar and energy storage products, threaten the economics of our existing contracts and cause us to cease solar and energy storage system sales and operations in the relevant jurisdictions, which may harm our business, financial condition and operating results.

***Any failure by us to comply with a variety of U.S. and international privacy and consumer protection laws may harm us.***

Any failure by us or our vendor or other business partners to comply with our public privacy notice or with federal, state or international privacy, data protection or security laws or regulations relating to the processing, collection, use, retention, security and transfer of personally identifiable information could result in regulatory or litigation-related actions against us, legal liability, fines, damages, ongoing audit requirements and other significant costs. Substantial expenses and operational changes may be required in connection with maintaining compliance with such laws, and in particular certain emerging privacy laws are still subject to a high degree of uncertainty as to their interpretation and application. For example, in May 2018, the General Data Protection Regulation began to fully apply to the processing of personal information collected from individuals located in the European Union, and has created new compliance obligations and significantly increased fines for noncompliance. Similarly, as of January 2020, the California Consumer Privacy Act imposes certain legal obligations on our use and processing of personal information related to California residents. Finally, new privacy and cybersecurity laws are coming into effect in China. Notwithstanding our efforts to protect the security and integrity of our customers' personal information, we may be required to expend significant resources to comply with data breach requirements if, for example, third parties improperly obtain and use the personal information of our customers or we otherwise experience a data loss with respect to customers' personal information. A major breach of our network security and systems may result in fines, penalties and damages and harm our brand, prospects and operating results.

***We could be subject to liability, penalties and other restrictive sanctions and adverse consequences arising out of certain governmental investigations and proceedings.***

We are cooperating with certain government investigations as discussed in Note 16, *Commitments and Contingencies*, to the consolidated financial statements included elsewhere in this Annual Report on Form 10-K. To our knowledge, no government agency in any such ongoing investigation has concluded that any wrongdoing occurred. However, we cannot predict the outcome or impact of any such ongoing matters, and there exists the possibility that we could be subject to liability, penalties and other restrictive sanctions and adverse consequences if the SEC, the U.S. Department of Justice or any other government agency were to pursue legal action in the future. Moreover, we expect to incur costs in responding to related requests for information and subpoenas, and if instituted, in defending against any governmental proceedings.

For example, on October 16, 2018, the U.S. District Court for the Southern District of New York entered a final judgment approving the terms of a settlement filed with the Court on September 29, 2018, in connection with the actions taken by the SEC relating to Mr. Musk's statement on August 7, 2018 that he was considering taking Tesla private. Pursuant to the settlement, we, among other things, paid a civil penalty of \$20 million, appointed an independent director as the chair of our board of directors, appointed two additional independent directors to our board of directors and made further enhancements to our disclosure controls and other corporate governance-related matters. On April 26, 2019, this settlement was amended to clarify certain of the previously-agreed disclosure procedures, which was subsequently approved by the Court. All other terms of the prior settlement were reaffirmed without modification. Although we intend to continue to comply with the terms and requirements of the settlement, if



there is a lack of compliance or an alleged lack of compliance, additional enforcement actions or other legal proceedings may be instituted against us.

***We may face regulatory challenges to or limitations on our ability to sell vehicles directly.***

While we intend to continue to leverage our most effective sales strategies, including sales through our website, we may not be able to sell our vehicles through our own stores in certain states in the U.S. with laws that may be interpreted to impose limitations on this direct-to-consumer sales model. It has also been asserted that the laws in some states limit our ability to obtain dealer licenses from state motor vehicle regulators, and such assertions persist. In certain locations, decisions by regulators permitting us to sell vehicles have been and may be challenged by dealer associations and others as to whether such decisions comply with applicable state motor vehicle industry laws. We have prevailed in many of these lawsuits and such results have reinforced our continuing belief that state laws were not intended to apply to a manufacturer that does not have franchise dealers. In some states, there have also been regulatory and legislative efforts by dealer associations to propose laws that, if enacted, would prevent us from obtaining dealer licenses in their states given our current sales model. A few states have passed legislation that clarifies our ability to operate, but at the same time limits the number of dealer licenses we can obtain or stores that we can operate. The application of state laws applicable to our operations continues to be difficult to predict.

Internationally, there may be laws in jurisdictions we have not yet entered or laws we are unaware of in jurisdictions we have entered that may restrict our sales or other business practices. Even for those jurisdictions we have analyzed, the laws in this area can be complex, difficult to interpret and may change over time. Continued regulatory limitations and other obstacles interfering with our ability to sell vehicles directly to consumers may harm our financial condition and operating results.

**Risks Related to the Ownership of Our Common Stock**

***The trading price of our common stock is likely to continue to be volatile.***

The trading price of our common stock has been highly volatile and could continue to be subject to wide fluctuations in response to various factors, some of which are beyond our control. Our common stock has experienced over the last 52 weeks an intra-day trading high of \$900.40 per share and a low of \$70.10 per share, as adjusted to give effect to the reflect the five-for-one stock split effected in the form of a stock dividend in August 2020 (the “Stock Split”). The stock market in general, and the market for technology companies in particular, has experienced extreme price and volume fluctuations that have often been unrelated or disproportionate to the operating performance of those companies. In particular, a large proportion of our common stock has been historically and may in the future be traded by short sellers which may put pressure on the supply and demand for our common stock, further influencing volatility in its market price. Public perception and other factors outside of our control may additionally impact the stock price of companies like us that garner a disproportionate degree of public attention, regardless of actual operating performance. In addition, in the past, following periods of volatility in the overall market or the market price of our shares, securities class action litigation has been filed against us. While we defend such actions vigorously, any judgment against us or any future stockholder litigation could result in substantial costs and a diversion of our management’s attention and resources.

***Our financial results may vary significantly from period to period due to fluctuations in our operating costs and other factors.***

We expect our period-to-period financial results to vary based on our operating costs, which we anticipate will fluctuate as the pace at which we continue to design, develop and manufacture new products and increase production capacity by expanding our current manufacturing facilities and adding future facilities, may not be consistent or linear between periods. Additionally, our revenues from period to period may fluctuate as we introduce existing products to new markets for the first time and as we develop and introduce new products. As a result of these factors, we believe that quarter-to-quarter comparisons of our financial results, especially in the short term, are not necessarily meaningful and that these comparisons cannot be relied upon as indicators of future performance. Moreover, our financial results may not meet expectations of equity research analysts, ratings agencies or investors, who may be focused only on short-term quarterly financial results. If any of this occurs, the trading price of our stock could fall substantially, either suddenly or over time.

***We may fail to meet our publicly announced guidance or other expectations about our business, which could cause our stock price to decline.***

We may provide from time to time guidance regarding our expected financial and business performance. Correctly identifying key factors affecting business conditions and predicting future events is inherently an uncertain process, and our guidance may not ultimately be accurate and has in the past been inaccurate in certain respects, such as the timing of new product manufacturing ramps. Our guidance is based on certain assumptions such as those relating to anticipated production and sales volumes (which generally are not linear throughout a given period), average sales prices, supplier and commodity costs and planned cost reductions. If our guidance varies from actual results due to our assumptions not being met or the impact on our financial performance that could occur as a result of various risks and uncertainties, the market value of our common stock could decline significantly.



***Transactions relating to our convertible senior notes may dilute the ownership interest of existing stockholders, or may otherwise depress the price of our common stock.***

The conversion of some or all of the convertible senior notes issued by us or our subsidiaries would dilute the ownership interests of existing stockholders to the extent we deliver shares upon conversion of any of such notes by their holders, and we may be required to deliver a significant number of shares. Any sales in the public market of the common stock issuable upon such conversion could adversely affect their prevailing market prices. In addition, the existence of the convertible senior notes may encourage short selling by market participants because the conversion of such notes could be used to satisfy short positions, or the anticipated conversion of such notes into shares of our common stock could depress the price of our common stock.

Moreover, in connection with certain of the convertible senior notes, we entered into convertible note hedge transactions, which are expected to reduce the potential dilution and/or offset potential cash payments we are required to make in excess of the principal amount upon conversion of the applicable notes. We also entered into warrant transactions with the hedge counterparties, which could separately have a dilutive effect on our common stock to the extent that the market price per share of our common stock exceeds the applicable strike price of the warrants on the applicable expiration dates. In addition, the hedge counterparties or their affiliates may enter into various transactions with respect to their hedge positions, which could also affect the market price of our common stock or the convertible senior notes.

***If Elon Musk were forced to sell shares of our common stock that he has pledged to secure certain personal loan obligations, such sales could cause our stock price to decline.***

Certain banking institutions have made extensions of credit to Elon Musk, our Chief Executive Officer, a portion of which was used to purchase shares of common stock in certain of our public offerings and private placements at the same prices offered to third-party participants in such offerings and placements. We are not a party to these loans, which are partially secured by pledges of a portion of the Tesla common stock currently owned by Mr. Musk. If the price of our common stock were to decline substantially, Mr. Musk may be forced by one or more of the banking institutions to sell shares of Tesla common stock to satisfy his loan obligations if he could not do so through other means. Any such sales could cause the price of our common stock to decline further.

***Anti-takeover provisions contained in our governing documents, applicable laws and our convertible senior notes could impair a takeover attempt.***

Our certificate of incorporation and bylaws afford certain rights and powers to our board of directors that may facilitate the delay or prevention of an acquisition that it deems undesirable. We are also subject to Section 203 of the Delaware General Corporation Law and other provisions of Delaware law that limit the ability of stockholders in certain situations to effect certain business combinations. In addition, the terms of our convertible senior notes may require us to repurchase such notes in the event of a fundamental change, including a takeover of our company. Any of the foregoing provisions and terms that has the effect of delaying or deterring a change in control could limit the opportunity for our stockholders to receive a premium for their shares of our common stock, and could also affect the price that some investors are willing to pay for our common stock.

**ITEM 1B. UNRESOLVED STAFF COMMENTS**

None.

**ITEM 2. PROPERTIES**

We are headquartered in Palo Alto, California. Our principal facilities include a large number of properties in North America, Europe and Asia utilized for manufacturing and assembly, warehousing, engineering, retail and service locations, Supercharger sites and administrative and sales offices. Our facilities are used to support both of our reporting segments, and are suitable and adequate for the conduct of our business. We primarily lease such facilities with the exception of some manufacturing facilities. The following table sets forth the location of our primary owned and leased manufacturing facilities.

Primary Manufacturing Facilities	Location	Owned or Leased
Fremont Factory	Fremont, California	Owned
Gigafactory Nevada	Sparks, Nevada	Owned
Gigafactory New York	Buffalo, New York	Leased
Gigafactory Shanghai	Shanghai, China	*

Gigafactory Berlin	Grunheide, Germany	Owned
Gigafactory Texas	Austin, Texas	Owned

- \* We own the building and the land use rights with an initial term of 50 years. The land use rights are treated as operating lease right-of-use assets.

### ITEM 3. LEGAL PROCEEDINGS

For a description of our material pending legal proceedings, please see Note 16, *Commitments and Contingencies*, to the consolidated financial statements included elsewhere in this Annual Report on Form 10-K.

In addition, each of the matters below is being disclosed pursuant to Item 103 of Regulation S-K because it relates to environmental regulations and aggregate civil penalties that could potentially exceed \$1 million. We believe that any proceeding that is material to our business or financial condition is likely to have potential penalties far in excess of such amount.

The Bay Area Air Quality Management District (“BAAQMD”) has issued notices of violation to us relating to air permitting and related compliance for the Fremont Factory, but has not initiated formal proceedings. We have disputed certain of these allegations and have asserted that there has been no related adverse community or environmental impact. While we have not yet resolved this matter, we remain in close communication with BAAQMD with respect to it. We do not currently expect any material adverse impact on our business.

The German Umweltbundesamt has issued our subsidiary in Germany a notice and fine in the amount of 12 million euro alleging its non-compliance under applicable laws relating to market participation notifications and take-back obligations with respect to end-of-life battery products required thereunder. This is primarily relating to administrative requirements, but Tesla has continued to take back battery packs, and although we cannot predict the outcome of this matter, including the final amount of any penalties, we have filed our objection and it is not expected to have a material adverse impact on our business.

We have also received a follow-up information request from the EPA under Section 114(a) of the Clean Air Act of 1963, as amended (the “Clean Air Act”). The EPA is reviewing the compliance of our Fremont Factory operations with applicable requirements under the Clean Air Act, and we are working with the EPA in responding its requests for information. While the outcome of this matter cannot be determined at this time, it is not currently expected to have a material adverse impact on our business.

### ITEM 4. MINE SAFETY DISCLOSURES

Not applicable.

## PART II

### ITEM 5. MARKET FOR REGISTRANT'S COMMON EQUITY, RELATED STOCKHOLDER MATTERS AND ISSUER PURCHASES OF EQUITY SECURITIES

#### Market Information

Our common stock has traded on The NASDAQ Global Select Market under the symbol "TSLA" since it began trading on June 29, 2010. Our initial public offering was priced at \$3.40 per share on June 28, 2010 as adjusted to give effect to the Stock Split.

#### Holders

As of February 1, 2021, there were 5,353 holders of record of our common stock. A substantially greater number of holders of our common stock are "street name" or beneficial holders, whose shares are held by banks, brokers and other financial institutions.

#### Dividend Policy

We have never declared or paid cash dividends on our common stock. We currently do not anticipate paying any cash dividends in the foreseeable future. Any future determination to declare cash dividends will be made at the discretion of our board of directors, subject to applicable laws, and will depend on our financial condition, results of operations, capital requirements, general business conditions and other factors that our board of directors may deem relevant.

#### Stock Performance Graph

*This performance graph shall not be deemed "filed" for purposes of Section 18 of the Securities Exchange Act of 1934, as amended (the "Exchange Act"), or incorporated by reference into any filing of Tesla, Inc. under the Securities Act of 1933, as amended (the "Securities Act"), or the Exchange Act, except as shall be expressly set forth by specific reference in such filing.*

The following graph shows a comparison, from January 1, 2016 through December 31, 2020, of the cumulative total return on our common stock, The NASDAQ Composite Index and a group of all public companies sharing the same SIC code as us, which is SIC code 3711, "Motor Vehicles and Passenger Car Bodies" (Motor Vehicles and Passenger Car Bodies Public Company Group). Such returns are based on historical results and are not intended to suggest future performance. Data for The NASDAQ Composite Index and the Motor Vehicles and Passenger Car Bodies Public Company Group assumes an investment of \$100 on January 1, 2016 and reinvestment of dividends. We have never declared or paid cash dividends on our common stock nor do we anticipate paying any such cash dividends in the foreseeable future.

#### Unregistered Sales of Equity Securities and Use of Proceeds

None.

## Purchases of Equity Securities by the Issuer and Affiliated Purchasers

None.

## ITEM 6. SELECTED CONSOLIDATED FINANCIAL DATA

The following selected consolidated financial data should be read in conjunction with “Management’s Discussion and Analysis of Financial Condition and Results of Operations” and the consolidated financial statements and the related notes included elsewhere in this Annual Report on Form 10-K and from the historical consolidated financial statements not included herein to fully understand factors that may affect the comparability of the information presented below (in millions, except per share data).

	Year Ended December 31,				
	2020	2019 (3)	2018 (2)	2017	2016 (1)
<b>Consolidated Statements of Operations Data:</b>					
Total revenues	\$ 31,536	\$ 24,578	\$ 21,461	\$ 11,759	\$ 7,000
Gross profit	\$ 6,630	\$ 4,069	\$ 4,042	\$ 2,223	\$ 1,599
Income (loss) from operations	\$ 1,994	\$ (69)	\$ (388)	\$ (1,632)	\$ (667)
Net income (loss) attributable to common stockholders	\$ 721	\$ (862)	\$ (976)	\$ (1,962)	\$ (675)
Net income (loss) per share of common stock attributable to common stockholders (4)					
Basic	\$ 0.74	\$ (0.98)	\$ (1.14)	\$ (2.37)	\$ (0.94)
Diluted	\$ 0.64	\$ (0.98)	\$ (1.14)	\$ (2.37)	\$ (0.94)
Weighted average shares used in computing net income (loss) per share of common stock (4)					
Basic	933	887	853	829	721
Diluted	1,083	887	853	829	721

	As of December 31,				
	2020	2019 (3)	2018 (2)	2017	2016 (1)
<b>Consolidated Balance Sheet Data:</b>					
Working capital (deficit)	\$ 12,469	\$ 1,436	\$ (1,686)	\$ (1,104)	\$ 433
Total assets	\$ 52,148	\$ 34,309	\$ 29,740	\$ 28,655	\$ 22,664
Total long-term liabilities	\$ 14,170	\$ 15,532	\$ 13,434	\$ 15,348	\$ 10,923

- We acquired SolarCity Corporation (“SolarCity”) on November 21, 2016. SolarCity’s financial results have
- (1) been included in our financial results from the acquisition date as previously reported in our Annual Report on Form 10-K for the year ended December 31, 2016.
  - (2) We adopted ASC 606 in 2018. Prior periods have not been revised. For further details, refer to Note 2, *Summary of Significant Accounting Policies*, of the notes to the consolidated financial statements included in our Annual Report on Form 10-K for the year ended December 31, 2018.
  - (3) We adopted ASC 842 in 2019. Prior periods have not been revised. For further details, refer to Note 2, *Summary of Significant Accounting Policies*, of the notes to the consolidated financial statements included in our Annual Report on Form 10-K for the year ended December 31, 2019.
  - (4) Prior period results have been adjusted to give effect to the Stock Split. See Note 1, *Overview*, of the notes to the consolidated financial statements included elsewhere in this Annual Report on Form 10-K for further details.



## **ITEM 7. MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS**

*The following discussion and analysis should be read in conjunction with the consolidated financial statements and the related notes included elsewhere in this Annual Report on Form 10-K. For discussion related to changes in financial condition and the results of operations for fiscal year 2018-related items, refer to Part II, Item 7.*

*Management's Discussion and Analysis of Financial Condition and Results of Operations in our Annual Report on Form 10-K for fiscal year 2019, which was filed with the Securities and Exchange Commission on February 13, 2020.*

### **Overview and 2020 Highlights**

Our mission is to accelerate the world's transition to sustainable energy. We design, develop, manufacture, lease and sell high-performance fully electric vehicles, solar energy generation systems and energy storage products. We also offer maintenance, installation, operation, financial and other services related to our products.

In 2020, we produced 509,737 vehicles and delivered 499,647 vehicles. We are currently focused on increasing vehicle production and capacity, developing and ramping our battery cell technology, increasing the affordability of our vehicles, expanding our global infrastructure and introducing our next vehicles.

In 2020, we deployed 3.02 GWh of energy storage products and 205 megawatts of solar energy systems. We are currently focused on ramping production of energy storage products, improving our Solar Roof installation capability and efficiency and increasing market share of retrofit solar energy systems.

In 2020, we recognized total revenues of \$31.54 billion, representing an increase of \$6.96 billion compared to the prior year. We continue to ramp production, build new manufacturing capacity and expand our operations to enable increased deliveries and deployments of our products and further revenue growth.

In 2020, our net income attributable to common stockholders was \$721 million, representing a favorable change of \$1.58 billion compared to the prior year. In 2020, our operating margin was 6.3%, representing a favorable change of 6.6% compared to the prior year. We continue to focus on operational efficiencies, while we have seen an acceleration of non-cash stock-based compensation expense due to a rapid increase in our market capitalization and updates to our business outlook.

We ended 2020 with \$19.38 billion in cash and cash equivalents, representing an increase of \$13.12 billion from the end of 2019. Our cash flows from operating activities during 2020 was \$5.94 billion, compared to \$2.41 billion during 2019, and capital expenditures amounted to \$3.16 billion during 2020, compared to \$1.33 billion during 2019. Sustained growth has allowed our business to generally fund itself, but we will continue a number of capital-intensive projects in upcoming periods.

### **Management Opportunities, Challenges and Risks and 2021 Outlook**

#### *Impact of COVID-19 Pandemic*

There continues to be worldwide impact from the COVID-19 pandemic. While we have been relatively successful in navigating such impact to date, we have previously been affected by temporary manufacturing closures, employment and compensation adjustments, and impediments to administrative activities supporting our product deliveries and deployments. There are also ongoing related risks to our business depending on the progression of the pandemic, and recent trends in certain regions have indicated potential returns to limited or closed government functions, business activities and person-to-person interactions. Global trade conditions and consumer trends may further adversely impact us and our industries. For example, pandemic-related issues have exacerbated port congestion and intermittent supplier shutdowns and delays, resulting in additional expenses to expedite delivery of critical parts. Similarly, increased demand for personal electronics has created a shortfall of microchip supply, and it is yet unknown how we may be impacted. Please see the "Results of Operations" section of this Item below and certain risk factors described in Part I, Item 1A, Risk Factors in this Annual Report on Form 10-K, particularly the first risk factor included there, for more detailed descriptions of the impact and risks to our business.

We cannot predict the duration or direction of current global trends from this pandemic, the sustained impact of which is largely unknown, is rapidly evolving and has varied across geographic regions. Ultimately, we continue to monitor macroeconomic conditions to remain flexible and to optimize and evolve our business as appropriate, and we will have to accurately project demand and infrastructure requirements globally and deploy our production, workforce and other resources accordingly.

### *Automotive—Production*

The following is a summary of the status of production of each of our announced vehicle models in production and under development, as of the date of this Annual Report on Form 10-K:

<b>Production Location</b>	<b>Vehicle Model(s)</b>	<b>Production Status</b>
Fremont Factory	Model S and Model X	Active
	Model 3 and Model Y	Active
Gigafactory Shanghai	Model 3 and Model Y	Active
Gigafactory Berlin	Model Y	Constructing manufacturing facilities
Gigafactory Texas	Model Y	Constructing manufacturing facilities
TBD	Cybertruck	In development
	Tesla Semi	In development
	Tesla Roadster	In development

We recently announced updated versions of Model S and Model X featuring a redesigned powertrain and other improvements. In 2021, we are focused on ramping these models on new manufacturing equipment, as well as production rates of Model 3 and Model Y, to at least the capacity that we have installed. The next phase of production growth will depend on the construction of Gigafactory Berlin and Gigafactory Texas, each of which is progressing as planned for deliveries beginning in 2021. Our goal is to continuously decrease production costs and increase the affordability of our vehicles. We are continuing to develop and manufacture our own battery cells, with which we are targeting high-volume output, lower capital and production costs and longer range. As cell supply is critical to our business, coupling this strategy with cells from our suppliers will help us stay ahead of any potential constraints.

However, these plans are subject to uncertainties inherent in establishing and ramping manufacturing operations, which may be exacerbated by the number of concurrent international projects and any future impact from events outside of our control such as the COVID-19 pandemic and any industry-wide component constraints. Moreover, we must meet ambitious technological targets with our plans for battery cells as well as for iterative manufacturing and design improvements for our vehicles with each new factory.

### *Automotive—Demand and Sales*

Our cost reduction efforts and additional localized procurement and manufacturing are key to our vehicles' affordability, and for example have allowed us to competitively price our vehicles in China. In addition to opening new factories in 2021, we will also continue to generate demand and brand awareness by improving our vehicles' functionality, including Autopilot, FSD and software features, and introducing anticipated future vehicles. Moreover, we expect to benefit from ongoing electrification of the automotive sector and increasing environmental awareness.

However, we operate in a cyclical industry that is sensitive to trade, environmental and political uncertainty, all of which may also be compounded by any future global impact from the COVID-19 pandemic. On the other hand, there have been recent signs of recovery from competitors that experienced downturns in 2020, meaning that we will have to continue to execute well to maintain the momentum that we have gained relative to an ever-growing competitive landscape.

### *Automotive—Deliveries and Customer Infrastructure*

As our deliveries increase, we must work constantly to prevent our vehicle delivery capability from becoming a bottleneck on our total deliveries. Situating our factories closer to local markets should mitigate the strain on our deliveries. In any case, as we expand, we will have to continue to increase and staff our delivery, servicing and charging infrastructure, maintain our vehicle reliability and optimize our Supercharger locations to ensure cost-effectiveness and customer satisfaction. In particular, we remain focused on increasing the capability and efficiency of our servicing operations.

### *Energy Generation and Storage Demand, Production and Deployment*

The long-term success of this business is dependent upon increasing margins through greater volumes. We continue to increase the production of our energy storage products to meet high levels of demand. For Powerwall, better availability and growing grid stability concerns drive higher interest, and cross-selling with our residential

solar energy products will continue to benefit both product lines. We remain committed to increasing our retrofit solar energy business by offering a low-cost and simplified online ordering experience. In addition, we are working to improve our installation capabilities for Solar Roof by on-boarding and training a large number of installers and reducing the installation time dramatically. As these product lines grow, we will have to maintain adequate battery cell supply for our energy storage products and hire additional personnel, particularly skilled electricians to support the ramp of Solar Roof.

### *Cash Flow and Capital Expenditure Trends*

Our capital expenditures are typically difficult to project beyond the short term given the number and breadth of our core projects at any given time, and uncertainties in future global market conditions resulting from the COVID-19 pandemic currently makes projections more challenging. We are simultaneously ramping new products in the new Model S and Model X, Model Y and Solar Roof, constructing or ramping manufacturing facilities on three continents and piloting the development and manufacture of new battery cell technologies, and the pace of our capital spend may vary depending on overall priority among projects, the pace at which we meet milestones, production adjustments to and among our various products, increased capital efficiencies and the addition of new projects. Owing and subject to the foregoing as well as the pipeline of announced projects under development and all other continuing infrastructure growth, we currently expect our capital expenditures to be \$4.50 to \$6.00 billion in 2021 and each of the next two fiscal years.

Our business has recently been consistently generating cash flow from operations in excess of our level of capital spend, and with better working capital management resulting in shorter days sales outstanding than days payable outstanding, our sales growth is also facilitating positive cash generation. On the other hand, we are likely to see heightened levels of capital expenditures during certain periods depending on the specific pace of our capital-intensive projects. Moreover, as our stock price has significantly increased recently, we have seen higher levels of early conversions of “in-the-money” convertible senior notes, which obligates us to deliver cash and or shares pursuant to the terms of those notes. Overall, we expect our ability to be self-funding to continue as long as macroeconomic factors support current trends in our sales. We also opportunistically strengthened our liquidity further through an at-the-market offering of common stock in December 2020, with net proceeds to us of approximately \$4.99 billion.

### *Operating Expense Trends*

As long as we see expanding sales, and excluding the potential impact of non-cash stock compensation expense attributable to the 2018 CEO Performance Award and impairment charges on certain assets as explained below, we generally expect operating expenses relative to revenues to decrease as we additionally increase operational efficiency and process automation.

In March 2018, our stockholders approved a performance-based stock option award to our CEO (the “2018 CEO Performance Award”), consisting of 12 vesting tranches contingent on the achievement of specified market capitalization and operational milestones. We incur non-cash stock-based compensation expense for each tranche only after the related operational milestone initially becomes probable of being met based on a subjective assessment of our future financial performance, and if this happens following the grant date, we record at such time a cumulative catch-up expense that may be significant based on the length of time elapsed from the grant date. Moreover, the remaining expense for that tranche is ratably recorded over the period remaining until the later of (i) the expected achievement of the relevant operational milestone (if it has not yet been achieved) and (ii) the expected achievement of the related market capitalization milestone (if it has not yet been achieved). Upon vesting of a tranche, all remaining associated expense is recognized immediately. Because the expected market capitalization achievements are generally later than the related expected operational milestone achievements, the achievement of the former earlier than expected may increase the magnitude of any catch-up expense and/or accelerate the rate at which the remaining expense is recognized. During 2020, several operational milestones became probable and several tranches vested, including as a result of our market capitalization increasing rapidly, resulting in the recognition or acceleration of related expense earlier than anticipated and within a relatively short period of time. See Note 14, *Equity Incentive Plans—2018 CEO Performance Award*, to the consolidated financial statements included elsewhere in this Annual Report on Form 10-K for further details regarding the stock-based compensation relating to the 2018 CEO Performance Award. As our market capitalization is unpredictable and our financial performance improves, it is possible that the earlier-than-planned recognition of such expenses will continue in the near term.

In January 2021, we updated our investment policy to provide us with more flexibility to further diversify and maximize returns on our cash that is not required to maintain adequate operating liquidity. As part of the policy, we may invest a portion of such cash in certain specified alternative reserve assets. Thereafter, we invested an aggregate \$1.50 billion in bitcoin under this policy. Moreover, we expect to begin accepting bitcoin as a form of payment for our products in the near future, subject to applicable laws and initially on a limited basis, which we may or may not liquidate upon receipt. Digital assets are considered indefinite-lived intangible assets under applicable accounting rules. Accordingly, any decrease in their fair values below our carrying values for such assets at any time subsequent to their acquisition will require us to recognize impairment charges, whereas we may make no upward revisions for any market price increases until a sale. As we currently intend to hold these assets long-term, these charges may negatively impact our profitability in the periods in which such impairments occur even if the overall market values of these assets increase.

## **Critical Accounting Policies and Estimates**

The consolidated financial statements are prepared in accordance with accounting principles generally accepted in the U.S. ("GAAP"). The preparation of the consolidated financial statements requires us to make estimates and assumptions that affect the reported amounts of assets, liabilities, revenues, costs and expenses and related disclosures. We base our estimates on historical experience, as appropriate, and on various other assumptions that we believe to be reasonable under the circumstances. Changes in the accounting estimates are reasonably likely to occur from period to period. Accordingly, actual results could differ significantly from the estimates made by our management. We evaluate our estimates and assumptions on an ongoing basis. To the extent that there are material differences between these estimates and actual results, our future financial statement presentation, financial condition, results of operations and cash flows may be affected.

Due to the COVID-19 pandemic, there has been uncertainty and disruption in the global economy and financial markets. The estimates used for, but not limited to, determining significant economic incentive for resale value guarantee arrangements, sales return reserves, the collectability of accounts receivable, inventory valuation, fair value of long-lived assets, goodwill, fair value of financial instruments, fair value and residual value of operating lease vehicles and solar energy systems subject to leases could be impacted. We have assessed the impact and are not aware of any specific events or circumstances that required an update to our estimates and assumptions or materially affected the carrying value of our assets or liabilities as of the date of issuance of this Annual Report on Form 10-K. These estimates may change as new events occur and additional information is obtained. Actual results could differ materially from these estimates under different assumptions or conditions.

### *Revenue Recognition*

#### *Automotive Segment*

#### Automotive Sales Revenue

##### Automotive Sales without Resale Value Guarantee

Automotive sales revenue includes revenues related to deliveries of new vehicles and pay-per-use charges, and specific other features and services that meet the definition of a performance obligation under ASC 606, including access to our Supercharger network, internet connectivity, FSD features and over-the-air software updates. We recognize revenue on automotive sales upon delivery to the customer, which is when the control of a vehicle transfers. Payments are typically received at the point control transfers or in accordance with payment terms customary to the business. Other features and services such as access to our Supercharger network, internet connectivity and over-the-air software updates are provisioned upon control transfer of a vehicle and recognized over time on a straight-line basis as we have a stand-ready obligation to deliver such services to the customer. We recognize revenue related to these other features and services over the performance period, which is generally the expected ownership life of the vehicle or the eight-year life of the vehicle. Revenue related to FSD features is recognized when functionality is delivered to the customer. For our obligations related to automotive sales, we estimate standalone selling price by considering costs used to develop and deliver the service, third-party pricing of similar options and other information that may be available.

At the time of revenue recognition, we reduce the transaction price and record a sales return reserve against revenue for estimated variable consideration related to future product returns based on historical experience. In addition, any fees that are paid or payable by us to a customer's lender when we arrange the financing are recognized as an offset against automotive sales revenue.

Costs to obtain a contract mainly relate to commissions paid to our sales personnel for the sale of vehicles. Commissions are not paid on other obligations such as access to our Supercharger network, internet connectivity, FSD features and over-the-air software updates. As our contract costs related to automotive sales are typically fulfilled within one year, the costs to obtain a contract are expensed as incurred. Amounts billed to customers related to shipping and handling are classified as automotive sales revenue, and we have elected to recognize the cost for freight and shipping when control over vehicles, parts or accessories have transferred to the customer as an expense in cost of automotive sales revenue. Our policy is to exclude taxes collected from a customer from the transaction price of automotive contracts.

##### Automotive Sales with Resale Value Guarantee or a Buyback Option

We offer resale value guarantees or similar buy-back terms to certain international customers who purchase vehicles and who finance their vehicles through one of our specified commercial banking partners. We also offer resale value guarantees in connection with automotive sales to certain leasing partners. Under these programs, we receive full payment for the vehicle sales price at the time of delivery and our counterparty has the option of selling their vehicle back to us during the guarantee period, which currently is generally at the end of the term of the applicable loan or financing program, for a pre-determined resale value.



With the exception of the *Vehicle Sales to Leasing Partners with a Resale Value Guarantee and a Buyback Option* program discussed within the *Automotive Leasing* section below, we recognize revenue when control transfers upon delivery to customers in accordance with ASC 606 as a sale with a right of return as we do not believe the customer has a significant economic incentive to exercise the resale value guarantee provided to them at contract inception. The process to determine whether there is a significant economic incentive includes a comparison of a vehicle's estimated market value at the time the option is exercisable with the guaranteed resale value to determine the customer's economic incentive to exercise. The performance obligations and the pattern of recognizing automotive sales with resale value guarantees are consistent with automotive sales without resale value guarantees with the exception of our estimate for sales return reserve. Sales return reserves for automotive sales with resale value guarantees are estimated based on historical experience plus consideration for expected future market values. On a quarterly basis, we assess the estimated market values of vehicles under our buyback options program to determine whether there have been changes to the likelihood of future product returns. As we accumulate more data related to the buyback values of our vehicles or as market conditions change, there may be material changes to their estimated values.

#### Automotive Regulatory Credits

We earn tradable credits in the operation of our automotive business under various regulations related to ZEVs, greenhouse gas, fuel economy and clean fuel. We sell these credits to other regulated entities who can use the credits to comply with emission standards and other regulatory requirements. Payments for automotive regulatory credits are typically received at the point control transfers to the customer, or in accordance with payment terms customary to the business. We recognize revenue on the sale of automotive regulatory credits at the time control of the regulatory credits is transferred to the purchasing party as automotive sales revenue in the consolidated statements of operations.

#### Automotive Leasing Revenue

##### Direct Vehicle Operating Leasing Program

We have outstanding leases under our direct vehicle operating leasing programs in the U.S., Canada and in certain countries in Europe. Qualifying customers are permitted to lease a vehicle directly from Tesla for up to 48 months. At the end of the lease term, customers are required to return the vehicles to us or for Model S and Model X leases in certain regions, may opt to purchase the vehicles for a pre-determined residual value. We account for these leasing transactions as operating leases. We record leasing revenues to automotive leasing revenue on a straight-line basis over the contractual term, and we record the depreciation of these vehicles to cost of automotive leasing revenue.

Our policy is to exclude taxes collected from a customer from the transaction price of automotive contracts.

##### Vehicle Sales to Leasing Partners with a Resale Value Guarantee and a Buyback Option

We offered buyback options in connection with automotive sales with resale value guarantees with certain leasing partner sales in the U.S. and where we expected the customer had a significant economic incentive to exercise the resale value guarantee provided to them at contract inception, we continued to recognize these transactions as operating leases. These transactions entailed a transfer of leases, which we had originated with an end-customer, to our leasing partner. As control of the vehicles had not been transferred in accordance with ASC 606, these transactions were accounted for as interest-bearing collateralized borrowings in accordance with ASC 840, *Leases*, prior to January 1, 2019. Under this program, cash was received for the full price of the vehicle and the collateralized borrowing value was generally recorded within resale value guarantees and the customer upfront down payment was recorded within deferred revenue. We amortize the deferred revenue amount to automotive leasing revenue on a straight-line basis over the option period and accrue interest expense based on our borrowing rate. We capitalized vehicles under this program to operating lease vehicles, net, on the consolidated balance sheets, and we record depreciation from these vehicles to cost of automotive leasing revenue during the period the vehicle is under a lease arrangement. Cash received for these vehicles, net of revenue recognized during the period, is classified as collateralized lease (repayments) borrowings within cash flows from financing activities in the consolidated statements of cash flows. With the adoption of ASC 842 on January 1, 2019, all new agreements under this program are accounted for as operating leases under ASC 842 and there was no material change in the timing and amount of revenue recognized over the term. Consequently, any cash flows for new agreements are classified as operating cash activities on the consolidated statements of cash flows.

At the end of the lease term, we settle our liability in cash by either purchasing the vehicle from the leasing partner for the buyback option amount or paying a shortfall to the option amount the leasing partner may realize on the sale of the vehicle. Any remaining balances within deferred revenue and resale value guarantee will be settled to automotive leasing revenue. The end customer can extend the lease for a period of up to 6 months. In cases where the leasing partner retains ownership of the vehicle after the end of our option period, we expense the net value of the leased vehicle to cost of automotive leasing revenue.





### Direct Sales-Type Leasing Program

We have outstanding direct leases and vehicles financed by us under loan arrangements accounted for as sales-type leases under ASC 842 in certain countries in Asia and Europe, which we introduced in volume during the third quarter of 2020. Depending on the specific program, customers may or may not have a right to return the vehicle to us during or at the end of the lease term. If the customer does not have a right to return, the customer will take title to the vehicle at the end of the lease term after making all contractual payments. Under the programs for which there is a right to return, the purchase option is reasonably certain to be exercised by the lessee and we therefore expect the customer to take title to the vehicle at the end of the lease term after making all contractual payments. Qualifying customers are permitted to lease a vehicle directly under these programs for up to 48 months. Our loan arrangements under these programs can have terms for up to 72 months. We recognize all revenue and costs associated with the sales-type lease as automotive leasing revenue and automotive leasing cost of revenue, respectively, upon delivery of the vehicle to the customer. Interest income based on the implicit rate in the lease is recorded to automotive leasing revenue over time as customers are invoiced on a monthly basis.

### *Energy Generation and Storage Segment*

#### Energy Generation and Storage Sales

Energy generation and storage sales revenue consists of the sale of solar energy systems and energy storage systems to residential, small commercial, and large commercial and utility grade customers, including solar subscription-based arrangements. Energy generation and storage sales revenue also includes revenue from agreements for solar energy systems and PPAs that commence after January 1, 2019, which is recognized as earned, based on the amount of capacity provided for solar energy systems or electricity delivered for PPAs at the contractual billing rates, assuming all other revenue recognition criteria have been met. Under the practical expedient available under ASC 606-10-55-18, we recognize revenue based on the value of the service which is consistent with the billing amount. Sales of solar energy systems to residential and small scale commercial customers consist of the engineering, design and installation of the system. Post-installation, residential and small scale commercial customers receive a proprietary monitoring system that captures and displays historical energy generation data. Residential and small scale commercial customers pay the full purchase price of the solar energy system upfront. Revenue for the design and installation obligation is recognized when control transfers, which is when we install a solar energy system and the system passes inspection by the utility or the authority having jurisdiction. Revenue for the monitoring service is recognized ratably as a stand-ready obligation over the warranty period of the solar energy system. Sales of energy storage systems to residential and small scale commercial customers consist of the installation of the energy storage system and revenue is recognized when control transfers, which is when the product has been delivered or, if we are performing installation, when installed and commissioned. Payment for such storage systems is made upon invoice or in accordance with payment terms customary to the business.

For large commercial and utility grade solar energy system and energy storage system sales which consist of the engineering, design and installation of the system, customers make milestone payments that are consistent with contract-specific phases of a project. Revenue from such contracts is recognized over time using the percentage of completion method based on cost incurred as a percentage of total estimated contract costs for energy storage system sales and as a percentage of total estimated labor hours for solar energy system sales. Certain large-scale commercial and utility grade solar energy system and energy storage system sales also include operations and maintenance service which are negotiated with the design and installation contracts and are thus considered to be a combined contract with the design and installation service. For certain large commercial and utility grade solar energy systems and energy storage systems where the percentage of completion method does not apply, revenue is recognized when control transfers, which is when the product has been delivered to the customer and commissioned for energy storage systems and when the project has received permission to operate from the utility for solar energy systems. Operations and maintenance service revenue is recognized ratably over the respective contract term for solar energy system sales and upon delivery of the service for energy storage system sales. Customer payments for such services are usually paid annually or quarterly in advance.

In instances where there are multiple performance obligations in a single contract, we allocate the consideration to the various obligations in the contract based on the relative standalone selling price method. Standalone selling prices are estimated based on estimated costs plus margin or by using market data for comparable products. Costs incurred on the sale of residential installations before the solar energy systems are completed are included as work in process within inventory in the consolidated balance sheets. Any fees that are paid or payable by us to a solar loan lender would be recognized as an offset against revenue. Costs to obtain a contract relate mainly to commissions paid to our sales personnel related to the sale of solar energy systems and energy storage systems. As our contract costs related to solar energy system and energy storage system sales are typically fulfilled within one year, the costs to obtain a contract are expensed as incurred.

As part of our solar energy system and energy storage system contracts, we may provide the customer with performance guarantees that warrant that the underlying system will meet or exceed the minimum energy generation or energy performance requirements specified in the contract. In certain instances, we may receive a bonus payment if the system performs above a specified level. Conversely, if a solar energy system or energy storage system does not meet the performance guarantee requirements, we may be required to pay liquidated damages. Other forms of variable consideration related to our large commercial and utility grade solar energy system and energy storage system contracts include variable customer payments that will be made based on our energy market participation activities. Such guarantees and variable customer payments represent a form of variable consideration and are estimated at contract inception at their most likely amount and updated at the end of each reporting period as additional performance data becomes available. Such estimates are included in the transaction price only to the extent that it is probable a significant reversal of revenue will not occur.

We record as deferred revenue any non-refundable amounts that are collected from customers related to fees charged for prepayments and remote monitoring service and operations and maintenance service, which is recognized as revenue ratably over the respective customer contract term.

#### Energy Generation and Storage Leasing

For revenue arrangements where we are the lessor under operating lease agreements for energy generation and storage products, we record lease revenue from minimum lease payments, including upfront rebates and incentives earned from such systems, on a straight-line basis over the life of the lease term, assuming all other revenue recognition criteria have been met. The difference between the payments received and the revenue recognized is recorded as deferred revenue or deferred asset on the consolidated balance sheet.

For solar energy systems where customers purchase electricity from us under PPAs prior to January 1, 2019, we have determined that these agreements should be accounted for as operating leases pursuant to ASC 840. Revenue is recognized based on the amount of electricity delivered at rates specified under the contracts, assuming all other revenue recognition criteria are met.

We record as deferred revenue any amounts that are collected from customers, including lease prepayments, in excess of revenue recognized and operations and maintenance service fees, which is recognized as revenue ratably over the respective customer contract term. Deferred revenue also includes the portion of rebates and incentives received from utility companies and various local and state government agencies, which is recognized as revenue over the lease term.

We capitalize initial direct costs from the execution of agreements for solar energy systems and PPAs, which include the referral fees and sales commissions, as an element of solar energy systems, net, and subsequently amortize these costs over the term of the related agreements.

#### *Inventory Valuation*

Inventories are stated at the lower of cost or net realizable value. Cost is computed using standard cost for vehicles and energy storage products, which approximates actual cost on a first-in, first-out basis. In addition, cost for solar energy systems is recorded using actual cost. We record inventory write-downs for excess or obsolete inventories based upon assumptions about current and future demand forecasts. If our inventory on-hand is in excess of our future demand forecast, the excess amounts are written-off.

We also review our inventory to determine whether its carrying value exceeds the net amount realizable upon the ultimate sale of the inventory. This requires us to determine the estimated selling price of our vehicles less the estimated cost to convert the inventory on-hand into a finished product. Once inventory is written-down, a new, lower cost basis for that inventory is established and subsequent changes in facts and circumstances do not result in the restoration or increase in that newly established cost basis.

Should our estimates of future selling prices or production costs change, additional and potentially material increases to this reserve may be required. A small change in our estimates may result in a material charge to our reported financial results.

## *Warranties*

We provide a manufacturer's warranty on all new and used vehicles and a warranty on the installation and components of the energy generation and storage systems we sell for periods typically between 10 to 25 years. We accrue a warranty reserve for the products sold by us, which includes our best estimate of the projected costs to repair or replace items under warranties and recalls when identified. These estimates are based on actual claims incurred to date and an estimate of the nature, frequency and costs of future claims. These estimates are inherently uncertain given our relatively short history of sales, and changes to our historical or projected warranty experience may cause material changes to the warranty reserve in the future. The warranty reserve does not include projected warranty costs associated with our vehicles subject to operating lease accounting and our solar energy systems under lease contracts or PPAs, as the costs to repair these warranty claims are expensed as incurred. The portion of the warranty reserve expected to be incurred within the next 12 months is included within accrued liabilities and other, while the remaining balance is included within other long-term liabilities on the consolidated balance sheets. Warranty expense is recorded as a component of cost of revenues in the consolidated statements of operations.

## *Stock-Based Compensation*

We use the fair value method of accounting for our stock options and restricted stock units ("RSUs") granted to employees and for our employee stock purchase plan (the "ESPP") to measure the cost of employee services received in exchange for the stock-based awards. The fair value of stock option awards with only service and/or performance conditions is estimated on the grant or offering date using the Black-Scholes option-pricing model. The Black-Scholes option-pricing model requires inputs such as the risk-free interest rate, expected term and expected volatility. These inputs are subjective and generally require significant judgment. The fair value of RSUs is measured on the grant date based on the closing fair market value of our common stock. The resulting cost is recognized over the period during which an employee is required to provide service in exchange for the awards, usually the vesting period, which is generally four years for stock options and RSUs and six months for the ESPP. Stock-based compensation expense is recognized on a straight-line basis, net of actual forfeitures in the period.

For performance-based awards, stock-based compensation expense is recognized over the expected performance achievement period of individual performance milestones when the achievement of each individual performance milestone becomes probable. For performance-based awards with a vesting schedule based entirely on the attainment of both performance and market conditions, stock-based compensation expense associated with each tranche is recognized over the longer of (i) the expected achievement period for the operational milestone for such tranche and (ii) the expected achievement period for the related market capitalization milestone determined on the grant date, beginning at the point in time when the relevant operational milestone is considered probable of being achieved. If such operational milestone becomes probable any time after the grant date, we will recognize a cumulative catch-up expense from the grant date to that point in time. If the related market capitalization milestone is achieved earlier than its expected achievement period and the achievement of the related operational milestone, then the stock-based compensation expense will be recognized over the expected achievement period for the operational milestone, which may accelerate the rate at which such expense is recognized. If additional operational milestones become probable, stock-based compensation expense will be recorded in the period it becomes probable including cumulative catch-up expense for the service provided since the grant date. The fair value of such awards is estimated on the grant date using Monte Carlo simulations.

As we accumulate additional employee stock-based awards data over time and as we incorporate market data related to our common stock, we may calculate significantly different volatilities and expected lives, which could materially impact the valuation of our stock-based awards and the stock-based compensation expense that we will recognize in future periods. Stock-based compensation expense is recorded in cost of revenues, research and development expense and selling, general and administrative expense in the consolidated statements of operations.

## *Income Taxes*

We are subject to taxes in the U.S. and in many foreign jurisdictions. Significant judgment is required in determining our provision for income taxes, our deferred tax assets and liabilities and any valuation allowance recorded against our net deferred tax assets. We make these estimates and judgments about our future taxable income that are based on assumptions that are consistent with our future plans. Tax laws, regulations and administrative practices may be subject to change due to economic or political conditions including fundamental changes to the tax laws applicable to corporate multinationals. The U.S., many countries in the European Union and a number of other countries are actively considering changes in this regard. As of December 31, 2020, we had recorded a full valuation allowance on our net U.S. deferred tax assets because we expect that it is more likely than not that our U.S. deferred tax assets will not be realized. Should the actual amounts differ from our estimates, the amount of our valuation allowance could be materially impacted.

Furthermore, significant judgment is required in evaluating our tax positions. In the ordinary course of business, there are many transactions and calculations for which the ultimate tax settlement is uncertain. As a result, we recognize the effect of this uncertainty on our tax attributes or taxes payable based on our estimates of the eventual outcome. These effects are recognized when, despite our belief that our tax return positions are supportable, we believe that it is likely that some of those positions may not be fully sustained upon review by tax authorities. We are required to file income tax returns in the U.S. and various foreign jurisdictions, which requires us to interpret the applicable tax laws and regulations in effect in such jurisdictions. Such returns are subject to audit by the various federal, state and foreign taxing authorities, who may disagree with respect to our tax positions. We believe that our consideration is adequate for all open audit years based on our assessment of many factors, including past experience and interpretations of tax law. We review and update our estimates in light of changing facts and circumstances, such as the closing of a tax audit, the lapse of a statute of limitations or a change in estimate. To the extent that the final tax outcome of these matters differs from our expectations, such differences may impact income tax expense in the period in which such determination is made. The eventual impact on our income tax expense depends in part if we still have a valuation allowance recorded against our deferred tax assets in the period that such determination is made.

#### *Principles of Consolidation*

The consolidated financial statements reflect our accounts and operations and those of our subsidiaries in which we have a controlling financial interest. In accordance with the provisions of ASC 810, *Consolidation*, we consolidate any variable interest entity (“VIE”) of which we are the primary beneficiary. We form VIEs with our financing fund investors in the ordinary course of business in order to facilitate the funding and monetization of certain attributes associated with our solar energy systems and leases under our direct vehicle leasing programs. The typical condition for a controlling financial interest ownership is holding a majority of the voting interests of an entity; however, a controlling financial interest may also exist in entities, such as VIEs, through arrangements that do not involve controlling voting interests. ASC 810 requires a variable interest holder to consolidate a VIE if that party has the power to direct the activities of the VIE that most significantly impact the VIE’s economic performance and the obligation to absorb losses of the VIE that could potentially be significant to the VIE or the right to receive benefits from the VIE that could potentially be significant to the VIE. We do not consolidate a VIE in which we have a majority ownership interest when we are not considered the primary beneficiary. We have determined that we are the primary beneficiary of all the VIEs. We evaluate our relationships with all the VIEs on an ongoing basis to ensure that we continue to be the primary beneficiary. All intercompany transactions and balances have been eliminated upon consolidation.

#### *Noncontrolling Interests and Redeemable Noncontrolling Interests*

Noncontrolling interests and redeemable noncontrolling interests represent third-party interests in the net assets under certain funding arrangements, or funds, that we enter into to finance the costs of solar energy systems and vehicles under operating leases. We have determined that the contractual provisions of the funds represent substantive profit sharing arrangements. We have further determined that the methodology for calculating the noncontrolling interest and redeemable noncontrolling interest balances that reflects the substantive profit sharing arrangements is a balance sheet approach using the hypothetical liquidation at book value (“HLBV”) method. We, therefore, determine the amount of the noncontrolling interests and redeemable noncontrolling interests in the net assets of the funds at each balance sheet date using the HLBV method, which is presented on the consolidated balance sheet as noncontrolling interests in subsidiaries and redeemable noncontrolling interests in subsidiaries. Under the HLBV method, the amounts reported as noncontrolling interests and redeemable noncontrolling interests in the consolidated balance sheet represent the amounts the third parties would hypothetically receive at each balance sheet date under the liquidation provisions of the funds, assuming the net assets of the funds were liquidated at their recorded amounts determined in accordance with GAAP and with tax laws effective at the balance sheet date and distributed to the third parties. The third parties’ interests in the results of operations of the funds are determined as the difference in the noncontrolling interest and redeemable noncontrolling interest balances in the consolidated balance sheets between the start and end of each reporting period, after taking into account any capital transactions between the funds and the third parties. However, the redeemable noncontrolling interest balance is at least equal to the redemption amount. The redeemable noncontrolling interest balance is presented as temporary equity in the mezzanine section of the consolidated balance sheet since these third parties have the right to redeem their interests in the funds for cash or other assets. For certain funds, there may be significant fluctuations in net income (loss) attributable to noncontrolling interests and redeemable noncontrolling interests in subsidiaries due to changes in the liquidation provisions as time-based milestones are reached.

## Results of Operations

### Effects of COVID-19

The COVID-19 pandemic impacted our business and financial results in 2020.

The temporary suspension of production at our factories during the first half of 2020 caused production limitations that, together with reduced or closed government and third party partner operations in the year, negatively impacted our deliveries and deployments in 2020. While we resumed operations at all of our factories worldwide, our temporary suspension at our factories resulted in idle capacity charges as we still incurred fixed costs such as depreciation, certain payroll related expenses and property taxes. As part of our response strategy to the business disruptions and uncertainty around macroeconomic conditions caused by the COVID-19 pandemic, we instituted cost reduction initiatives across our business globally to be commensurate to the scope of our operations while they were scaled back in the first half of 2020. This included temporary labor cost reduction measures such as employee furloughs and compensation reductions. Additionally, we suspended non-critical operating spend and opportunistically renegotiated supplier and vendor arrangements. As part of various governmental responses to the pandemic granted to companies globally, we received certain payroll related benefits which helped to reduce the impact of the COVID-19 pandemic on our financial results. Such payroll related benefits related to our direct headcount have been primarily netted against our disclosed idle capacity charges and they marginally reduced our operating expenses. The impact of the idle capacity charges incurred during the first half of 2020 were almost entirely offset by our cost savings initiatives and payroll related benefits.

### Revenues

(Dollars in millions)	Year Ended December 31,			2020 vs. 2019 Change		2019 vs. 2018 Change	
	2020	2019	2018	\$	%	\$	%
Automotive sales	\$ 26,184	\$ 19,952	\$ 17,632	\$ 6,232	31%	\$ 2,320	13%
Automotive leasing	1,052	869	883	183	21%	(14)	-2%
Total automotive revenues	27,236	20,821	18,515	6,415	31%	2,306	12%
Services and other	2,306	2,226	1,391	80	4%	835	60%
Total automotive & services and other segment revenue	29,542	23,047	19,906	6,495	28%	3,141	16%
Energy generation and storage segment revenue	1,994	1,531	1,555	463	30%	(24)	-2%
Total revenues	<u>\$ 31,536</u>	<u>\$ 24,578</u>	<u>\$ 21,461</u>	<u>\$ 6,958</u>	28%	<u>\$ 3,117</u>	15%

### Automotive & Services and Other Segment

Automotive sales revenue includes revenues related to cash deliveries of new Model S, Model X, Model 3 and Model Y vehicles, including access to our Supercharger network, internet connectivity, FSD features and over-the-air software updates, as well as sales of regulatory credits to other automotive manufacturers. Cash deliveries are vehicles that are not subject to lease accounting. Our revenue from regulatory credits fluctuates depending on when a contract is executed with a buyer and when the credits are delivered.

Automotive leasing revenue includes the amortization of revenue for vehicles under direct operating lease agreements as well as those sold with resale value guarantees accounted for as operating leases under lease accounting. We began offering direct leasing for Model 3 vehicles in the second quarter of 2019 and we began offering direct leasing for Model Y vehicles in the third quarter of 2020. Additionally, automotive leasing revenue includes direct sales-type leasing programs where we recognize all revenue associated with the sales-type lease upon delivery to the customer, which we introduced in volume during the third quarter of 2020.

Services and other revenue consists of non-warranty after-sales vehicle services, sales of used vehicles, retail merchandise, sales by our acquired subsidiaries to third party customers and vehicle insurance revenue.

## 2020 compared to 2019

Automotive sales revenue increased \$6.23 billion, or 31%, in the year ended December 31, 2020 as compared to the year ended December 31, 2019, primarily due to an increase of 129,268 Model 3 and Model Y cash deliveries despite production limitations as a result of temporary suspension of production at the Fremont Factory and Gigafactory Nevada during the first half of 2020. We were able to increase deliveries year over year from production ramping at both Gigafactory Shanghai and the Fremont Factory. There was also an increase of \$986 million from additional sales of regulatory credits to \$1.58 billion in the year ended December 31, 2020. Additionally, due to pricing adjustments we made to our vehicle offerings during the year ended December 31, 2019, we estimated that there was a greater likelihood that customers would exercise their buyback options and adjusted our sales return reserve on vehicles previously sold under our buyback options program which resulted in a reduction of automotive sales revenue of \$555 million. We made further pricing adjustments that resulted in a similar but smaller reduction of automotive sales revenue of \$72 million during the year ended December 31, 2020. The smaller reduction in revenue from pricing adjustments resulted in a positive impact to automotive sales revenue of \$483 million year over year. These factors increasing automotive sales revenue were partially offset by a decrease in the combined average selling price of Model 3 and Model Y. Despite the inclusion of higher priced Model Y deliveries in 2020, the combined average selling price of Model 3 and Model Y decreased due to a higher proportion of Model 3 Standard Range variants in our sales mix compared to the prior year. Additionally, there was a decrease in automotive sales revenue from 8,669 fewer Model S and Model X cash deliveries at a relatively consistent combined average selling price in the year ended December 31, 2020 compared to the prior year.

Automotive leasing revenue increased \$183 million, or 21%, in the year ended December 31, 2020 as compared to the year ended December 31, 2019, primarily due to an increase in cumulative vehicles under our direct operating lease program and the introduction of direct sales-type leasing programs which we began offering in volume during the third quarter of 2020 where we recognize all revenue associated with the sales-type lease upon delivery to the customer. These increases were partially offset by the decreases in automotive leasing revenue associated with our resale value guarantee leasing programs accounted for as operating leases as those portfolios have declined.

Services and other revenue increased \$80 million, or 4%, in the year ended December 31, 2020 as compared to the year ended December 31, 2019, primarily due to an increase in non-warranty maintenance services revenue as our fleet continues to grow, an increase in retail merchandise revenue and an increase in sales by our acquired subsidiaries to third party customers as we had a partial year of sales in the prior year from our mid-year 2019 acquisitions. These increases were partially offset by a decrease in used vehicle revenue driven by a reduction in non-Tesla trade-ins.

## *Energy Generation and Storage Segment*

Energy generation and storage revenue includes sales and leasing of solar energy generation and energy storage products, services related to such products and sales of solar energy systems incentives.

## 2020 compared to 2019

Energy generation and storage revenue increased by \$463 million, or 30%, in the year ended December 31, 2020 as compared to the year ended December 31, 2019, primarily due to increases in deployments of Megapack, solar cash and loan jobs and Powerwall, partially offset by a decrease in deployments of Powerpack and reduced average selling prices on our solar cash and loan jobs as a result of our low cost solar strategy. Powerpack deployments have decreased following the introduction of our Megapack product, which we began deploying in late 2019.

## Cost of Revenues and Gross Margin

(Dollars in millions)	Year Ended December 31,			2020 vs. 2019 Change		2019 vs. 2018 Change	
	2020	2019	2018	\$	%	\$	%
<b>Cost of revenues</b>							
Automotive sales	\$ 19,696	\$ 15,939	\$ 13,686	\$ 3,757	24%	\$ 2,253	16%
Automotive leasing	563	459	488	104	23%	(29)	-6%
Total automotive cost of revenues	20,259	16,398	14,174	3,861	24%	2,224	16%
Services and other	2,671	2,770	1,880	(99)	-4%	890	47%
Total automotive & services and other segment cost of revenues	22,930	19,168	16,054	3,762	20%	3,114	19%
Energy generation and storage segment	1,976	1,341	1,365	635	47%	(24)	-2%
Total cost of revenues	\$ 24,906	\$ 20,509	\$ 17,419	\$ 4,397	21%	\$ 3,090	18%
Gross profit total automotive	\$ 6,977	\$ 4,423	\$ 4,341				
Gross margin total automotive	26%	21%	23%				
Gross profit total automotive & services and other segment	\$ 6,612	\$ 3,879	\$ 3,852				
Gross margin total automotive & services and other segment	22%	17%	19%				
Gross profit energy generation and storage segment	\$ 18	\$ 190	\$ 190				
Gross margin energy generation and storage segment	1%	12%	12%				
Total gross profit	\$ 6,630	\$ 4,069	\$ 4,042				
Total gross margin	21%	17%	19%				

### Automotive & Services and Other Segment

Cost of automotive sales revenue includes direct parts, material and labor costs, manufacturing overhead, including depreciation costs of tooling and machinery, shipping and logistic costs, vehicle connectivity costs, allocations of electricity and infrastructure costs related to our Supercharger network and reserves for estimated warranty expenses. Cost of automotive sales revenues also includes adjustments to warranty expense and charges to write down the carrying value of our inventory when it exceeds its estimated net realizable value and to provide for obsolete and on-hand inventory in excess of forecasted demand.

Cost of automotive leasing revenue includes the amortization of operating lease vehicles over the lease term, cost of goods sold associated with direct sales-type leases which were introduced in volume in the third quarter of 2020, as well as warranty expenses related to leased vehicles. Cost of automotive leasing revenue also includes vehicle connectivity costs and allocations of electricity and infrastructure costs related to our Supercharger network for vehicles under our leasing programs.

Cost of services and other revenue includes costs associated with providing non-warranty after-sales services, costs to acquire and certify used vehicles, costs for retail merchandise, and costs to provide vehicle insurance. Cost of services and other revenue also includes direct parts, material and labor costs and manufacturing overhead associated with the sales by our acquired subsidiaries to third party customers.

### 2020 compared to 2019

Cost of automotive sales revenue increased \$3.76 billion, or 24%, in the year ended December 31, 2020 as compared to the year ended December 31, 2019, primarily due to an increase of 129,268 Model 3 and Model Y cash deliveries. Due to pricing adjustments we made to our vehicle offerings during the year ended December 31, 2019, we estimated that there was a greater likelihood that customers would exercise their buyback options and if customers elect to exercise the buyback option, we expect to be able to subsequently resell the returned vehicles, which resulted in a reduction of cost of automotive sales revenue of \$451 million. We made further pricing adjustments that resulted in a similar but smaller reduction of cost of automotive sales revenue of \$42 million during the year ended December 31, 2020. Additionally, there was an increase to cost of automotive sales revenue from idle capacity charges of \$213 million as a result of temporary suspension of production at the Fremont Factory and Gigafactory Nevada during the first half of 2020. These factors increasing cost of automotive sales revenue were

partially offset by a decrease in average Model 3 costs per unit due to lower material, manufacturing, freight and duty costs from localized procurement and manufacturing in China and a higher sales mix of lower end trims, as well as a decrease of 8,669 Model S and Model X cash deliveries in the year ended December 31, 2020 compared to the prior year.



Cost of automotive leasing revenue increased \$104 million, or 23%, in the year ended December 31, 2020 as compared to the year ended December 31, 2019, primarily due to an increase in cumulative vehicles under our direct operating lease program and the introduction of direct sales-type leasing programs which we began offering in volume during the third quarter of 2020 where we recognize all cost of revenue associated with the sales-type lease upon delivery to the customer. These increases were partially offset by the decreases in cost of automotive lease revenue associated with our resale value guarantee leasing programs which are accounted for as operating leases as those portfolios have declined.

Cost of services and other revenue decreased \$99 million, or 4%, in the year ended December 31, 2020 as compared to the year ended December 31, 2019, primarily due to a decrease in used vehicle cost of revenue driven by a reduction in non-Tesla trade-ins, partially offset by increases in non-warranty maintenance services as our fleet continues to grow and an increase in costs of retail merchandise as our sales have increased.

Gross margin for total automotive increased from 21% to 26% in the year ended December 31, 2020 as compared to the year ended December 31, 2019, primarily due to an improvement of Model 3 gross margin primarily from lower material, manufacturing, freight and duty costs from localized procurement and manufacturing in China, partially offset by a decrease in the average selling price of Model 3 due to a higher proportion of Model 3 Standard Range variants in our sales mix compared to the prior year. Additionally, there was an increase of \$986 million in sales of regulatory credits and a positive impact from Model Y deliveries in 2020 as Model Y gross margin was higher than our prior year total automotive gross margin. These increases were partially offset by idle capacity charges of \$213 million as a result of a temporary suspension of production at the Fremont Factory and Gigafactory Nevada during the first half of 2020.

Gross margin for total automotive & services and other segment increased from 17% to 22% in the year ended December 31, 2020 as compared to the year ended December 31, 2019, primarily due to the automotive gross margin impacts discussed above and a lower proportion of services and other, which operated at a lower gross margin than our automotive business, within the segment in the year ended December 31, 2020. Additionally, there was an improvement in our non-warranty maintenance services gross margin due to increased operational efficiencies despite additional costs from ramping service centers to accommodate a larger deployed fleet and an improvement in our used vehicle sales gross margin.

#### *Energy Generation and Storage Segment*

Cost of energy generation and storage revenue includes direct and indirect material and labor costs, warehouse rent, freight, warranty expense, other overhead costs and amortization of certain acquired intangible assets. Cost of energy generation and storage revenue also includes charges to write down the carrying value of our inventory when it exceeds its estimated net realizable value and to provide for obsolete and on-hand inventory in excess of forecasted demand. In agreements for solar energy system and PPAs where we are the lessor, the cost of revenue is primarily comprised of depreciation of the cost of leased solar energy systems, maintenance costs associated with those systems and amortization of any initial direct costs.

#### 2020 compared to 2019

Cost of energy generation and storage revenue increased by \$635 million, or 47%, in the year ended December 31, 2020 as compared to the year ended December 31, 2019, primarily due to increases in deployments of Megapack, higher costs from temporary manufacturing underutilization of our Solar Roof ramp, increases in deployments of Powerwall and idle capacity charges of \$20 million as a result of temporary suspension of production at Gigafactory New York during the first half of 2020. These increases were partially offset by a decrease in deployments of Powerpack.

Gross margin for energy generation and storage decreased from 12% to 1% in the year ended December 31, 2020 as compared to the year ended December 31, 2019 primarily due to a higher proportion of Solar Roof in our overall energy business which operated at lower gross margins as a result of temporary manufacturing underutilization during product ramp. Additionally, there were lower gross margins in our solar cash and loan business from reduced average selling prices as a result of our low cost solar strategy, partially offset by lower materials and manufacturing costs.

#### *Research and Development Expense*

	Year Ended December 31,			2020 vs. 2019 Change		2019 vs. 2018 Change	
	2020	2019	2018	\$	%	\$	%
(Dollars in millions)							
Research and development	\$ 1,491	\$ 1,343	\$ 1,460	\$ 148	11%	\$ (117)	-8%
As a percentage of revenues	5%	5%	7%				

Research and development (“R&D”) expenses consist primarily of personnel costs for our teams in engineering and research, manufacturing engineering and manufacturing test organizations, prototyping expense, contract and professional services and amortized equipment expense.

R&D expenses increased \$148 million, or 11%, in the year ended December 31, 2020 as compared to the year ended December 31, 2019. The increase was primarily due to a \$62 million increase in expensed materials as we continue to expand our product roadmap, \$61 million increase in stock-based compensation expense primarily related to the issuance of equity awards in fiscal year 2020 at higher grant date fair values due to our increased share price, \$20 million increase in facilities, freight and depreciation expenses and a \$20 million increase in employee and labor related expenses.

R&D expenses as a percentage of revenue decreased from 5.5% to 4.7% in the year ended December 31, 2020 as compared to the year ended December 31, 2019. The decrease is primarily an increase in total revenues from expanding sales, partially offset by an increase in our R&D expenses as detailed above.

### ***Selling, General and Administrative Expense***

(Dollars in millions)	Year Ended December 31,			2020 vs. 2019 Change		2019 vs. 2018 Change	
	2020	2019	2018	\$	%	\$	%
Selling, general and administrative	\$ 3,145	\$ 2,646	\$ 2,835	\$ 499	19%	\$ (189)	-7%
As a percentage of revenues	10%	11%	13%				

Selling, general and administrative (“SG&A”) expenses generally consist of personnel and facilities costs related to our stores, marketing, sales, executive, finance, human resources, information technology and legal organizations, as well as fees for professional and contract services and litigation settlements.

SG&A expenses increased \$499 million, or 19%, in the year ended December 31, 2020 as compared to the year ended December 31, 2019. The increase is primarily due to an increase of \$625 million in stock-based compensation expense, of which \$542 million was attributable to the 2018 CEO Performance Award. We recorded stock-based compensation expense of \$838 million in the year ended December 31, 2020 for the 2018 CEO Performance Award compared to \$296 million in the prior year. Of the expense recorded in fiscal year 2020, \$232 million was due to cumulative catch-up expense for the service provided from the grant date when three operational milestones under such award were considered probable of being met and the remaining unamortized expense of \$357 million for the first four tranches were recognized upon vesting as the first four market capitalization milestones were achieved (see Note 14, *Equity Incentive Plans*, to the consolidated financial statements included elsewhere in this Annual Report on Form 10-K). The remaining stock-based compensation expense increase of \$83 million attributable to other directors and employees is primarily related to the issuance of equity awards in fiscal year 2020 at higher grant date fair values due to our increased share price. The increase in stock-based compensation was partially offset by a decrease of \$90 million in customer promotional costs, facilities-related expenses and sales and marketing activities. Additionally, there was a reduction to operating expenses for costs previously incurred in the amount of \$43 million for the settlement in part of the securities litigation relating to the SolarCity acquisition (see Note 16, *Commitments and Contingencies—Legal Proceedings—Securities Litigation Relating to the SolarCity Acquisition*, to the consolidated financial statements included elsewhere in this Annual Report on Form 10-K).

SG&A expenses as a percentage of revenue decreased from 11% to 10% in year ended December 31, 2020 as compared to the year ended December 31, 2019. The decrease is primarily from an increase in total revenues from expanding sales, partially offset by an increase in our SG&A expenses as detailed above.

### ***Restructuring and other***

(Dollars in millions)	Year Ended December 31,			2020 vs. 2019 Change		2019 vs. 2018 Change	
	2020	2019	2018	\$	%	\$	%
Restructuring and other	\$ —	\$ 149	\$ 135	\$ (149)	-100%	\$ 14	10%
As a percentage of revenues	0%	1%	1%				

During the year ended December 31, 2019, we carried out certain restructuring actions in order to reduce costs and improve efficiency. There were no restructuring actions in the year ended December 31, 2020.

### ***Interest Expense***

(Dollars in millions)	Year Ended December 31,			2020 vs. 2019 Change		2019 vs. 2018 Change	
	2020	2019	2018	\$	%	\$	%
Interest expense	\$ (748)	\$ (685)	\$ (663)	\$ (63)	9%	\$ (22)	3%
As a percentage of revenues	2%	3%	3%				



Interest expense increased by \$63 million, or 9%, in the year ended December 31, 2020 as compared to the year ended December 31, 2019, primarily due to \$105 million of losses on extinguishment of debt in fiscal year 2020 from early conversions on our convertible senior notes, partially offset by a decrease in interest expense due to a decrease in our weighted average interest rate as compared to the prior year and an increase of \$17 million in the amount of interest we capitalized from the consolidated statements of operations to property, plant and equipment on the consolidated balance sheets. Increased capitalization results in lower interest expense. The amount of interest we capitalize is driven by our construction in progress balance, which increased year-over-year due to our construction and expansion of multiple factories.

### ***Other Income (Expense), Net***

(Dollars in millions)	Year Ended December 31,			2020 vs. 2019 Change		2019 vs. 2018 Change	
	2020	2019	2018	\$	%	\$	%
Other (expense) income, net	\$ (122)	\$ 45	\$ 22	\$ (167)	Not meaningful	\$ 23	105%
As a percentage of revenues	0%	0%	0%				

Other (expense) income, net, consists primarily of foreign exchange gains and losses related to our foreign currency-denominated monetary assets and liabilities and changes in the fair values of our fixed-for-floating interest rate swaps. We expect our foreign exchange gains and losses will vary depending upon movements in the underlying exchange rates.

Other (expense) income, net, changed unfavorably by \$167 million in the year ended December 31, 2020 as compared to the year ended December 31, 2019. The unfavorable change was primarily due to fluctuations in foreign currency exchange rates such as the U.S. dollar depreciating greater than 5% against the euro and the Chinese yuan in 2020 compared to an appreciation of 2% and 1% against the same currencies in the prior year, respectively.

### ***Provision for Income Taxes***

(Dollars in millions)	Year Ended December 31,			2020 vs. 2019 Change		2019 vs. 2018 Change	
	2020	2019	2018	\$	%	\$	%
Provision for income taxes	\$ 292	\$ 110	\$ 58	\$ 182	165%	\$ 52	90%
Effective tax rate	25%	-17%	-6%				

Our provision for income taxes increased by \$182 million, or 165%, in the year ended December 31, 2020 as compared to the year ended December 31, 2019. The increase was primarily due to the substantial increases in taxable profits in our foreign jurisdictions year-over-year.

Our effective tax rate increased from -17% to 25% in the year ended December 31, 2020 as compared to the prior year, primarily due to substantial pre-tax income in the year ended December 31, 2020 as compared to a pre-tax loss for the year ended December 31, 2019.

### ***Net Income (Loss) Attributable to Noncontrolling Interests and Redeemable Noncontrolling Interests***

(Dollars in millions)	Year Ended December 31,			2020 vs. 2019 Change		2019 vs. 2018 Change	
	2020	2019	2018	\$	%	\$	%
Net income (loss) attributable to noncontrolling interests and redeemable noncontrolling interests in subsidiaries	\$ 141	\$ 87	\$ (87)	\$ 54	62%	\$ 174	Not meaningful

Our net income (loss) attributable to noncontrolling interests and redeemable noncontrolling interests was related to financing fund arrangements.

Net income (loss) attributable to noncontrolling interests and redeemable noncontrolling interests increased by \$54 million, or 62%, in the year ended December 31, 2020 as compared to the year ended December 31, 2019. The increase was primarily due to lower activities from new financing fund arrangements.

### **Liquidity and Capital Resources**

As of December 31, 2020, we had \$19.38 billion of cash and cash equivalents. Balances held in foreign currencies had a U.S. dollar equivalent of \$6.76 billion and consisted primarily of euros, Chinese yuan and Canadian dollars. Our sources of cash are

predominantly from our deliveries of vehicles, sales and installations of our energy storage products and solar energy systems, proceeds from debt facilities, proceeds from financing funds and proceeds from equity offerings.

Our sources of liquidity and cash flows enable us to fund ongoing operations, research and development projects for new products and technologies including our announced proprietary battery cells, ongoing production and additional manufacturing ramps at existing manufacturing facilities such as the Fremont Factory, Gigafactory Nevada, Gigafactory Shanghai and Gigafactory New York, the construction of Gigafactory Berlin and Gigafactory Texas, and the continued expansion of our retail and service locations, body shops, Mobile Service fleet, Supercharger network and energy product installation capabilities.

As discussed in and subject to the considerations referenced in Part II, Item 7, *Management's Discussion and Analysis of Financial Condition and Results of Operations—Management Opportunities, Challenges and Risks and 2021 Outlook—Cash Flow and Capital Expenditure Trends* in this Annual Report on Form 10-K, we currently expect our capital expenditures to be \$4.50 to \$6.00 billion in 2021 and in each of the next two fiscal years.

We expect that the cash we generate from our core operations will generally be sufficient to cover our future capital expenditures and to pay down our near-term debt obligations, although we may choose to seek alternative financing sources. For example, our local subsidiary has entered into credit facilities to support construction and production at Gigafactory Shanghai. See Note 12, *Debt*, to the consolidated financial statements included elsewhere in this Annual Report on Form 10-K. As always, we continually evaluate our capital expenditure needs and may decide it is best to raise additional capital to fund the rapid growth of our business.

In January 2021, we updated our investment policy to provide us with more flexibility to further diversify and maximize returns on our cash that is not required to maintain adequate operating liquidity. As part of the policy, we may invest a portion of such cash in certain specified alternative reserve assets. Thereafter, we invested an aggregate \$1.50 billion in bitcoin under this policy. Moreover, we expect to begin accepting bitcoin as a form of payment for our products in the near future, subject to applicable laws and initially on a limited basis, which we may or may not liquidate upon receipt. We believe our bitcoin holdings are highly liquid. However, digital assets may be subject to volatile market prices, which may be unfavorable at the time when we want or need to liquidate them.

We have an agreement to spend or incur \$5.0 billion in combined capital, operational expenses, costs of goods sold and other costs in the State of New York during the 10-year period beginning April 30, 2018, which we expect to meet through our operations. As we temporarily suspended most of our manufacturing operations at Gigafactory New York pursuant to a New York State executive order issued in March 2020 as a result of the COVID-19 pandemic, we were granted a one-year deferral of our obligation to be compliant as of April 30, 2020 with our applicable targets under such agreement.

We expect that our current sources of liquidity together with our projection of cash flows from operating activities will provide us with adequate liquidity over at least the next 12 months, even considering the expected levels of capital expenditures in the current and next two fiscal years. A large portion of our future expenditures is to fund our growth, and we can adjust our capital and operating expenditures by operating segment, including future expansion of our product offerings, retail and service locations, body shops, Mobile Service fleet, and Supercharger network. For example, if our near-term manufacturing operations decrease in scale or ramp more slowly than expected, including due to global economic conditions and levels of consumer outlook and spend impacting demand in the worldwide transportation, automotive and energy product industries, we may choose to correspondingly slow the pace of our capital expenditures. We may need or want to raise additional funds in the future, and these funds may not be available to us when we need or want them, or at all. If we cannot raise additional funds when we need or want them, our operations and prospects could be negatively affected.

In addition, we had \$2.63 billion of unused committed amounts under our credit facilities and financing funds as of December 31, 2020, some of which are subject to satisfying specified conditions prior to draw-down (such as pledging to our lenders sufficient amounts of qualified receivables, inventories, leased vehicles and our interests in those leases, solar energy systems and the associated customer contracts, our interests in financing funds or various other assets; and contributing or selling qualified solar energy systems and the associated customer contracts or qualified leased vehicles and our interests in those leases into the financing funds). For details regarding our indebtedness and financing funds, refer to Note 12, *Debt*, and Note 17, *Variable Interest Entity Arrangements* to the consolidated financial statements included elsewhere in this Annual Report on Form 10-K.

### **Summary of Cash Flows**

	Year Ended December 31,		
	2020	2019	2018
(Dollars in millions)			
Net cash provided by operating activities	\$ 5,943	\$ 2,405	\$ 2,098
Net cash used in investing activities	\$ (3,132)	\$ (1,436)	\$ (2,337)
Net cash provided by financing activities	\$ 9,973	\$ 1,529	\$ 574





### *Cash Flows from Operating Activities*

Our cash flows from operating activities are significantly affected by our cash investments to support the growth of our business in areas such as research and development and selling, general and administrative and working capital, especially inventory, which includes vehicles in transit. Our operating cash inflows include cash from vehicle sales, customer lease payments, customer deposits, cash from sales of regulatory credits and energy generation and storage products. These cash inflows are offset by our payments to suppliers for production materials and parts used in our manufacturing process, operating expenses, operating lease payments and interest payments on our financings.

Net cash provided by operating activities increased by \$3.54 billion to \$5.94 billion during the year ended December 31, 2020 from \$2.40 billion during the year ended December 31, 2019. This increase was primarily due to the increase in net income excluding non-cash expenses and gains of \$2.82 billion, the decrease in net operating assets and liabilities of \$533 million and \$188 million of the repayment of our 0.25% Convertible Senior Notes due in 2019 during the three months ended March 31, 2019 (which represents the portion of the repayment that was classified as an operating activity, as this represented an interest payment on the deeply-discounted convertible senior notes). The decrease in our net operating assets and liabilities was mainly driven by a larger increase in accounts payable and accrued liabilities in the year ended December 31, 2020 as compared to the prior year from ramp up in production at the Fremont Factory and Gigafactory Shanghai. The decrease in our net operating assets and liabilities was partially offset by a smaller increase in deferred revenue primarily due to delivery of regulatory credits in 2020 under a previous arrangement where we had received payment in advance as of December 31, 2019, a larger increase in operating lease vehicles as Model 3 direct leasing was introduced in the second quarter of 2019 and Model Y direct leasing was introduced in the third quarter of 2020, and a larger increase in accounts receivables of government rebates already passed through to customers.

### *Cash Flows from Investing Activities*

Cash flows from investing activities and their variability across each period related primarily to capital expenditures, which were \$3.16 billion for the year ended December 31, 2020, mainly for Model Y production expansion at the Fremont Factory, expansion of Gigafactory Shanghai and construction of Gigafactory Berlin and Gigafactory Texas, and \$1.33 billion for the year ended December 31, 2019, mainly for Gigafactory Shanghai construction, Model 3 production ramp and Model Y preparations. The increase in capital expenditures was partially offset by decreases of \$32 million in business combinations, net of cash acquired, and \$30 million of design, acquisition and installation of solar energy systems when compared to the prior year. Additionally, we received \$123 million and \$46 million, respectively, of government grants in connection with us making certain manufacturing equipment investments at Gigafactory Shanghai for the years ended December 31, 2020 and 2019, respectively.

### *Cash Flows from Financing Activities*

Cash flows from financing activities during the year ended December 31, 2020 consisted primarily of \$12.27 billion from issuance of common stock in public offerings in 2020, net of issuance costs, and \$417 million of proceeds from exercise of stock options and other stock issuances. These cash inflows were partially offset by \$1.99 billion of cash repayments upon early conversions of our convertible senior notes, \$338 million principal repayments of our finance leases, collateralized lease repayments of \$240 million and \$219 million net payments to financing fund investors. See Note 12, *Debt*, and Note 2, *Summary of Significant Accounting Policies*, to the consolidated financial statements included elsewhere in this Annual Report on Form 10-K for further details regarding our debt obligations and collateralized borrowings, respectively.

Cash flows from financing activities during the year ended December 31, 2019 consisted primarily of \$1.82 billion from the issuance of the 2.00% Convertible Senior Notes due in 2024 ("2024 Notes"), net of transaction costs, and \$848 million from the issuance of common stock, net of underwriting discounts, in registered public offerings, \$736 million of net borrowings under loan agreements entered into by certain Chinese subsidiaries, \$394 million of net borrowings for automotive asset-backed notes and \$174 million from the issuance of warrants in connection with the offering of the 2024 Notes. These cash inflows were partially offset by a \$732 million portion of the repayment of our 0.25% Convertible Senior Notes due in 2019 that was classified as financing activity, a \$566 million repayment of our 1.625% Convertible Senior Notes due in 2019, a purchase of convertible note hedges of \$476 million in connection with the offering of the 2024 Notes and collateralized lease repayments of \$389 million.

### Contractual Obligations

We are party to contractual obligations involving commitments to make payments to third parties, including certain debt financing arrangements and leases, primarily for stores, service centers, certain manufacturing facilities and certain corporate offices. These also include, as part of our normal business practices, contracts with suppliers for purchases of certain raw materials, components and services to facilitate adequate supply of these materials and services and capacity reservation contracts. The following table sets forth, as of December 31, 2020, certain significant obligations that will affect our future liquidity (in millions):

	Total	Year Ended December 31,					Thereafter
		2021	2022	2023	2024	2025	
Operating lease obligations, including imputed interest	\$ 1,846	\$ 366	\$ 327	\$ 279	\$ 245	\$ 204	\$ 425
Finance lease obligations, including imputed interest	1,635	462	446	412	299	9	7
Purchase obligations (1)	18,318	10,483	2,743	2,280	1,877	865	70
Debt, including scheduled interest (2)	11,695	2,100	2,172	2,602	2,021	2,109	691
Total	<u>\$ 33,494</u>	<u>\$ 13,411</u>	<u>\$ 5,688</u>	<u>\$ 5,573</u>	<u>\$ 4,442</u>	<u>\$ 3,187</u>	<u>\$ 1,193</u>

These amounts represent (i) purchase orders of \$5.95 billion issued under binding and enforceable agreements with all vendors as of December 31, 2020 and (ii) \$12.37 billion in other estimable purchase obligations pursuant to such agreements, primarily relating to the purchase of lithium-ion cells produced by Panasonic at Gigafactory Nevada, including any additional amounts we may have to pay vendors if we do not meet certain minimum purchase obligations. In cases where no purchase orders were outstanding under binding and

- (1) enforceable agreements as of December 31, 2020, we have included estimated amounts based on our best estimates and assumptions or discussions with the relevant vendors as of such date or, where applicable, on amounts or assumptions included in such agreements for purposes of discussion or reference. In certain cases, such estimated amounts were subject to contingent events. Furthermore, these amounts do not include future payments for purchase obligations that were recorded in accounts payable or accrued liabilities as of December 31, 2020.

- (2) This includes non-recourse debt repayments, including scheduled interest, of \$5.16 billion. Non-recourse debt refers to debt that is recourse to only assets of our subsidiaries. Short-term scheduled interest payments and amortization of convertible senior note conversion features, debt discounts and deferred financing costs for the year ended December 31, 2020 is \$342 million. Long-term scheduled interest payments and amortization of convertible senior note conversion features, debt discounts and deferred financing costs for the years thereafter is \$1.13 billion.

The table above excludes unrecognized tax benefits of \$353 million because if recognized, they would be an adjustment to our deferred tax assets.

We offer resale value guarantees or similar buyback terms to certain customers who purchase and finance their vehicles through one of our specified commercial banking partners and certain leasing partners (refer to *Automotive Sales with Resale Value Guarantee or a Buyback Option* in Note 2, *Significant Accounting Policies*, to the consolidated financial statements included elsewhere in this Annual Report on Form 10-K). The maximum amount we could be required to pay under these programs, should customers exercise their resale value guarantees or buyback options, would be \$1.84 billion over the next five years, of which \$394 million is within a 12-month period from December 31, 2020. We have not included this in the table above as it is unknown how many customers will exercise their options. Additionally, we plan to resell any vehicles which are returned to us and therefore, the actual exposure to us is deemed to be limited.

### Off-Balance Sheet Arrangements

During the periods presented, we did not have relationships with unconsolidated entities or financial partnerships, such as entities often referred to as structured finance or special purpose entities, which were established for the purpose of facilitating off-balance sheet arrangements or other contractually narrow or limited purposes.

### Recent Accounting Pronouncements

See Note 2, *Summary of Significant Accounting Policies*, to the consolidated financial statements included elsewhere in this Annual Report on Form 10-K.



## **ITEM 7A. QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISK**

### **Foreign Currency Risk**

We transact business globally in multiple currencies and hence have foreign currency risks related to our revenue, costs of revenue, operating expenses and localized subsidiary debt denominated in currencies other than the U.S. dollar (primarily the Chinese yuan, euro, Canadian dollar and British pound in relation to our current year operations). In general, we are a net receiver of currencies other than the U.S. dollar for our foreign subsidiaries. Accordingly, changes in exchange rates affect our revenue and other operating results as expressed in U.S. dollars as we do not typically hedge foreign currency risk.

We have also experienced, and will continue to experience, fluctuations in our net income (loss) as a result of gains (losses) on the settlement and the re-measurement of monetary assets and liabilities denominated in currencies that are not the local currency (primarily consisting of our intercompany and cash and cash equivalents balances). For the year ended December 31, 2020, we recognized a net foreign currency loss of \$114 million in other (expense) income, net, with our largest re-measurement exposures from the U.S. dollar, euro and Canadian dollar as our subsidiaries' monetary assets and liabilities are denominated in various local currencies. For the year ended December 31, 2019, we recognized a net foreign currency gain of \$48 million in other (expense) income, net, with our largest re-measurement exposures from the U.S. dollar, British pound and Canadian dollar.

We considered the historical trends in foreign currency exchange rates and determined that it is reasonably possible that adverse changes in foreign currency exchange rates of 10% for all currencies could be experienced in the near-term. These changes were applied to our total monetary assets and liabilities denominated in currencies other than our local currencies at the balance sheet date to compute the impact these changes would have had on our net income (loss) before income taxes. These changes would have resulted in a benefit of \$8 million at December 31, 2020 and an adverse impact of \$362 million at December 31, 2019 assuming no foreign currency hedging.

### **Interest Rate Risk**

We are exposed to interest rate risk on our borrowings that bear interest at floating rates. Pursuant to our risk management policies, in certain cases, we utilize derivative instruments to manage some of this risk. We do not enter into derivative instruments for trading or speculative purposes. A hypothetical 10% change in interest rates on our floating rate debt would have increased or decreased our interest expense for the years ended December 31, 2020 and 2019 by \$4 million and \$8 million, respectively.

## ITEM 8. FINANCIAL STATEMENTS AND SUPPLEMENTARY DATA

### Index to Consolidated Financial Statements

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## **Report of Independent Registered Public Accounting Firm**

To the Board of Directors and Stockholders of Tesla, Inc.

### ***Opinions on the Financial Statements and Internal Control over Financial Reporting***

We have audited the accompanying consolidated balance sheets of Tesla, Inc. and its subsidiaries (the “Company”) as of December 31, 2020 and 2019, and the related consolidated statements of operations, of comprehensive income (loss), of redeemable noncontrolling interests and equity and of cash flows for each of the three years in the period ended December 31, 2020, including the related notes (collectively referred to as the “consolidated financial statements”). We also have audited the Company's internal control over financial reporting as of December 31, 2020, based on criteria established in *Internal Control - Integrated Framework* (2013) issued by the Committee of Sponsoring Organizations of the Treadway Commission (COSO).

In our opinion, the consolidated financial statements referred to above present fairly, in all material respects, the financial position of the Company as of December 31, 2020 and 2019, and the results of its operations and its cash flows for each of the three years in the period ended December 31, 2020 in conformity with accounting principles generally accepted in the United States of America. Also in our opinion, the Company maintained, in all material respects, effective internal control over financial reporting as of December 31, 2020, based on criteria established in *Internal Control - Integrated Framework* (2013) issued by the COSO.

### ***Changes in Accounting Principles***

As discussed in Note 2 to the consolidated financial statements, the Company changed the manner in which it accounts for leases in 2019 and the manner in which it accounts for revenue from contracts with customers in 2018.

### ***Basis for Opinions***

The Company's management is responsible for these consolidated financial statements, for maintaining effective internal control over financial reporting, and for its assessment of the effectiveness of internal control over financial reporting, included in Management's Report on Internal Control over Financial Reporting appearing under Item 9A. Our responsibility is to express opinions on the Company's consolidated financial statements and on the Company's internal control over financial reporting based on our audits. We are a public accounting firm registered with the Public Company Accounting Oversight Board (United States) (PCAOB) and are required to be independent with respect to the Company in accordance with the U.S. federal securities laws and the applicable rules and regulations of the Securities and Exchange Commission and the PCAOB.

We conducted our audits in accordance with the standards of the PCAOB. Those standards require that we plan and perform the audits to obtain reasonable assurance about whether the consolidated financial statements are free of material misstatement, whether due to error or fraud, and whether effective internal control over financial reporting was maintained in all material respects.

Our audits of the consolidated financial statements included performing procedures to assess the risks of material misstatement of the consolidated financial statements, whether due to error or fraud, and performing procedures that respond to those risks. Such procedures included examining, on a test basis, evidence regarding the amounts and disclosures in the consolidated financial statements. Our audits also included evaluating the accounting principles used and significant estimates made by management, as well as evaluating the overall presentation of the consolidated financial statements. Our audit of internal control over financial reporting included obtaining an understanding of internal control over financial reporting, assessing the risk that a material weakness exists, and testing and evaluating the design and operating effectiveness of internal control based on the assessed risk. Our audits also included performing such other procedures as we considered necessary in the circumstances. We believe that our audits provide a reasonable basis for our opinions.

### ***Definition and Limitations of Internal Control over Financial Reporting***

A company's internal control over financial reporting is a process designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles. A company's internal control over financial reporting includes those policies and procedures that (i) pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of the assets of the company; (ii) provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with generally accepted accounting principles, and that receipts and expenditures of the company are being made only in accordance with authorizations of management and directors of the company; and (iii) provide reasonable assurance regarding

prevention or timely detection of unauthorized acquisition, use, or disposition of the company's assets that could have a material effect on the financial statements.

Because of its inherent limitations, internal control over financial reporting may not prevent or detect misstatements. Also, projections of any evaluation of effectiveness to future periods are subject to the risk that controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate.

### ***Critical Audit Matters***

The critical audit matters communicated below are matters arising from the current period audit of the consolidated financial statements that were communicated or required to be communicated to the audit committee and that (i) relate to accounts or disclosures that are material to the consolidated financial statements and (ii) involved our especially challenging, subjective, or complex judgments. The communication of critical audit matters does not alter in any way our opinion on the consolidated financial statements, taken as a whole, and we are not, by communicating the critical audit matters below, providing separate opinions on the critical audit matters or on the accounts or disclosures to which they relate.

#### ***Automotive Sales To Customers With a Resale Value Guarantee or Buyback Option***

As described in Note 2 to the consolidated financial statements, the sales return reserve related to resale value guarantees or buyback options was \$703 million as of December 31, 2020, of which \$202 million was short-term. The Company offers some customers resale value guarantees or buyback options. Under these programs, the Company receives full payment for the vehicle sales price at the time of delivery and the customer has the option of selling their vehicle back to the Company during the guarantee period for a pre-determined resale value. In circumstances where management does not believe the customer has a significant economic incentive to exercise the resale value guarantee or buyback option provided to them at contract inception, the Company recognizes revenue when control transfers upon delivery to a customer as a sale with a right of return. In circumstances where management believes the customer has a significant economic incentive to exercise the resale value guarantee or buyback option at contract inception, the Company recognizes the transaction as an operating lease. Management's determination of whether there is a significant economic incentive includes comparing a vehicle's estimated market value at the time the option is exercisable with the guaranteed resale value. Sales return reserves are estimated based on historical experience plus consideration for expected future market values. On a quarterly basis, management assesses the estimated future market values of vehicles under these programs, taking into account price adjustments on vehicle offerings and changes in market conditions subsequent to the initial sale to determine the need for changes to the reserve.

The principal considerations for our determination that performing procedures relating to automotive sales to customers with a resale value guarantee or buyback option is a critical audit matter are the significant judgment by management in determining the sales return reserve when customers do not have a significant economic incentive to exercise their option; this in turn led to a high degree of auditor judgment, subjectivity, and effort in performing procedures and evaluating audit evidence related to the sales return reserve when customers do not have a significant economic incentive.

Addressing the matter involved performing procedures and evaluating audit evidence in connection with forming our overall opinion on the consolidated financial statements. These procedures included testing the effectiveness of controls relating to automotive revenue recognition for sales to customers with a resale value guarantee or buyback option as well as the related sales return reserve, including controls over management's estimate of expected future market values and historical experience. These procedures also included, among others, testing management's process for determining whether customers have a significant economic incentive to exercise their put rights under the resale value guarantee and buyback option programs and, if not, the related sales return reserve. This included evaluating the appropriateness of the model applied and the reasonableness of significant assumptions related to historical experience and the estimated expected future market values used in the comparison to guaranteed resale amounts. Evaluating assumptions related to historical experience and estimated expected future market values involved evaluating whether the assumptions used were reasonable considering current and past performance and consistency with evidence obtained in other areas of the audit. Procedures were performed to evaluate the reliability, completeness and relevance of management's data used in the development of the historical experience assumption.

#### ***Automotive Warranty Reserve***

As described in Note 2 to the consolidated financial statements, total accrued warranty, which primarily relates to the automotive segment, was \$1,468 million as of December 31, 2020. The Company provides a manufacturer's warranty on all new and used Tesla vehicles. As described in Note 2, a warranty reserve is accrued for these products sold, which includes management's best estimate of the projected costs to repair or replace items under warranty, including recalls when identified. These estimates are based on actual claims incurred to date and an estimate of the nature, frequency and costs of future claims.





The principal considerations for our determination that performing procedures relating to the automotive warranty reserve is a critical audit matter are the significant judgment by management in determining the warranty reserve; this in turn led to significant auditor judgment, subjectivity, and effort in performing procedures to evaluate the estimate of the nature, frequency and costs of future claims, and the audit effort involved the use of professionals with specialized skill and knowledge.

Addressing the matter involved performing procedures and evaluating audit evidence in connection with forming our overall opinion on the consolidated financial statements. These procedures included testing the effectiveness of controls relating to management's estimate of the automotive warranty reserve, including controls over management's estimate of the nature, frequency and costs of future claims as well as the completeness and accuracy of actual claims incurred to date. These procedures also included, among others, testing management's process for determining the automotive warranty reserve. This included evaluating the appropriateness of the model applied and the reasonableness of significant assumptions related to the nature and frequency of future claims and the related costs to repair or replace items under warranty. Evaluating the assumptions related to the nature and frequency of future claims and the related costs to repair or replace items under warranty involved evaluating whether the assumptions used were reasonable considering current and past performance, including a lookback analysis comparing prior period forecasted claims to actual claims incurred. These procedures also included developing an independent estimate of a portion of the warranty accrual, comparing the independent estimate to management's estimate to evaluate the reasonableness of the estimate, and testing the completeness and accuracy of historical vehicle claims. Procedures were performed to test the reliability, completeness, and relevance of management's data related to the historical claims processed and that such claims were appropriately used by management in the estimation of future claims. Professionals with specialized skill and knowledge were used to assist in evaluating the appropriateness of aspects of management's model for estimating the nature and frequency of future claims, and testing management's warranty reserve for a portion of future warranty claims.

/s/ PricewaterhouseCoopers LLP

San Jose, California  
February 8, 2021

We have served as the Company's auditor since 2005.

**Tesla, Inc.**  
**Consolidated Balance Sheets**  
(in millions, except per share data)

	December 31, 2020	December 31, 2019
<b>Assets</b>		
Current assets		
Cash and cash equivalents	\$ 19,384	\$ 6,268
Accounts receivable, net	1,886	1,324
Inventory	4,101	3,552
Prepaid expenses and other current assets	1,346	959
Total current assets	26,717	12,103
Operating lease vehicles, net	3,091	2,447
Solar energy systems, net	5,979	6,138
Property, plant and equipment, net	12,747	10,396
Operating lease right-of-use assets	1,558	1,218
Intangible assets, net	313	339
Goodwill	207	198
Other non-current assets	1,536	1,470
<b>Total assets</b>	<b>\$ 52,148</b>	<b>\$ 34,309</b>
<b>Liabilities</b>		
Current liabilities		
Accounts payable	\$ 6,051	\$ 3,771
Accrued liabilities and other	3,855	3,222
Deferred revenue	1,458	1,163
Customer deposits	752	726
Current portion of debt and finance leases	2,132	1,785
Total current liabilities	14,248	10,667
Debt and finance leases, net of current portion	9,556	11,634
Deferred revenue, net of current portion	1,284	1,207
Other long-term liabilities	3,330	2,691
<b>Total liabilities</b>	<b>28,418</b>	<b>26,199</b>
Commitments and contingencies (Note 16)		
Redeemable noncontrolling	604	643

interests in subsidiaries		
Convertible senior notes (Note 12)	51	—
<b>Equity</b>		
Stockholders' equity		
Preferred stock; \$0.001 par value; 100 shares authorized; no shares issued and outstanding	—	—
Common stock; \$0.001 par value; 2,000 shares authorized; 960 and 905 shares issued and outstanding as of December 31, 2020 and December 31, 2019, respectively (1)	1	1
Additional paid-in capital (1)	27,260	12,736
Accumulated other comprehensive income (loss)	363	(36)
Accumulated deficit	(5,399)	(6,083)
Total stockholders' equity	22,225	6,618
Noncontrolling interests in subsidiaries	850	849
<b>Total liabilities and equity</b>	<b>\$ 52,148</b>	<b>\$ 34,309</b>

- (1) Prior period results have been adjusted to reflect the five-for-one stock split effected in the form of a stock dividend in August 2020. See Note 1, *Overview*, for details.

The accompanying notes are an integral part of these consolidated financial statements.

**Tesla, Inc.**  
**Consolidated Statements of Operations**  
(in millions, except per share data)

	Year Ended December 31,		
	2020	2019	2018
<b>Revenues</b>			
Automotive sales	\$ 26,184	\$ 19,952	\$ 17,632
Automotive leasing	1,052	869	883
Total automotive revenues	27,236	20,821	18,515
Energy generation and storage	1,994	1,531	1,555
Services and other	2,306	2,226	1,391
Total revenues	31,536	24,578	21,461
<b>Cost of revenues</b>			
Automotive sales	19,696	15,939	13,686
Automotive leasing	563	459	488
Total automotive cost of revenues	20,259	16,398	14,174
Energy generation and storage	1,976	1,341	1,365
Services and other	2,671	2,770	1,880
Total cost of revenues	24,906	20,509	17,419
<b>Gross profit</b>	6,630	4,069	4,042
<b>Operating expenses</b>			
Research and development	1,491	1,343	1,460
Selling, general and administrative	3,145	2,646	2,835
Restructuring and other	—	149	135
Total operating expenses	4,636	4,138	4,430
<b>Income (loss) from operations</b>	1,994	(69)	(388)
Interest income	30	44	24
Interest expense	(748)	(685)	(663)
Other (expense) income, net	(122)	45	22
<b>Income (loss) before income taxes</b>	1,154	(665)	(1,005)
Provision for income taxes	292	110	58
<b>Net income (loss)</b>	862	(775)	(1,063)
Net income (loss) attributable to noncontrolling interests and redeemable noncontrolling interests in subsidiaries	141	87	(87)
<b>Net income (loss) attributable to common stockholders</b>	<u>\$ 721</u>	<u>\$ (862)</u>	<u>\$ (976)</u>
Less: Buy-out of noncontrolling interest	31	8	—
Net income (loss) used in computing net income (loss) per share of common stock	<u>\$ 690</u>	<u>\$ (870)</u>	<u>\$ (976)</u>
Net income (loss) per share of common stock attributable to common stockholders (1)			
Basic	<u>\$ 0.74</u>	<u>\$ (0.98)</u>	<u>\$ (1.14)</u>
Diluted	<u>\$ 0.64</u>	<u>\$ (0.98)</u>	<u>\$ (1.14)</u>
Weighted average shares used in computing net income (loss) per share of common stock (1)			
Basic	<u>933</u>	<u>887</u>	<u>853</u>
Diluted	<u>1,083</u>	<u>887</u>	<u>853</u>

- (1) Prior period results have been adjusted to reflect the five-for-one stock split effected in the form of a stock dividend in August 2020. See Note 1, *Overview*, for details.

The accompanying notes are an integral part of these consolidated financial statements.

**Tesla, Inc.**  
**Consolidated Statements of Comprehensive Income (Loss)**  
(in millions)

	Year Ended December 31,		
	2020	2019	2018
Net income (loss)	\$ 862	\$ (775)	\$ (1,063)
Other comprehensive income (loss):			
Foreign currency translation adjustment	399	(28)	(42)
Comprehensive income (loss)	1,261	(803)	(1,105)
Less: Comprehensive income (loss) attributable to noncontrolling interests and redeemable noncontrolling interests in subsidiaries	141	87	(87)
Comprehensive income (loss) attributable to common stockholders	\$ 1,120	\$ (890)	\$ (1,018)

The accompanying notes are an integral part of these consolidated financial statements.

**Tesla, Inc.**  
**Consolidated Statements of Redeemable Noncontrolling Interests and Equity**  
(in millions, except per share data)

	Redeemable Noncontrolling Interests	Common Stock Shares (1)	Amount	Additional Paid-In Capital (1)	Accumulated Deficit (1)	Accumulated Other Comprehensive Income (Loss)	Total Stockholders' Equity	Noncontrolling Interests in Subsidiaries	Total Equity
<b>Balance as of December 31, 2017</b>	\$ 398	844	\$ 1	\$ 9,177	\$ (4,974)	\$ 33	\$ 4,237	\$ 997	\$ 5,234
Adjustments for prior periods from adopting ASC 606	8	—	—	—	623	—	623	(89)	534
Adjustments for prior periods from adopting Accounting Standards Update No. 2017-05	—	—	—	—	9	—	9	—	9
Exercises of conversion feature of convertible senior notes	—	1	0	0	—	—	0	—	0
Issuance of common stock for equity incentive awards	—	18	0	296	—	—	296	—	296
Stock-based compensation	—	—	—	775	—	—	775	—	775
Contributions from noncontrolling interests	276	—	—	—	—	—	—	161	161
Distributions to noncontrolling interests	(61)	—	—	—	—	—	—	(210)	(210)
Other	(3)	—	—	—	—	—	—	—	—
Net loss	(62)	—	—	—	(976)	—	(976)	(25)	(1,001)
Other comprehensive loss	—	—	—	—	—	(41)	(41)	—	(41)
<b>Balance as of December 31, 2018</b>	\$ 556	863	\$ 1	\$ 10,248	\$ (5,318)	\$ (8)	\$ 4,923	\$ 834	\$ 5,757
Adjustments for prior periods from adopting ASC 842	—	—	—	—	97	—	97	—	97
Conversion feature of 2.00% Convertible Senior Notes due in 2024 ("2024 Notes")	—	—	—	491	—	—	491	—	491
Purchase of convertible note hedges	—	—	—	(476)	—	—	(476)	—	(476)
Sales of warrants	—	—	—	174	—	—	174	—	174
Issuance of common stock for equity incentive awards and acquisitions, net of transaction costs	—	24	0	482	—	—	482	—	482
Issuance of common stock in May 2019 public offering at \$48.60 per share (1), net of issuance costs of \$15	—	18	0	848	—	—	848	—	848
Stock-based compensation	—	—	—	973	—	—	973	—	973
Contributions from noncontrolling interests	105	—	—	—	—	—	—	174	174
Distributions to noncontrolling interests	(65)	—	—	—	—	—	—	(198)	(198)
Other	(1)	—	—	(4)	—	—	(4)	—	(4)
Net income (loss)	48	—	—	—	(862)	—	(862)	39	(823)
Other comprehensive loss	—	—	—	—	—	(28)	(28)	—	(28)
<b>Balance as of December 31, 2019</b>	\$ 643	905	\$ 1	\$ 12,736	\$ (6,083)	\$ (36)	\$ 6,618	\$ 849	\$ 7,467
Adjustments for prior periods from adopting ASU 2016-13	—	—	—	—	(37)	—	(37)	—	(37)
Reclassification between equity and mezzanine equity for convertible senior notes	—	—	—	(51)	—	—	(51)	—	(51)
Exercises of conversion feature of convertible senior notes	—	2	0	59	—	—	59	—	59
Issuance of common stock for equity incentive awards	—	19	0	417	—	—	417	—	417
Issuance of common stock in public offerings, net of issuance costs of \$68 (1)	—	34	0	12,269	—	—	12,269	—	12,269
Stock-based compensation	—	—	—	1,861	—	—	1,861	—	1,861
Contributions from noncontrolling interests	7	—	—	—	—	—	—	17	17
Distributions to noncontrolling interests	(67)	—	—	—	—	—	—	(132)	(132)
Buy-outs of noncontrolling interests	(4)	—	—	(31)	—	—	(31)	—	(31)
Net income	25	—	—	—	721	—	721	116	837
Other comprehensive income	—	—	—	—	—	399	399	—	399
<b>Balance as of December 31, 2020</b>	\$ 604	960	\$ 1	\$ 27,260	\$ (5,399)	\$ 363	\$ 22,225	\$ 850	\$ 23,075

- (1) Prior period results have been adjusted to reflect the five-for-one stock split effected in the form of a stock dividend in August 2020. See Note 1, *Overview*, for details regarding stock split and public offerings.

The accompanying notes are an integral part of these consolidated financial statements.

**Tesla, Inc.**  
**Consolidated Statements of Cash Flows**  
(in millions)

	Year Ended December 31,		
	2020	2019	2018
<b>Cash Flows from Operating Activities</b>			
Net income (loss)	\$ 862	\$ (775)	\$ (1,063)
Adjustments to reconcile net income (loss) to net cash provided by operating activities:			
Depreciation, amortization and impairment	2,322	2,154	1,901
Stock-based compensation	1,734	898	749
Amortization of debt discounts and issuance costs	180	188	159
Inventory and purchase commitments write-downs	202	193	85
Loss on disposals of fixed assets	117	146	162
Foreign currency transaction net loss (gain)	114	(48)	(2)
Non-cash interest and other operating activities	228	186	49
Operating cash flow related to repayment of discounted convertible senior notes	—	(188)	—
Changes in operating assets and liabilities, net of effect of business combinations:			
Accounts receivable	(652)	(367)	(497)
Inventory	(422)	(429)	(1,023)
Operating lease vehicles	(1,072)	(764)	(215)
Prepaid expenses and other current assets	(251)	(288)	(82)
Other non-current assets	(344)	115	(207)
Accounts payable and accrued liabilities	2,102	646	1,797
Deferred revenue	321	801	406
Customer deposits	7	(58)	(96)
Other long-term liabilities	495	(5)	(25)
Net cash provided by operating activities	5,943	2,405	2,098
<b>Cash Flows from Investing Activities</b>			
Purchases of property and equipment excluding finance leases, net of sales	(3,157)	(1,327)	(2,101)



Purchases of solar energy systems, net of sales	(75)	(105)	(218)
Receipt of government grants	123	46	—
Purchase of intangible assets	(10)	(5)	—
Business combinations, net of cash acquired	(13)	(45)	(18)
Net cash used in investing activities	(3,132)	(1,436)	(2,337)
<b>Cash Flows from Financing Activities</b>			
Proceeds from issuances of common stock in public offerings, net of issuance costs	12,269	848	—
Proceeds from issuances of convertible and other debt	9,713	10,669	6,176
Repayments of convertible and other debt	(11,623)	(9,161)	(5,247)
Repayments of borrowings issued to related parties	—	—	(100)
Collateralized lease repayments	(240)	(389)	(559)
Proceeds from exercises of stock options and other stock issuances	417	263	296
Principal payments on finance leases	(338)	(321)	(181)
Debt issuance costs	(6)	(37)	(15)
Purchase of convertible note hedges	—	(476)	—
Proceeds from issuance of warrants	—	174	—
Proceeds from investments by noncontrolling interests in subsidiaries	24	279	437
Distributions paid to noncontrolling interests in subsidiaries	(208)	(311)	(227)
Payments for buy-outs of noncontrolling interests in subsidiaries	(35)	(9)	(6)
Net cash provided by financing activities	9,973	1,529	574
Effect of exchange rate changes on cash and cash equivalents and restricted cash	334	8	(23)
Net increase in cash and cash equivalents and restricted cash	13,118	2,506	312
Cash and cash equivalents and restricted cash, beginning of period	6,783	4,277	3,965
Cash and cash equivalents and restricted cash, end of period	\$ 19,901	\$ 6,783	\$ 4,277
<b>Supplemental Non-Cash Investing and Financing Activities</b>			
Equity issued in connection with business combination	\$ —	\$ 207	\$ —
	\$ 1,088	\$ 562	\$ 249

Acquisitions of property and equipment included in liabilities						
Estimated fair value of facilities under build-to-suit leases	\$	—	\$	—	\$	94
<b>Supplemental Disclosures</b>						
Cash paid during the period for interest, net of amounts capitalized	\$	444	\$	455	\$	381
Cash paid during the period for taxes, net of refunds	\$	115	\$	54	\$	35

The accompanying notes are an integral part of these consolidated financial statements.

**Tesla, Inc.**  
**Notes to Consolidated Financial Statements**

**Note 1 – Overview**

Tesla, Inc. (“Tesla”, the “Company”, “we”, “us” or “our”) was incorporated in the State of Delaware on July 1, 2003. We design, develop, manufacture and sell high-performance fully electric vehicles and design, manufacture, install and sell solar energy generation and energy storage products. Our Chief Executive Officer, as the chief operating decision maker (“CODM”), organizes our company, manages resource allocations and measures performance among two operating and reportable segments: (i) automotive and (ii) energy generation and storage.

As of and following December 31, 2020, there has continued to be widespread impact from the coronavirus disease (“COVID-19”) pandemic. In 2020, we temporarily suspended operations at each of our manufacturing facilities worldwide for a part of the first half of the year. Some of our suppliers and partners also experienced temporary suspensions before resuming, including Panasonic, which manufactures battery cells for our products at our Gigafactory Nevada. We also instituted temporary employee furloughs and compensation reductions while our U.S. operations were scaled back. Finally, reduced operations or closures at motor vehicle departments, vehicle auction houses and municipal and utility company inspectors resulted in challenges in or postponements for our new vehicle deliveries, used vehicle sales, and energy product deployments. By the second half of 2020, however, we resumed operations at all of our manufacturing facilities and have continued to increase our output and add additional capacity and work with each of our suppliers and government agencies on meeting, ramping and sustaining our production. On the other hand, certain government regulations and shifting social behaviors have continued to limit or close non-essential transportation, government functions, business activities and person-to-person interactions. In some cases, the relaxation of such trends has recently been followed by actual or contemplated returns to stringent restrictions on gatherings or commerce. We cannot predict the duration or direction of such trends, which have also adversely affected and may in the future affect our operations.

On February 19, 2020, we completed a public offering of our common stock and issued a total of 15.2 million shares (as adjusted to give effect to the Stock Split, as described in the paragraph below), for total cash proceeds of \$2.31 billion, net of underwriting discounts and offering costs of \$28 million.

On August 10, 2020, our Board of Directors declared a five-for-one split of the Company’s common stock effected in the form of a stock dividend (the “Stock Split”). Each stockholder of record on August 21, 2020 received a dividend of four additional shares of common stock for each then-held share, distributed after close of trading on August 28, 2020. All share and per share amounts presented herein have been retroactively adjusted to reflect the impact of the Stock Split.

On September 1, 2020, we entered into an Equity Distribution Agreement with certain sales agents to sell \$5.00 billion in shares of our common stock from time to time through an “at-the-market” offering program. Such sales were completed by September 4, 2020 and settled by September 9, 2020, with the sale of 11,141,562 shares of common stock resulting in gross proceeds of \$5.00 billion and net proceeds of \$4.97 billion, net of sales agents’ commissions of \$25 million and other offering costs of \$1 million.

On December 8, 2020, we entered into a separate Equity Distribution Agreement with certain sales agents to sell \$5.00 billion in shares of our common stock from time to time through an “at-the-market” offering program. Such sales were completed by December 9, 2020 and settled by December 11, 2020, with the sale of 7,915,589 shares of common stock resulting in gross proceeds of \$5.00 billion and net proceeds of \$4.99 billion, net of sales agents’ commissions of \$13 million and other offering costs of \$1 million.

## **Note 2 – Summary of Significant Accounting Policies**

### *Principles of Consolidation*

The accompanying consolidated financial statements have been prepared in conformity with U.S. generally accepted accounting principles (“GAAP”) and reflect our accounts and operations and those of our subsidiaries in which we have a controlling financial interest. In accordance with the provisions of Accounting Standards Codification (“ASC”) 810, Consolidation, we consolidate any variable interest entity (“VIE”) of which we are the primary beneficiary. We form VIEs with financing fund investors in the ordinary course of business in order to facilitate the funding and monetization of certain attributes associated with solar energy systems and leases under our direct vehicle leasing programs. The typical condition for a controlling financial interest ownership is holding a majority of the voting interests of an entity; however, a controlling financial interest may also exist in entities, such as VIEs, through arrangements that do not involve controlling voting interests. ASC 810 requires a variable interest holder to consolidate a VIE if that party has the power to direct the activities of the VIE that most significantly impact the VIE’s economic performance and the obligation to absorb losses of the VIE that could potentially be significant to the VIE or the right to receive benefits from the VIE that could potentially be significant to the VIE. We do not consolidate a VIE in which we have a majority ownership interest when we are not considered the primary beneficiary. We have determined that we are the primary beneficiary of all the VIEs (see Note 17, *Variable Interest Entity Arrangements*). We evaluate our relationships with all the VIEs on an ongoing basis to ensure that we continue to be the primary beneficiary. All intercompany transactions and balances have been eliminated upon consolidation.

### *Use of Estimates*

The preparation of financial statements in conformity with U.S. generally accepted accounting principles (“GAAP”) requires management to make estimates and assumptions that affect the reported amounts of assets, liabilities, revenues, costs and expenses and related disclosures in the accompanying notes.

Due to the COVID-19 pandemic, there has been uncertainty and disruption in the global economy and financial markets. The estimates used for, but not limited to, determining significant economic incentive for resale value guarantee arrangements, sales return reserves, the collectability of accounts receivable, inventory valuation, fair value of long-lived assets, goodwill, fair value of financial instruments, fair value and residual value of operating lease vehicles and solar energy systems subject to leases could be impacted. We have assessed the impact and are not aware of any specific events or circumstances that required an update to our estimates and assumptions or materially affected the carrying value of our assets or liabilities as of the date of issuance of this Annual Report on Form 10-K. These estimates may change as new events occur and additional information is obtained. Actual results could differ materially from these estimates under different assumptions or conditions.

### *Reclassifications*

Certain prior period balances have been reclassified to conform to the current period presentation in the consolidated financial statements and the accompanying notes. Restricted cash and MyPower customer notes receivable have been reclassified to other assets and resale value guarantees has been reclassified to other liabilities.

### *Revenue Recognition*

#### *Adoption of ASC 606 revenue standard*

On January 1, 2018, we adopted ASC 606, *Revenue from Contracts with Customers*, using the modified retrospective method.

### Revenue by source

The following table disaggregates our revenue by major source (in millions):

	Year Ended December 31,		
	2020	2019	2018
Automotive sales without resale value guarantee	\$ 24,053	\$ 19,212	\$ 15,810
Automotive sales with resale value guarantee (1)	551	146	1,403
Automotive regulatory credits	1,580	594	419
Energy generation and storage sales	1,477	1,000	1,056
Services and other	2,306	2,226	1,391
Total revenues from sales and services	29,967	23,178	20,079
Automotive leasing	1,052	869	883
Energy generation and storage leasing	517	531	499
Total revenues	\$ 31,536	\$ 24,578	\$ 21,461

- Due to pricing adjustments we made to our vehicle offerings during 2020 and 2019, we estimated that there was a greater likelihood that customers would exercise their buyback options and adjusted our sales return reserve on vehicles previously sold under our buyback options program, which resulted in a reduction of
- (1) automotive sales with resale value guarantee. For the years ended December 31, 2020 and 2019, price adjustments resulted in a reduction of automotive sales with resale value guarantee by \$72 million and \$555 million, respectively. The amounts presented represent automotive sales with resale value guarantee net of such pricing adjustments' impact.

### Automotive Segment

#### Automotive Sales Revenue

##### Automotive Sales without Resale Value Guarantee

Automotive sales revenue includes revenues related to deliveries of new vehicles and pay-per-use charges, and specific other features and services that meet the definition of a performance obligation under ASC 606, including access to our Supercharger network, internet connectivity, Full Self-Driving ("FSD") features and over-the-air software updates. We recognize revenue on automotive sales upon delivery to the customer, which is when the control of a vehicle transfers. Payments are typically received at the point control transfers or in accordance with payment terms customary to the business. Other features and services such as access to our Supercharger network, internet connectivity and over-the-air software updates are provisioned upon control transfer of a vehicle and recognized over time on a straight-line basis as we have a stand-ready obligation to deliver such services to the customer. We recognize revenue related to these other features and services over the performance period, which is generally the expected ownership life of the vehicle or the eight-year life of the vehicle. Revenue related to FSD features is recognized when functionality is delivered to the customer. For our obligations related to automotive sales, we estimate standalone selling price by considering costs used to develop and deliver the service, third-party pricing of similar options and other information that may be available.

At the time of revenue recognition, we reduce the transaction price and record a sales return reserve against revenue for estimated variable consideration related to future product returns. Such return rate estimates are based on historical experience and are immaterial in all periods presented. In addition, any fees that are paid or payable by us to a customer's lender when we arrange the financing are recognized as an offset against automotive sales revenue.

Costs to obtain a contract mainly relate to commissions paid to our sales personnel for the sale of vehicles. Commissions are not paid on other obligations such as access to our Supercharger network, internet connectivity, FSD features and over-the-air software updates. As our contract costs related to automotive sales are typically fulfilled within one year, the costs to obtain a contract are expensed as incurred. Amounts billed to customers related to shipping and handling are classified as automotive sales revenue, and we have elected to recognize the cost for freight and shipping when control over vehicles, parts, or accessories have transferred to the customer as an expense in cost of automotive sales revenue. Our policy is to exclude taxes collected from a customer from the transaction price of automotive contracts.

### Automotive Sales with Resale Value Guarantee or a Buyback Option

We offer resale value guarantees or similar buy-back terms to certain international customers who purchase vehicles and who finance their vehicles through one of our specified commercial banking partners. We also offer resale value guarantees in connection with automotive sales to certain leasing partners. Under these programs, we receive full payment for the vehicle sales price at the time of delivery and our counterparty has the option of selling their vehicle back to us during the guarantee period, which currently is generally at the end of the term of the applicable loan or financing program, for a pre-determined resale value.

With the exception of the *Vehicle Sales to Leasing Partners with a Resale Value Guarantee and a Buyback Option* program discussed within the Automotive Leasing section below, we recognize revenue when control transfers upon delivery to customers in accordance with ASC 606 as a sale with a right of return as we do not believe the customer has a significant economic incentive to exercise the resale value guarantee provided to them at contract inception. The process to determine whether there is a significant economic incentive includes a comparison of a vehicle's estimated market value at the time the option is exercisable with the guaranteed resale value to determine the customer's economic incentive to exercise. The performance obligations and the pattern of recognizing automotive sales with resale value guarantees are consistent with automotive sales without resale value guarantees with the exception of our estimate for sales return reserve. Sales return reserves for automotive sales with resale value guarantees are estimated based on historical experience plus consideration for expected future market values. On a quarterly basis, we assess the estimated market values of vehicles under our buyback options program to determine whether there have been changes to the likelihood of future product returns. As we accumulate more data related to the buyback values of our vehicles or as market conditions change, there may be material changes to their estimated values. Due to price adjustments we made to our vehicle offerings during 2020, we estimated that there is a greater likelihood that customers will exercise their buyback options that were provided prior to such adjustments. As a result, along with the estimated variable consideration related to normal future product returns for vehicles sold under the buyback options program, we adjusted our sales return reserve on vehicles previously sold under our buyback options program resulting in a reduction of automotive sales revenues of \$72 million for the year ended December 31, 2020. If customers elect to exercise the buyback option, we expect to be able to subsequently resell the returned vehicles, which resulted in a corresponding reduction in cost of automotive sales of \$42 million for the year ended December 31, 2020. The net impact was \$30 million reduction in gross profit for the year ended December 31, 2020. The total sales return reserve on vehicles previously sold under our buyback options program was \$703 million and \$639 million as of December 31, 2020 and December 31, 2019, respectively, of which \$202 million and \$93 million was short term, respectively.

Deferred revenue activity related to the access to our Supercharger network, internet connectivity, FSD features and over-the-air software updates on automotive sales with and without resale value guarantee consisted of the following (in millions):

	Year ended December 31,	
	2020	2019
Deferred revenue on automotive sales with and without resale value guarantee— beginning of period	\$ 1,472	\$ 883
Additions	724	880
Net changes in liability for pre-existing contracts	56	9
Revenue recognized	(326)	(300)
Deferred revenue on automotive sales with and without resale value guarantee— end of period	\$ 1,926	\$ 1,472

Deferred revenue is equivalent to the total transaction price allocated to the performance obligations that are unsatisfied, or partially unsatisfied, as of December 31, 2020. From the deferred revenue balance as of December 31, 2019, revenue recognized during the year ended December 31, 2020 was \$283 million. From the deferred revenue balance as of December 31, 2018, revenue recognized during the year ended December 31, 2019 was \$220 million. Of the total deferred revenue on automotive sales with and without resale value guarantees as of December 31, 2020, we expect to recognize \$1.13 billion of revenue in the next 12 months. The remaining balance will be recognized over the performance period as discussed above in Automotive Sales without Resale Value Guarantee.

### Automotive Regulatory Credits

We earn tradable credits in the operation of our automotive business under various regulations related to zero-emission vehicles, greenhouse gas, fuel economy and clean fuel. We sell these credits to other regulated entities who can use the credits to comply with emission standards and other regulatory requirements.



Payments for automotive regulatory credits are typically received at the point control transfers to the customer, or in accordance with payment terms customary to the business. We recognize revenue on the sale of automotive regulatory credits at the time control of the regulatory credits is transferred to the purchasing party as automotive sales revenue in the consolidated statements of operations. Revenue from the sale of automotive regulatory credits totaled \$1.58 billion, \$594 million and \$419 million for the years ended December 31, 2020, 2019 and 2018, respectively. Deferred revenue related to sales of automotive regulatory credits was \$21 million and \$140 million as of December 31, 2020 and 2019, respectively. We expect to recognize the majority of the deferred revenue as of December 31, 2020 in the next 12 months.

#### Automotive Leasing Revenue

##### Direct Vehicle Operating Leasing Program

We have outstanding leases under our direct vehicle operating leasing programs in the U.S., Canada and in certain countries in Europe. Qualifying customers are permitted to lease a vehicle directly from Tesla for up to 48 months. At the end of the lease term, customers are required to return the vehicles to us or for Model S and Model X leases in certain regions, may opt to purchase the vehicles for a pre-determined residual value. We account for these leasing transactions as operating leases. We record leasing revenues to automotive leasing revenue on a straight-line basis over the contractual term, and we record the depreciation of these vehicles to cost of automotive leasing revenue. For the years ended December 31, 2020, 2019 and 2018, we recognized \$752 million, \$532 million and \$393 million of direct vehicle leasing revenue, respectively. As of December 31, 2020 and 2019, we had deferred \$293 million and \$218 million, respectively, of lease-related upfront payments, which will be recognized on a straight-line basis over the contractual terms of the individual leases.

Our policy is to exclude taxes collected from a customer from the transaction price of automotive contracts.

##### Vehicle Sales to Leasing Partners with a Resale Value Guarantee and a Buyback Option

We offered buyback options in connection with automotive sales with resale value guarantees with certain leasing partner sales in the U.S. and where we expected the customer had a significant economic incentive to exercise the resale value guarantee provided to them at contract inception, we continued to recognize these transactions as operating leases. These transactions entailed a transfer of leases, which we had originated with an end-customer, to our leasing partner. As control of the vehicles had not been transferred in accordance with ASC 606, these transactions were accounted for as interest-bearing collateralized borrowings in accordance with ASC 840, *Leases*, prior to January 1, 2019. Under this program, cash was received for the full price of the vehicle and the collateralized borrowing value was generally recorded within resale value guarantees and the customer upfront down payment was recorded within deferred revenue. We amortize the deferred revenue amount to automotive leasing revenue on a straight-line basis over the option period and accrue interest expense based on our borrowing rate. The option period expires at the earlier of the end of the contractual option period or the pay-off of the initial loan. We capitalized vehicles under this program to operating lease vehicles, net, on the consolidated balance sheets, and we record depreciation from these vehicles to cost of automotive leasing revenue during the period the vehicle is under a lease arrangement. Cash received for these vehicles, net of revenue recognized during the period, is classified as collateralized lease (repayments) borrowings within cash flows from financing activities in the consolidated statements of cash flows. Following the adoption of ASC 842 on January 1, 2019, all new agreements under this program are accounted for as operating leases and there was no material change in the timing and amount of revenue recognized over the term. Consequently, any cash flows for new agreements are classified as operating cash activities on the consolidated statements of cash flows.

At the end of the lease term, we settle our liability in cash by either purchasing the vehicle from the leasing partner for the buyback option amount or paying a shortfall to the option amount the leasing partner may realize on the sale of the vehicle. Any remaining balances within deferred revenue and resale value guarantee will be settled to automotive leasing revenue. The end customer can extend the lease for a period of up to 6 months. In cases where the leasing partner retains ownership of the vehicle after the end of our option period, we expense the net value of the leased vehicle to cost of automotive leasing revenue. The maximum amount we could be required to pay under this program, should we decide to repurchase all vehicles, was \$42 million and \$214 million as of December 31, 2020 and 2019, respectively, including \$23 million within a 12-month period from December 31, 2020. As of December 31, 2020 and 2019, we had \$42 million and \$238 million, respectively, of such borrowings recorded in accrued liabilities and other and other long-term liabilities and \$11 million and \$29 million, respectively, recorded in deferred revenue liability. For the years ended December 31, 2020, 2019 and 2018, we recognized \$77 million, \$186 million and \$332 million, respectively, of leasing revenue related to this program. The net carrying amount of operating lease vehicles under this program was \$43 million and \$190 million, respectively, as of December 31, 2020 and 2019.



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### Direct Sales-Type Leasing Program

We have outstanding direct leases and vehicles financed by us under loan arrangements accounted for as sales-type leases under ASC 842 in certain countries in Asia and Europe, which we introduced in volume during the third quarter of 2020. Depending on the specific program, customers may or may not have a right to return the vehicle to us during or at the end of the lease term. If the customer does not have a right to return, the customer will take title to the vehicle at the end of the lease term after making all contractual payments. Under the programs for which there is a right to return, the purchase option is reasonably certain to be exercised by the lessee and we therefore expect the customer to take title to the vehicle at the end of the lease term after making all contractual payments. Qualifying customers are permitted to lease a vehicle directly under these programs for up to 48 months. Our loan arrangements under these programs can have terms for up to 72 months. We recognize all revenue and costs associated with the sales-type lease as automotive leasing revenue and automotive leasing cost of revenue, respectively, upon delivery of the vehicle to the customer. Interest income based on the implicit rate in the lease is recorded to automotive leasing revenue over time as customers are invoiced on a monthly basis. For the year ended December 31, 2020, we recognized \$120 million of sales-type leasing revenue and \$87 million of sales-type leasing cost of revenue.

### Services and Other Revenue

Services and other revenue consists of non-warranty after-sales vehicle services, sales of used vehicles, retail merchandise, sales by our acquired subsidiaries to third party customers, and vehicle insurance revenue.

Revenues related to repair and maintenance services are recognized over time as services are provided and extended service plans are recognized over the performance period of the service contract as the obligation represents a stand-ready obligation to the customer. We sell used vehicles, services, service plans, vehicle components and merchandise separately and thus use standalone selling prices as the basis for revenue allocation to the extent that these items are sold in transactions with other performance obligations. Payment for used vehicles, services, and merchandise are typically received at the point when control transfers to the customer or in accordance with payment terms customary to the business. Payments received for prepaid plans are refundable upon customer cancellation of the related contracts and are included within customer deposits on the consolidated balance sheets. Deferred revenue related to services and other revenue was immaterial as of December 31, 2020 and 2019.

### Energy Generation and Storage Segment

#### Energy Generation and Storage Sales

Energy generation and storage sales revenue consists of the sale of solar energy systems and energy storage systems to residential, small commercial, and large commercial and utility grade customers. Energy generation and storage sales revenue also includes revenue from agreements for solar energy systems and power purchase agreements ("PPAs") that commence after January 1, 2019, which is recognized as earned, based on the amount of capacity provided for solar energy systems or electricity delivered for PPAs at the contractual billing rates, assuming all other revenue recognition criteria have been met. Under the practical expedient available under ASC 606-10-55-18, we recognize revenue based on the value of the service which is consistent with the billing amount. Sales of solar energy systems to residential and small scale commercial customers consist of the engineering, design, and installation of the system. Post installation, residential and small scale commercial customers receive a proprietary monitoring system that captures and displays historical energy generation data. Residential and small scale commercial customers pay the full purchase price of the solar energy system upfront. Revenue for the design and installation obligation is recognized when control transfers, which is when we install a solar energy system and the system passes inspection by the utility or the authority having jurisdiction. Revenue for the monitoring service is recognized ratably as a stand-ready obligation over the warranty period of the solar energy system. Sales of energy storage systems to residential and small scale commercial customers consist of the installation of the energy storage system and revenue is recognized when control transfers, which is when the product has been delivered or, if we are performing installation, when installed and commissioned. Payment for such storage systems is made upon invoice or in accordance with payment terms customary to the business.

For large commercial and utility grade solar energy system and energy storage system sales which consist of the engineering, design, and installation of the system, customers make milestone payments that are consistent with contract-specific phases of a project. Revenue from such contracts is recognized over time using the percentage of completion method based on cost incurred as a percentage of total estimated contract costs for energy storage system sales and as a percentage of total estimated labor hours for solar energy system sales. Certain large-scale commercial and utility grade solar energy system and energy storage system sales also include operations and maintenance service which are negotiated with the design and installation contracts and are thus considered to be a combined contract with the design and installation service. For certain large commercial and utility grade solar energy systems and energy storage systems where the percentage of completion method does not apply, revenue is recognized when control transfers, which is when the product has been delivered to the customer and commissioned for energy storage systems and when the project has received permission to operate from the utility for solar energy systems. Operations

and maintenance service revenue is recognized ratably over the respective contract term for solar energy system sales and upon delivery of the service for energy storage system sales. Customer payments for such services are usually paid annually or quarterly in advance.

In instances where there are multiple performance obligations in a single contract, we allocate the consideration to the various obligations in the contract based on the relative standalone selling price method. Standalone selling prices are estimated based on estimated costs plus margin or using market data for comparable products. Costs incurred on the sale of residential installations before the solar energy systems are completed are included as work in process within inventory in the consolidated balance sheets. Any fees that are paid or payable by us to a solar loan lender would be recognized as an offset against revenue. Costs to obtain a contract relate mainly to commissions paid to our sales personnel related to the sale of solar energy systems and energy storage systems. As our contract costs related to solar energy system and energy storage system sales are typically fulfilled within one year, the costs to obtain a contract are expensed as incurred.

As part of our solar energy system and energy storage system contracts, we may provide the customer with performance guarantees that warrant that the underlying system will meet or exceed the minimum energy generation or energy performance requirements specified in the contract. In certain instances, we may receive a bonus payment if the system performs above a specified level. Conversely, if a solar energy system or energy storage system does not meet the performance guarantee requirements, we may be required to pay liquidated damages. Other forms of variable consideration related to our large commercial and utility grade solar energy system and energy storage system contracts include variable customer payments that will be made based on our energy market participation activities. Such guarantees and variable customer payments represent a form of variable consideration and are estimated at contract inception at their most likely amount and updated at the end of each reporting period as additional performance data becomes available. Such estimates are included in the transaction price only to the extent that it is probable a significant reversal of revenue will not occur.

We record as deferred revenue any non-refundable amounts that are collected from customers related to fees charged for prepayments and remote monitoring service and operations and maintenance service, which is recognized as revenue ratably over the respective customer contract term. As of December 31, 2020 and 2019, deferred revenue related to such customer payments amounted to \$187 million and \$156 million, respectively. Revenue recognized from the deferred revenue balance as of December 31, 2019 was \$34 million for the year ended December 31, 2020. Revenue recognized from the deferred revenue balance as of December 31, 2018 was \$41 million for the year ended December 31, 2019. We have elected the practical expedient to omit disclosure of the amount of the transaction price allocated to remaining performance obligations for energy generation and storage sales with an original expected contract length of one year or less and the amount that we have the right to invoice when that amount corresponds directly with the value of the performance to date. As of December 31, 2020, total transaction price allocated to performance obligations that were unsatisfied or partially unsatisfied for contracts with an original expected length of more than one year was \$100 million. Of this amount, we expect to recognize \$6 million in the next 12 months and the remaining over a period up to 27 years.

#### Energy Generation and Storage Leasing

For revenue arrangements where we are the lessor under operating lease agreements for energy generation and storage products, we record lease revenue from minimum lease payments, including upfront rebates and incentives earned from such systems, on a straight-line basis over the life of the lease term, assuming all other revenue recognition criteria have been met. The difference between the payments received and the revenue recognized is recorded as deferred revenue or deferred asset on the consolidated balance sheet.

For solar energy systems where customers purchase electricity from us under PPAs prior to January 1, 2019, we have determined that these agreements should be accounted for as operating leases pursuant to ASC 840. Revenue is recognized based on the amount of electricity delivered at rates specified under the contracts, assuming all other revenue recognition criteria are met.

We record as deferred revenue any amounts that are collected from customers, including lease prepayments, in excess of revenue recognized and operations and maintenance service fees, which is recognized as revenue ratably over the respective customer contract term. As of December 31, 2020 and 2019, deferred revenue related to such customer payments amounted to \$206 million and \$226 million, respectively. Deferred revenue also includes the portion of rebates and incentives received from utility companies and various local and state government agencies, which is recognized as revenue over the lease term. As of December 31, 2020 and 2019, deferred revenue from rebates and incentives amounted to \$29 million and \$36 million, respectively.

We capitalize initial direct costs from the execution of agreements for solar energy systems and PPAs, which include the referral fees and sales commissions, as an element of solar energy systems, net, and subsequently amortize these costs over the term of the related agreements.

## Cost of Revenues

### *Automotive Segment*

#### Automotive Sales

Cost of automotive sales revenue includes direct parts, material and labor costs, manufacturing overhead, including depreciation costs of tooling and machinery, shipping and logistic costs, vehicle connectivity costs, allocations of electricity and infrastructure costs related to our Supercharger network, and reserves for estimated warranty expenses. Cost of automotive sales revenues also includes adjustments to warranty expense and charges to write down the carrying value of our inventory when it exceeds its estimated net realizable value and to provide for obsolete and on-hand inventory in excess of forecasted demand.

#### Automotive Leasing

Cost of automotive leasing revenue includes the amortization of operating lease vehicles over the lease term, cost of goods sold associated with direct sales-type leases, as well as warranty expenses related to leased vehicles. Cost of automotive leasing revenue also includes vehicle connectivity costs and allocations of electricity and infrastructure costs related to our Supercharger network for vehicles under our leasing programs.

#### Services and Other

Costs of services and other revenue includes costs associated with providing non-warranty after-sales services, costs to acquire and certify used vehicles, costs for retail merchandise, and costs to provide vehicle insurance. Cost of services and other revenue also includes direct parts, material and labor costs, manufacturing overhead associated with the sales by our acquired subsidiaries to third party customers.

### *Energy Generation and Storage Segment*

#### Energy Generation and Storage

Cost of energy generation and storage revenue includes direct and indirect material and labor costs, warehouse rent, freight, warranty expense, other overhead costs and amortization of certain acquired intangible assets. Cost of energy generation and storage revenue also includes charges to write down the carrying value of our inventory when it exceeds its estimated net realizable value and to provide for obsolete and on-hand inventory in excess of forecasted demand. In agreements for solar energy system and PPAs where we are the lessor, the cost of revenue is primarily comprised of depreciation of the cost of leased solar energy systems, maintenance costs associated with those systems and amortization of any initial direct costs.

## *Leases*

We adopted ASC 842, *Leases*, as of January 1, 2019 using the cumulative effect adjustment approach (“adoption of the new lease standard”). In addition, we elected the package of practical expedients permitted under the transition guidance within the new standard, which allowed us to carry forward the historical determination of contracts as leases, lease classification and not reassess initial direct costs for historical lease arrangements. Accordingly, previously reported financial statements, including footnote disclosures, have not been recast to reflect the application of the new standard to all comparative periods presented. The finance lease classification under ASC 842 includes leases previously classified as capital leases under ASC 840.

## *Research and Development Costs*

Research and development costs are expensed as incurred.

## *Marketing, Promotional and Advertising Costs*

Marketing, promotional and advertising costs are expensed as incurred and are included as an element of selling, general and administrative expense in the consolidated statement of operations. Marketing, promotional and advertising costs were immaterial for the years ended December 31, 2020, 2019 and 2018.

## *Income Taxes*

Income taxes are computed using the asset and liability method, under which deferred tax assets and liabilities are determined based on the difference between the financial statement and tax bases of assets and liabilities using

enacted tax rates in effect for the year in which the differences are expected to affect taxable income. Valuation allowances are established when necessary to reduce deferred tax assets to the amount expected to be realized.

We record liabilities related to uncertain tax positions when, despite our belief that our tax return positions are supportable, we believe that it is more likely than not that those positions may not be fully sustained upon review by tax authorities. Accrued interest and penalties related to unrecognized tax benefits are classified as income tax expense.

The Tax Cuts and Jobs Act ("TCJA") subjects a U.S. shareholder to tax on global intangible low-taxed income ("GILTI") earned by certain foreign subsidiaries. Under GAAP, we can make an accounting policy election to either treat taxes due on the GILTI inclusion as a current period expense or factor such amounts into our measurement of deferred taxes. We elected the deferred method, under which we recorded the corresponding deferred tax assets and liabilities on our consolidated balance sheets, currently subject to valuation allowance.

#### *Comprehensive Income (Loss)*

Comprehensive income (loss) is comprised of net income (loss) and other comprehensive income (loss). Other comprehensive income (loss) consists of foreign currency translation adjustments that have been excluded from the determination of net income (loss).

#### *Stock-Based Compensation*

We recognize compensation expense for costs related to all share-based payments, including stock options, restricted stock units ("RSUs") and our employee stock purchase plan (the "ESPP"). The fair value of stock option awards with only service and/or performance conditions is estimated on the grant or offering date using the Black-Scholes option-pricing model. The fair value of RSUs is measured on the grant date based on the closing fair market value of our common stock. Stock-based compensation expense is recognized on a straight-line basis over the requisite service period, net of actual forfeitures in the period.

For performance-based awards, stock-based compensation expense is recognized over the expected performance achievement period of individual performance milestones when the achievement of each individual performance milestone becomes probable. For performance-based awards with a vesting schedule based entirely on the attainment of both performance and market conditions, stock-based compensation expense associated with each tranche is recognized over the longer of (i) the expected achievement period for the operational milestone for such tranche and (ii) the expected achievement period for the related market capitalization milestone determined on the grant date, beginning at the point in time when the relevant operational milestone is considered probable of being achieved. If such operational milestone becomes probable any time after the grant date, we will recognize a cumulative catch-up expense from the grant date to that point in time. If the related market capitalization milestone is achieved earlier than its expected achievement period and the achievement of the related operational milestone, then the stock-based compensation expense will be recognized over the expected achievement period for the operational milestone, which may accelerate the rate at which such expense is recognized. The fair value of such awards is estimated on the grant date using Monte Carlo simulations (see Note 14, *Equity Incentive Plans*).

As we accumulate additional employee stock-based awards data over time and as we incorporate market data related to our common stock, we may calculate significantly different volatilities and expected lives, which could materially impact the valuation of our stock-based awards and the stock-based compensation expense that we will recognize in future periods. Stock-based compensation expense is recorded in cost of revenues, research and development expense and selling, general and administrative expense in the consolidated statements of operations.

### *Noncontrolling Interests and Redeemable Noncontrolling Interests*

Noncontrolling interests and redeemable noncontrolling interests represent third-party interests in the net assets under certain funding arrangements, or funds, that we enter into to finance the costs of solar energy systems and vehicles under operating leases. We have determined that the contractual provisions of the funds represent substantive profit sharing arrangements. We have further determined that the methodology for calculating the noncontrolling interest and redeemable noncontrolling interest balances that reflects the substantive profit sharing arrangements is a balance sheet approach using the hypothetical liquidation at book value (“HLBV”) method. We, therefore, determine the amount of the noncontrolling interests and redeemable noncontrolling interests in the net assets of the funds at each balance sheet date using the HLBV method, which is presented on the consolidated balance sheet as noncontrolling interests in subsidiaries and redeemable noncontrolling interests in subsidiaries. Under the HLBV method, the amounts reported as noncontrolling interests and redeemable noncontrolling interests in the consolidated balance sheet represent the amounts the third parties would hypothetically receive at each balance sheet date under the liquidation provisions of the funds, assuming the net assets of the funds were liquidated at their recorded amounts determined in accordance with GAAP and with tax laws effective at the balance sheet date and distributed to the third parties. The third parties’ interests in the results of operations of the funds are determined as the difference in the noncontrolling interest and redeemable noncontrolling interest balances in the consolidated balance sheets between the start and end of each reporting period, after taking into account any capital transactions between the funds and the third parties. However, the redeemable noncontrolling interest balance is at least equal to the redemption amount. The redeemable noncontrolling interest balance is presented as temporary equity in the mezzanine section of the consolidated balance sheet since these third parties have the right to redeem their interests in the funds for cash or other assets. For certain funds, there may be significant fluctuations in the ending balance of redeemable noncontrolling interest in subsidiaries and net income (loss) attributable to noncontrolling interests and redeemable noncontrolling interests in subsidiaries due to changes in the liquidation provisions as time-based milestones are reached.

### *Net Income (Loss) per Share of Common Stock Attributable to Common Stockholders*

Basic net income (loss) per share of common stock attributable to common stockholders is calculated by dividing net income (loss) attributable to common stockholders by the weighted-average shares of common stock outstanding for the period. During the year ended December 31, 2020, we decreased net income attributable to common stockholders by \$31 million to arrive at the numerator used to calculate net income per share. During the year ended December 31, 2019, we increased net loss attributable to common stockholders by \$8 million to arrive at the numerator used to calculate net loss per share. These adjustments represent the difference between the cash we paid to the financing fund investors for their noncontrolling interest in our subsidiaries and the carrying amount of the noncontrolling interest on our consolidated balance sheets, in accordance with ASC 260, *Earnings per Share*. Potentially dilutive shares, which are based on the weighted-average shares of common stock underlying outstanding stock-based awards, warrants and convertible senior notes using the treasury stock method or the if-converted method, as applicable, are included when calculating diluted net income (loss) per share of common stock attributable to common stockholders when their effect is dilutive. Since we intend to settle or have settled in cash the principal outstanding under our 0.25% Convertible Senior Notes due in 2019 (“2019 Notes”), 1.25% Convertible Senior Notes due in 2021 (“2021 Notes”), 2.375% Convertible Senior Notes due in 2022 (“2022 Notes”), 2024 Notes and our subsidiary’s 5.50% Convertible Senior Notes due in 2022, we use the treasury stock method applied using our average share price during the period when calculating their potential dilutive effect, if any. Furthermore, in connection with the offerings of our convertible senior notes, we entered into convertible note hedges and warrants (see Note 12, *Debt*). However, our convertible note hedges are not included when calculating potentially dilutive shares since their effect is always anti-dilutive. Warrants which have a strike price above our average share price during the period were out of the money and were not included in the tables below. Warrants will be included in the weighted-average shares used in computing basic net income (loss) per share of common stock in the period(s) they are settled.

The following table presents the reconciliation of basic to diluted weighted average shares used in computing net income (loss) per share of common stock attributable to common stockholders, as adjusted to give effect to the Stock Split (in millions):

	Year Ended December 31,		
	2020	2019	2018
Weighted average shares used in computing	933	887	853



net income (loss) per share of common stock, basic				
Add:				
Stock-based awards	66	—	—	
Convertible senior notes	47	—	—	
Warrants	37	—	—	
Weighted average shares used in computing net income (loss) per share of common stock, diluted	1,083	887	853	

The following table presents the potentially dilutive shares that were excluded from the computation of diluted net income (loss) per share of common stock attributable to common stockholders, because their effect was anti-dilutive (in millions):

	Year Ended December 31,		
	2020	2019	2018
Stock-based awards	2	50	50
Convertible senior notes	1	5	7
Warrants	—	—	1

### *Business Combinations*

We account for business acquisitions under ASC 805, *Business Combinations*. The total purchase consideration for an acquisition is measured as the fair value of the assets given, equity instruments issued and liabilities assumed at the acquisition date. Costs that are directly attributable to the acquisition are expensed as incurred. Identifiable assets (including intangible assets), liabilities assumed (including contingent liabilities) and noncontrolling interests in an acquisition are measured initially at their fair values at the acquisition date. We recognize goodwill if the fair value of the total purchase consideration and any noncontrolling interests is in excess of the net fair value of the identifiable assets acquired and the liabilities assumed. We recognize a bargain purchase gain within other income (expense), net, on the consolidated statement of operations if the net fair value of the identifiable assets acquired and the liabilities assumed is in excess of the fair value of the total purchase consideration and any noncontrolling interests. We include the results of operations of the acquired business in the consolidated financial statements beginning on the acquisition date.

### *Cash and Cash Equivalents*

All highly liquid investments with an original maturity of three months or less at the date of purchase are considered cash equivalents. Our cash equivalents are primarily comprised of money market funds.

### *Restricted Cash*

We maintain certain cash balances restricted as to withdrawal or use. Our restricted cash is comprised primarily of cash as collateral for our sales to lease partners with a resale value guarantee, letters of credit, real estate leases, insurance policies, credit card borrowing facilities and certain operating leases. In addition, restricted cash includes cash received from certain fund investors that have not been released for use by us and cash held to service certain payments under various secured debt facilities. We record restricted cash as other assets in the consolidated balance sheets and determine current or non-current classification based on the expected duration of the restriction.

Our total cash and cash equivalents and restricted cash, as presented in the consolidated statements of cash flows, was as follows (in millions):

	December 31, 2020	December 31, 2019	December 31, 2018
Cash and cash equivalents	\$ 19,384	\$ 6,268	\$ 3,686
Restricted cash included in prepaid expenses and other current assets	238	246	193
Restricted cash included in other non-current assets	279	269	398
Total as presented in	\$ 19,901	\$ 6,783	\$ 4,277

the  
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*Accounts Receivable and Allowance for Doubtful Accounts*

Accounts receivable primarily include amounts related to receivables from financial institutions and leasing companies offering various financing products to our customers, sales of energy generation and storage products, sales of regulatory credits to other automotive manufacturers, government rebates already passed through to customers and maintenance services on vehicles owned by leasing companies. We provide an allowance against accounts receivable for the amount we expect to be uncollectible. We write-off accounts receivable against the allowance when they are deemed uncollectible.

Depending on the day of the week on which the end of a fiscal quarter falls, our accounts receivable balance may fluctuate as we are waiting for certain customer payments to clear through our banking institutions and receipts of payments from our financing partners, which can take up to approximately two weeks based on the contractual payment terms with such partners. Our accounts receivable balances associated with our sales of regulatory credits, which are typically transferred to other manufacturers during the last few days of the quarter, is dependent on contractual payment terms. Additionally, government rebates can take up to a year or more to be collected depending on the customary processing timelines of the specific jurisdictions issuing them. These various factors may have a significant impact on our accounts receivable balance from period to period.

#### *MyPower Customer Notes Receivable*

We have customer notes receivable under the legacy MyPower loan program. MyPower was offered by one of our subsidiaries to provide residential customers with the option to finance the purchase of a solar energy system through a 30-year loan. The outstanding balances, net of any allowance for credit losses, are presented on the consolidated balance sheet as a component of prepaid expenses and other current assets for the current portion and as other non-current assets for the long-term portion. We adopted ASC 326, *Financial Instruments – Credit Losses*, on January 1, 2020 on a modified retrospective basis. Under ASC 326, expected credit loss for customer notes receivable are measured on a collective basis and are determined as the difference between the amortized cost basis and the present value of cash flows expected to be collected. In determining expected credit losses, we consider our historical level of credit losses, current economic trends, and reasonable and supportable forecasts that affect the collectability of the future cash flows. We write-off customer notes receivable when they are deemed uncollectible and the amount of potentially uncollectible amounts has been insignificant. Using a modified retrospective approach for the impact upon adoption, we recorded an increase to the allowance for credit losses of \$37 million on January 1, 2020, with an offset to accumulated deficit. As of December 31, 2020 and 2019, the total outstanding balance of MyPower customer notes receivable, net of allowance for credit losses, was \$334 million and \$402 million, respectively, of which \$9 million was due in the next 12 months as of December 31, 2020 and 2019, respectively. As of December 31, 2020, the allowance for credit losses was \$45 million. In addition, there were no material non-accrual or past due customer notes receivable as of December 31, 2020.

#### *Concentration of Risk*

##### *Credit Risk*

Financial instruments that potentially subject us to a concentration of credit risk consist of cash, cash equivalents, restricted cash, accounts receivable, convertible note hedges, and interest rate swaps. Our cash balances are primarily invested in money market funds or on deposit at high credit quality financial institutions in the U.S. These deposits are typically in excess of insured limits. As of December 31, 2020 and 2019, no entity represented 10% or more of our total accounts receivable balance. The risk of concentration for our convertible note hedges and interest rate swaps is mitigated by transacting with several highly-rated multinational banks.

##### *Supply Risk*

We are dependent on our suppliers, the majority of which are single source suppliers, and the inability of these suppliers to deliver necessary components of our products in a timely manner at prices, quality levels and volumes acceptable to us, or our inability to efficiently manage these components from these suppliers, could have a material adverse effect on our business, prospects, financial condition and operating results.

Although all of our manufacturing facilities are operational, and we continue to increase our output and add additional capacity and are working with each of our suppliers and government agencies on meeting, ramping and sustaining our production, our ability to sustain this trajectory depends, among other things, on the readiness and solvency of our suppliers and vendors through any macroeconomic factors resulting from the COVID-19 pandemic.

#### *Inventory Valuation*

Inventories are stated at the lower of cost or net realizable value. Cost is computed using standard cost for vehicles and energy storage products, which approximates actual cost on a first-in, first-out basis. In addition, cost for solar energy systems is recorded using actual cost. We record inventory write-downs for excess or obsolete inventories based upon assumptions about current and future demand forecasts. If our inventory on-hand is in excess of our future demand forecast, the excess amounts are written-off.

We also review our inventory to determine whether its carrying value exceeds the net amount realizable upon the ultimate sale of the inventory. This requires us to determine the estimated selling price of our vehicles less the

estimated cost to convert the inventory on-hand into a finished product. Once inventory is written-down, a new, lower cost basis for that inventory is established and subsequent changes in facts and circumstances do not result in the restoration or increase in that newly established cost basis.

Should our estimates of future selling prices or production costs change, additional and potentially material increases to this reserve may be required. A small change in our estimates may result in a material charge to our reported financial results.

### *Operating Lease Vehicles*

Vehicles that are leased as part of our direct vehicle leasing program and vehicles delivered to leasing partners with a resale value guarantee and a buyback option where there is significant economic incentive to exercise at contract inception are classified as operating lease vehicles as the related revenue transactions are treated as operating leases under ASC 842 (refer to the Automotive Leasing Revenue section above for details). Operating lease vehicles are recorded at cost less accumulated depreciation. We generally depreciate their value, less salvage value, using the straight-line-method to cost of automotive leasing revenue over the contractual period. The gross cost of operating lease vehicles as of December 31, 2020 and 2019 was \$3.54 billion and \$2.85 billion, respectively. Operating lease vehicles on the consolidated balance sheets are presented net of accumulated depreciation of \$446 million and \$406 million as of December 31, 2020 and 2019, respectively.

### *Solar Energy Systems, Net*

We are the lessor of solar energy systems. Prior to January 1, 2019, these leases were accounted for as operating leases in accordance with ASC 840. Under ASC 840, to determine lease classification, we evaluated the lease terms to determine whether there was a transfer of ownership or bargain purchase option at the end of the lease, whether the lease term was greater than 75% of the useful life or whether the present value of the minimum lease payments exceeded 90% of the fair value at lease inception. Agreements for solar energy system leases and PPAs that commence after January 1, 2019 no longer meet the definition of a lease upon the adoption of ASC 842 and are instead accounted for in accordance with ASC 606. We utilize periodic appraisals to estimate useful lives and fair values at lease inception and residual values at lease termination. Solar energy systems are stated at cost less accumulated depreciation.

Depreciation and amortization is calculated using the straight-line method over the estimated useful lives of the respective assets, as follows:

Solar energy systems in service	30 to 35 years
Initial direct costs related to customer solar energy system lease acquisition costs	Lease term (up to 25 years)

Solar energy systems pending interconnection will be depreciated as solar energy systems in service when they have been interconnected and placed in-service. Solar energy systems under construction represents systems that are under installation, which will be depreciated as solar energy systems in service when they are completed, interconnected and placed in service. Initial direct costs related to customer solar energy system agreement acquisition costs are capitalized and amortized over the term of the related customer agreements.

### *Property, Plant and Equipment, net*

Property, plant and equipment, net, including leasehold improvements, are recognized at cost less accumulated depreciation. Depreciation is generally computed using the straight-line method over the estimated useful lives of the respective assets, as follows:

Machinery, equipment, vehicles and office furniture	2 to 12 years
Building and building improvements	15 to 30 years
Computer equipment and software	3 to 10 years

Leasehold improvements are depreciated on a straight-line basis over the shorter of their estimated useful lives or the terms of the related leases.

Upon the retirement or sale of our property, plant and equipment, the cost and associated accumulated depreciation are removed from the consolidated balance sheet, and the resulting gain or loss is reflected on the consolidated statement of operations. Maintenance and repair expenditures are expensed as incurred while major improvements that increase the functionality, output or expected life of an asset are capitalized and depreciated ratably over the identified useful life.

Interest expense on outstanding debt is capitalized during the period of significant capital asset construction. Capitalized interest on construction-in-progress is included within property, plant and equipment, net and is amortized over the life of the related assets.

### *Long-Lived Assets Including Acquired Intangible Assets*

We review our property, plant and equipment, solar energy systems, long-term prepayments and intangible assets for impairment whenever events or changes in circumstances indicate that the carrying amount of an asset (or asset group) may not be recoverable. We measure recoverability by comparing the carrying amount to the future undiscounted cash flows that the asset is expected to generate. If the asset is not recoverable, its carrying amount would be adjusted down to its fair value. For the year ended December 31, 2020, we have recognized no material impairments of our long-lived assets. For the years ended December 31, 2019 and 2018, we have recognized certain impairments of our long-lived assets (refer to Note 22, *Restructuring and Other*, for further details).

Intangible assets with definite lives are amortized on a straight-line basis over their estimated useful lives, which range from one to thirty years.

### *Goodwill*

We assess goodwill for impairment annually in the fourth quarter, or more frequently if events or changes in circumstances indicate that it might be impaired, by comparing its carrying value to the reporting unit's fair value. For the years ended December 31, 2020, 2019, and 2018, we had not recognized any impairment of goodwill.

### *Capitalization of Software Costs*

For costs incurred in development of internal use software, we capitalize costs incurred during the application development stage to property, plant and equipment, net on the consolidated balance sheets. Costs related to preliminary project activities and post-implementation activities are expensed as incurred. Internal use software is amortized on a straight-line basis over its estimated useful life of three years. We evaluate the useful lives of these assets on an annual basis, and we test for impairment whenever events or changes in circumstances occur that could impact the recoverability of these assets.

### *Foreign Currency*

We determine the functional and reporting currency of each of our international subsidiaries and their operating divisions based on the primary currency in which they operate. In cases where the functional currency is not the U.S. dollar, we recognize a cumulative translation adjustment created by the different rates we apply to current period income or loss and the balance sheet. For each subsidiary, we apply the monthly average functional exchange rate to its monthly income or loss and the month-end functional currency rate to translate the balance sheet.

Foreign currency transaction gains and losses are a result of the effect of exchange rate changes on transactions denominated in currencies other than the functional currency. Transaction gains and losses are recognized in other (expense) income, net, in the consolidated statements of operations. For the years ended December 31, 2020, 2019 and 2018, we recorded net foreign currency transaction losses of \$114 million, gains of \$48 million and gains of \$2 million, respectively.



### Warranties

We provide a manufacturer's warranty on all new and used vehicles and a warranty on the installation and components of the energy generation and storage systems we sell for periods typically between 10 to 25 years. We accrue a warranty reserve for the products sold by us, which includes our best estimate of the projected costs to repair or replace items under warranties and recalls when identified. These estimates are based on actual claims incurred to date and an estimate of the nature, frequency and costs of future claims. These estimates are inherently uncertain given our relatively short history of sales, and changes to our historical or projected warranty experience may cause material changes to the warranty reserve in the future. The warranty reserve does not include projected warranty costs associated with our vehicles subject to operating lease accounting and our solar energy systems under lease contracts or PPAs, as the costs to repair these warranty claims are expensed as incurred. The portion of the warranty reserve expected to be incurred within the next 12 months is included within accrued liabilities and other, while the remaining balance is included within other long-term liabilities on the consolidated balance sheets. Warranty expense is recorded as a component of cost of revenues in the consolidated statements of operations. Due to the magnitude of our automotive business, accrued warranty balance was primarily related to our automotive segment. Accrued warranty activity consisted of the following (in millions):

	Year Ended December 31,		
	2020	2019	2018
Accrued warranty—beginning of period	\$ 1,089	\$ 748	\$ 402
Warranty costs incurred	(312)	(250)	(209)
Net changes in liability for pre-existing warranties, including expirations and foreign exchange impact	66	36	(26)
Additional warranty accrued from adoption of ASC 606	—	—	37
Provision for warranty	625	555	544
Accrued warranty—end of period	<u>\$ 1,468</u>	<u>\$ 1,089</u>	<u>\$ 748</u>

### Solar Renewable Energy Credits

We account for Solar Renewable Energy Certificates ("SRECs") when they are purchased by us or sold to third parties. For SRECs generated by solar energy systems owned by us and minted by government agencies, we do not recognize any specifically identifiable costs as there are no specific incremental costs incurred to generate the SRECs. We recognize revenue within the energy generation and storage segment from the sale of an SREC when the SREC is transferred to the buyer, and the cost of the SREC, if any, is then recorded to energy generation and storage cost of revenue.

### Nevada Tax Incentives

In connection with the construction of Gigafactory Nevada, we entered into agreements with the State of Nevada and Storey County in Nevada that provide abatements for specified taxes, discounts to the base tariff energy rates and transferable tax credits of up to \$195.0 million in consideration of capital investment and hiring targets that were met at Gigafactory Nevada. These incentives are available until June 2024 or June 2034, depending on the incentive. As of December 31, 2020 and 2019, we had earned the maximum of \$195 million of transferable tax credits under these agreements.

### Gigafactory Texas Tax Incentives

In connection with the construction of Gigafactory Texas, we entered into a 20-year agreement with Travis County in Texas pursuant to which we would receive grant funding equal to 70-80% of property taxes paid by us to Travis County and a separate 10-year agreement with the Del Valle Independent School District in Texas pursuant to which a portion of the taxable value of our property would be capped at a specified amount, in each case subject to our meeting certain minimum economic development metrics through our construction and operations at Gigafactory Texas. As of December 31, 2020, we had not yet received any grant funding related to property taxes paid to Travis County.

## *Recent Accounting Pronouncements*

### *Recently issued accounting pronouncements not yet adopted*

In December 2019, the FASB issued ASU No. 2019-12, Simplifying the Accounting for Income Taxes, as part of its initiative to reduce complexity in accounting standards. The amendments in the ASU include removing exceptions to incremental intraperiod tax allocation of losses and gains from different financial statement components, exceptions to the method of recognizing income taxes on interim period losses, and exceptions to deferred tax liability recognition related to foreign subsidiary investments. In addition, the ASU requires that entities recognize franchise tax based on an incremental method and requires an entity to evaluate the accounting for step-ups in the tax basis of goodwill as inside or outside of a business combination. The amendments in the ASU are effective for fiscal years beginning after December 15, 2020, including interim periods therein. Early adoption of the standard is permitted, including adoption in interim or annual periods for which financial statements have not yet been issued. We have not early adopted this ASU as of December 31, 2020. The ASU is currently not expected to have a material impact on our consolidated financial statements.

In March 2020, the FASB issued ASU No. 2020-04, Facilitation of the Effects of Reference Rate Reform on Financial Reporting (Topic 848). The ASU provides optional expedients and exceptions for applying GAAP to transactions affected by reference rate (e.g., LIBOR) reform if certain criteria are met, for a limited period of time to ease the potential burden in accounting for (or recognizing the effects of) reference rate reform on financial reporting. The ASU is effective as of March 12, 2020 through December 31, 2022. We will evaluate transactions or contract modifications occurring as a result of reference rate reform and determine whether to apply the optional guidance on an ongoing basis. The ASU is currently not expected to have a material impact on our consolidated financial statements.

In August 2020, the FASB issued ASU 2020-06, Accounting for Convertible Instruments and Contracts in an Entity's Own Equity. The ASU simplifies the accounting for convertible instruments by removing certain separation models in ASC 470-20, Debt—Debt with Conversion and Other Options, for convertible instruments. The ASU updates the guidance on certain embedded conversion features that are not required to be accounted for as derivatives under Topic 815, Derivatives and Hedging, or that do not result in substantial premiums accounted for as paid-in capital, such that those features are no longer required to be separated from the host contract. The convertible debt instruments will be accounted for as a single liability measured at amortized cost. This will also result in the interest expense recognized for convertible debt instruments to be typically closer to the coupon interest rate when applying the guidance in Topic 835, Interest. Further, the ASU made amendments to the EPS guidance in Topic 260 for convertible instruments, the most significant impact of which is requiring the use of the if-converted method for diluted EPS calculation, and no longer allowing the net share settlement method. The ASU also made revisions to Topic 815-40, which provides guidance on how an entity must determine whether a contract qualifies for a scope exception from derivative accounting. The amendments to Topic 815-40 change the scope of contracts that are recognized as assets or liabilities. The ASU is effective for interim and annual periods beginning after December 15, 2021, with early adoption permitted for periods beginning after December 15, 2020. Adoption of the ASU can either be on a modified retrospective or full retrospective basis.

We will adopt the ASU on January 1, 2021 on a modified retrospective basis. The adoption is expected to reduce additional paid in capital and convertible senior notes (mezzanine equity) by approximately \$475 million and \$50 million, respectively for the recombination of the equity conversion component of our convertible debt remaining outstanding, which was initially separated and recorded in equity, remove the remaining debt discounts recorded for this previous separation for approximately \$269 million and reduce property, plant and equipment for previously capitalized interest by approximately \$45 million, as a result. The net effect of these adjustments will be recorded as a reduction in the balance of our opening accumulated deficit as of January 1, 2021.

We currently expect the adoption of the ASU will result in the reduction of non-cash interest expense for the year ending December 31, 2021 and until the affected notes have been settled, before the impact of reduction of our interest capitalization, which is not expected to be material. The reduction of depreciation expense through cost of goods sold is not expected to be material for the year ending December 31, 2021. These reduced expenses will increase the income attributable to common stockholders for both basic and diluted earnings per share. The required use of the if converted method is not expected to have a significant impact on the calculation of common share equivalents included in the measure of our diluted earnings per share for our 2021 Notes, 2022 Notes, 2024 Notes and our subsidiary's 5.50% Convertible Senior Notes due in 2022. The amendments to the derivative accounting guidance are not expected to have a material impact on our consolidated financial statements. The adoption will have no impact on the consolidated statement of cash flows.

#### *Recently adopted accounting pronouncements*

In June 2016, the FASB issued ASU No. 2016-13, Measurement of Credit Losses on Financial Instruments, to require financial assets carried at amortized cost to be presented at the net amount expected to be collected based on historical experience, current conditions and forecasts. Subsequently, the FASB issued ASU No. 2018-19, Codification Improvements to Topic 326, to clarify that receivables arising from operating leases are within the scope of lease accounting standards. Further, the FASB issued ASU No. 2019-04, ASU No. 2019-05, ASU 2019-10, ASU 2019-11, ASU 2020-02 and ASU 2020-03 to provide additional guidance on the credit losses standard. Adoption of the ASUs is on a modified retrospective basis. We adopted the ASUs on January 1, 2020. The ASUs did not have a material impact on our consolidated financial statements. ASU No. 2016-13 applies to all financial assets including loans, trade receivables and any other financial assets not excluded from the scope that have the contractual right to receive cash. The adoption of this ASU did not have any impact except on MyPower customer notes receivable. Refer to MyPower Customer Notes Receivable above for further details.

In January 2017, the FASB issued ASU No. 2017-04, Simplifying the Test for Goodwill Impairment, to simplify the test for goodwill impairment by removing Step 2. An entity will, therefore, perform the goodwill impairment test by comparing the fair value of a reporting unit with its carrying amount and recognizing an impairment charge for the amount by which the carrying amount exceeds the fair value, not to exceed the total amount of goodwill allocated to the reporting unit. An entity still has the option to perform a qualitative assessment to determine if the quantitative impairment test is necessary. We adopted the ASU prospectively on January 1, 2020. The ASU did not have a material impact on our consolidated financial statements.

In August 2018, the FASB issued ASU No. 2018-15, Customer's Accounting for Implementation Costs Incurred in a Cloud Computing Arrangement that Is a Service Contract. The ASU aligns the requirements for capitalizing implementation costs incurred in a hosting arrangement that is a service contract with the requirements for capitalizing implementation costs incurred to develop or obtain internal-use software (and hosting arrangements that include an internal-use software license). We adopted the ASU prospectively on January 1, 2020. The ASU did not have a material impact on our consolidated financial statements.

### **Note 3 – Business Combinations**

For the year ended December 31, 2020, we completed various acquisitions for which consideration was immaterial on an individual basis and in aggregate.

#### ***Maxwell Acquisition***

On May 16, 2019 (the "Acquisition Date"), we completed our strategic acquisition of Maxwell Technologies, Inc. ("Maxwell"), an energy storage and power delivery products company, for its complementary technology and workforce. Pursuant to the related Agreement and Plan of Merger, each issued and outstanding share of Maxwell common stock was converted into 0.0965 (the "Exchange Ratio") shares of our common stock, as adjusted to give effect to the Stock Split. In addition, Maxwell's stock option awards and restricted stock unit awards were assumed by us and converted into corresponding equity awards in respect of our common stock based on the Exchange Ratio, with the awards retaining the same vesting and other terms and conditions as in effect immediately prior to the acquisition.

#### ***Fair Value of Purchase Consideration***

The Acquisition Date fair value of the purchase consideration was \$207 million (as adjusted to give effect to the Stock Split, 4,514,840 shares issued at \$45.90 per share, the opening price of our common stock on the Acquisition Date).

#### ***Fair Value of Assets Acquired and Liabilities Assumed***

We accounted for the acquisition using the purchase method of accounting for business combinations under ASC 805, Business Combinations. The total purchase price was allocated to the tangible and identifiable intangible assets acquired and liabilities based on their estimated fair values as of the Acquisition Date.

Fair value estimates are based on a complex series of judgments about future events and uncertainties and rely heavily on estimates and assumptions. The judgments used to determine the estimated fair value assigned to each class of assets acquired and liabilities assumed, as well as asset lives and the expected future cash flows and related discount rates, can materially impact our consolidated financial statements. Significant inputs used for the model included the amount of cash flows, the expected period of the cash flows and the discount rates.



The allocation of the purchase price was based on management's estimate of the Acquisition Date fair values of the assets acquired and liabilities assumed, as follows (in millions):

<b>Assets acquired:</b>	
Cash and cash equivalents	\$ 32
Accounts receivable	24
Inventory	32
Property, plant and equipment, net	27
Operating lease right-of-use assets	10
Intangible assets	105
Prepaid expenses and other assets, current and non-current	3
Total assets acquired	233
<b>Liabilities and equity assumed:</b>	
Accounts payable	(10)
Accrued liabilities and other	(28)
Debt and finance leases, current and non-current	(44)
Deferred revenue, current	(1)
Other long-term liabilities	(14)
Additional paid-in capital	(8)
Total liabilities and equity assumed	(105)
Net assets acquired	128
Goodwill	79
Total purchase price	\$ 207

Goodwill represented the excess of the purchase price over the fair value of the net assets acquired and was primarily attributable to the expected synergies from integrating Maxwell's technology into our automotive segment as well as the acquired talent. Goodwill is not deductible for U.S. income tax purposes and is not amortized.

#### *Identifiable Intangible Assets Acquired*

The determination of the fair value of identified intangible assets and their respective useful lives were as follows (in millions, except for estimated useful life):

	Fair Value	Useful Life (in years)
Developed technology	\$ 102	9
Customer relations	2	9
Trade name	1	10
Total intangible assets	\$ 105	

Maxwell's results of operations since the Acquisition Date have been included within the automotive segment. Standalone and pro forma results of operations have not been presented because they were not material to the consolidated financial statements.

#### **Other 2019 Acquisitions**

During the year ended December 31, 2019, we completed various other acquisitions generally for the related technology and workforce. Total consideration for these acquisitions was \$96 million, of which \$80 million was paid in cash. In aggregate, \$36 million was attributed to intangible assets, \$51 million was attributed to goodwill within the automotive segment, and \$9 million was attributed to net assets assumed. Goodwill is not deductible for U.S. income tax purposes. The identifiable intangible assets were related to purchased technology, with estimated useful lives of one to nine years.

Standalone and pro forma results of operations have not been presented because they were not material to the consolidated financial statements, either individually or in aggregate.

#### **Note 4 – Goodwill and Intangible Assets**

Goodwill increased \$9 million within the automotive segment from \$198 million as of December 31, 2019 to \$207 million as of December 31, 2020 due to completed business combinations and foreign currency translation adjustments during the year ended December 31, 2020. There were no accumulated impairment losses as of December 31, 2020 and 2019.

Information regarding our intangible assets including assets recognized from our acquisitions was as follows (in millions):

	December 31, 2020				December 31, 2019			
	Gross Carrying Amount	Accumulated Amortization	Other	Net Carrying Amount	Gross Carrying Amount	Accumulated Amortization	Other	Net Carrying Amount
<b>Finite-lived</b>								
<b>intangible assets:</b>								
Developed technology	\$ 302	\$ (111)	\$ 3	\$ 194	\$ 291	\$ (72)	\$ 1	\$ 220
Trade names	3	(1)	—	2	3	(1)	1	3
Favorable contracts and leases, net	113	(32)	—	81	113	(24)	—	89
Other	38	(18)	1	21	38	(16)	—	22
Total finite-lived intangible assets	456	(162)	4	298	445	(113)	2	334
<b>Indefinite-lived</b>								
<b>intangible assets:</b>								
Gigafactory Nevada water rights	15	—	—	15	5	—	—	5
In-process research and development ("IPR&D")	—	—	—	—	60	—	(60)	—
Total indefinite-lived intangible assets	15	—	—	15	65	—	(60)	5
Total intangible assets	\$ 471	\$ (162)	\$ 4	\$ 313	\$ 510	\$ (113)	\$ (58)	\$ 339

Amortization expense during the years ended December 31, 2020, 2019 and 2018 was \$51 million, \$44 million and \$66 million, respectively.

Total future amortization expense for finite-lived intangible assets was estimated as follows (in millions):

2021	\$ 51
2022	50
2023	44
2024	29
2025	29

Thereafter	95
Total	<u>\$ 298</u>

#### Note 5 – Fair Value of Financial Instruments

ASC 820, *Fair Value Measurements*, states that fair value is an exit price, representing the amount that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants. As such, fair value is a market-based measurement that should be determined based on assumptions that market participants would use in pricing an asset or a liability. The three-tiered fair value hierarchy, which prioritizes which inputs should be used in measuring fair value, is comprised of: (Level I) observable inputs such as quoted prices in active markets; (Level II) inputs other than quoted prices in active markets that are observable either directly or indirectly and (Level III) unobservable inputs for which there is little or no market data. The fair value hierarchy requires the use of observable market data when available in determining fair value. Our assets and liabilities that were measured at fair value on a recurring basis were as follows (in millions):

	December 31, 2020				December 31, 2019			
	Fair Value	Level I	Level II	Level III	Fair Value	Level I	Level II	Level III
Money market funds (cash and cash equivalents)	\$13,847	\$13,847	\$ —	\$ —	\$ 1,632	\$ 1,632	\$ —	\$ —
Interest rate swap assets	—	—	—	—	1	—	1	—
Interest rate swap liabilities	58	—	58	—	(27)	—	(27)	—
Total	<u>\$13,905</u>	<u>\$13,847</u>	<u>\$ 58</u>	<u>\$ —</u>	<u>\$ 1,606</u>	<u>\$ 1,632</u>	<u>\$ (26)</u>	<u>\$ —</u>



All of our money market funds were classified within Level I of the fair value hierarchy because they were valued using quoted prices in active markets. Our interest rate swaps were classified within Level II of the fair value hierarchy because they were valued using alternative pricing sources or models that utilized market observable inputs, including current and forward interest rates.

#### Interest Rate Swaps

We enter into fixed-for-floating interest rate swap agreements to swap variable interest payments on certain debt for fixed interest payments, as required by certain of our lenders. We do not designate our interest rate swaps as hedging instruments. Accordingly, our interest rate swaps are recorded at fair value on the consolidated balance sheets within other non-current assets or other long-term liabilities, with any changes in their fair values recognized as other (expense) income, net, in the consolidated statements of operations and with any cash flows recognized as operating activities in the consolidated statements of cash flows. Our interest rate swaps outstanding were as follows (in millions):

	December 31, 2020			December 31, 2019		
	Aggregate Notional Amount	Gross Asset at Fair Value	Gross Liability at Fair Value	Aggregate Notional Amount	Gross Asset at Fair Value	Gross Liability at Fair Value
Interest rate swaps	\$ 554	\$ —	\$ 58	\$ 821	\$ 1	\$ 27

Our interest rate swaps activity was as follows (in millions):

	Year Ended December 31,		
	2020	2019	2018
Gross losses	\$ 42	\$ 51	\$ 12
Gross gains	\$ 6	\$ 11	\$ 22

#### Disclosure of Fair Values

Our financial instruments that are not re-measured at fair value include accounts receivable, MyPower customer notes receivable, accounts payable, accrued liabilities, customer deposits and debt. The carrying values of these financial instruments other than our 2021 Notes, 2022 Notes, 2024 Notes, our subsidiary's Zero-Coupon Convertible Senior Notes due in 2020 and our subsidiary's 5.50% Convertible Senior Notes due in 2022 (collectively referred to as "Convertible Senior Notes" below), 5.30% Senior Notes due in 2025 ("2025 Notes"), solar asset-backed notes and solar loan-backed notes approximate their fair values.

We estimate the fair value of the Convertible Senior Notes and the 2025 Notes using commonly accepted valuation methodologies and market-based risk measurements that are indirectly observable, such as credit risk (Level II). In addition, we estimate the fair values of our solar asset-backed notes and solar loan-backed notes based on rates currently offered for instruments with similar maturities and terms (Level III). The following table presents the estimated fair values and the carrying values (in millions):

	December 31, 2020		December 31, 2019	
	Carrying Value	Fair Value	Carrying Value	Fair Value
Convertible Senior Notes	\$ 1,971	\$ 24,596	\$ 3,729	\$ 6,110
2025 Notes	\$ 1,785	\$ 1,877	\$ 1,782	\$ 1,748
Solar asset-backed notes	\$ 1,115	\$ 1,137	\$ 1,155	\$ 1,211
Solar loan-backed notes	\$ 146	\$ 152	\$ 175	\$ 189

#### Note 6 – Inventory

Our inventory consisted of the following (in millions):

	December 31, 2020	December 31, 2019
Raw materials	\$ 1,508	\$ 1,428
	493	362

Work in process		
Finished goods (1)	1,666	1,356
Service parts	434	406
Total	<u>\$ 4,101</u>	<u>\$ 3,552</u>

- (1) Finished goods inventory includes vehicles in transit to fulfill customer orders, new vehicles available for sale, used vehicles, energy storage products and Solar Roof products available for sale.

For solar energy systems, we commence transferring component parts from inventory to construction in progress, a component of solar energy systems, once a lease or PPA contract with a customer has been executed and installation has been initiated. Additional costs incurred on the leased solar energy systems, including labor and overhead, are recorded within solar energy systems under construction.

We write-down inventory for any excess or obsolete inventories or when we believe that the net realizable value of inventories is less than the carrying value. During the years ended December 31, 2020, 2019 and 2018, we recorded write-downs of \$145 million, \$138 million and \$78 million, respectively, in cost of revenues.

#### Note 7 – Solar Energy Systems, Net

Solar energy systems, net, consisted of the following (in millions):

	December 31, 2020	December 31, 2019
Solar energy systems in service	\$ 6,758	\$ 6,682
Initial direct costs related to customer solar energy system lease acquisition costs	103	102
	<u>6,861</u>	<u>6,784</u>
Less: accumulated depreciation and amortization (1)	<u>(955)</u>	<u>(723)</u>
	<u>5,906</u>	<u>6,061</u>
Solar energy systems under construction	28	18
Solar energy systems pending interconnection	45	59
Solar energy systems, net (2)	<u>\$ 5,979</u>	<u>\$ 6,138</u>

- (1) Depreciation and amortization expense during the years ended December 31, 2020, 2019 and 2018 was \$232 million, \$227 million and \$276 million, respectively.
- (2) As of December 31, 2020 and 2019, solar energy systems, net, included \$36 million of gross finance leased assets with accumulated depreciation and amortization of \$7 million and \$6 million, respectively.

#### Note 8 – Property, Plant and Equipment, Net

Our property, plant and equipment, net, consisted of the following (in millions):

	December 31, 2020	December 31, 2019
Machinery, equipment, vehicles and office furniture	\$ 8,493	\$ 7,167
Tooling	1,811	1,493
Leasehold improvements	1,421	1,087
Land and buildings	3,662	3,024
Computer equipment, hardware and software	856	595
Construction in progress	1,621	764
	<u>17,864</u>	<u>14,130</u>
Less: Accumulated depreciation	<u>(5,117)</u>	<u>(3,734)</u>
Total	<u>\$ 12,747</u>	<u>\$ 10,396</u>

Construction in progress is primarily comprised of construction of Gigafactory Berlin and Gigafactory Texas, expansion of Gigafactory Shanghai and equipment and tooling related to the manufacturing of our products. We are currently constructing Gigafactory Berlin under conditional permits. Completed assets are transferred to their respective asset classes, and depreciation begins when an asset is ready for its intended use. Interest on outstanding debt is capitalized during periods of significant capital asset construction and amortized over the useful lives of the related assets. During the years ended December 31, 2020 and 2019, we capitalized \$48 million and \$31 million, respectively, of interest.

Depreciation expense during the years ended December 31, 2020, 2019 and 2018 was \$1.57 billion, \$1.37 billion and \$1.11 billion, respectively. Gross property, plant and equipment under finance leases as of December 31, 2020 and 2019 was \$2.28 billion and \$2.08 billion, respectively, with accumulated depreciation of \$816 million and \$483 million, respectively.



Panasonic has partnered with us on Gigafactory Nevada with investments in the production equipment that it uses to manufacture and supply us with battery cells. Under our arrangement with Panasonic, we plan to purchase the full output from their production equipment at negotiated prices. As the terms of the arrangement convey a finance lease under ASC 842, Leases, we account for their production equipment as leased assets when production commences. We account for each lease and any non-lease components associated with that lease as a single lease component for all asset classes, except production equipment classes embedded in supply agreements. This results in us recording the cost of their production equipment within property, plant and equipment, net, on the consolidated balance sheets with a corresponding liability recorded to debt and finance leases. Depreciation on Panasonic production equipment is computed using the units-of-production method whereby capitalized costs are amortized over the total estimated productive life of the respective assets. As of December 31, 2020 and 2019, we had cumulatively capitalized costs of \$1.77 billion and \$1.73 billion, respectively, on the consolidated balance sheets in relation to the production equipment under our Panasonic arrangement.

In 2019, the Shanghai government agreed to provide \$85 million of certain incentives in connection with us making certain manufacturing equipment investments at Gigafactory Shanghai, of which \$46 million was received in cash and the remaining \$39 million was in the form of assets and services contributed by the government. In 2020, the Shanghai government agreed to provide an additional \$122 million of such incentives. Of the total incentives provided between both years, \$123 million was received in cash in 2020. Proceeds from the grant must be spent on qualified capital investments at Gigafactory Shanghai as stipulated in the agreement. These incentives were taken as a reduction to property, plant and equipment, net, on the consolidated balance sheets and cash receipts are reflected as investing cash inflows on the consolidated statements of cash flows.

#### Note 9 – Accrued Liabilities and Other

As of December 31, 2020 and 2019, accrued liabilities and other current liabilities consisted of the following (in millions):

	December 31, 2020	December 31, 2019
Accrued purchases (1)	\$ 901	\$ 638
Taxes payable (2)	777	611
Payroll and related costs	654	466
Accrued warranty reserve, current portion	479	344
Sales return reserve, current portion	417	272
Operating lease liabilities, current portion	286	228
Accrued interest	77	86
Resale value guarantees, current portion	23	317
	241	260

Other current liabilities		
Total	\$ 3,855	\$ 3,222

- (1) Accrued purchases primarily reflects receipts of goods and services that we had not been invoiced yet. As we are invoiced for these goods and services, this balance will reduce and accounts payable will increase.
- (2) Taxes payable includes value added tax, sales tax, property tax, use tax and income tax payables.

#### Note 10 – Other Long-Term Liabilities

As of December 31, 2020 and 2019, other long-term liabilities consisted of the following (in millions):

	December 31, 2020	December 31, 2019
Operating lease liabilities	\$ 1,254	\$ 956
Accrued warranty reserve	989	745
Sales return reserve	500	545
Deferred tax liability	151	66
Resale value guarantees	19	36
Other non-current liabilities	417	343
Total other long-term liabilities	\$ 3,330	\$ 2,691

## Note 11 – Customer Deposits

Customer deposits primarily consisted of cash payments from customers at the time they place an order or reservation for a vehicle or an energy product and any additional payments up to the point of delivery or the completion of installation, including the fair values of any customer trade-in vehicles that are applicable toward a new vehicle purchase. Customer deposits also include prepayments on contracts that can be cancelled without significant penalties, such as vehicle maintenance plans. Customer deposit amounts and timing vary depending on the vehicle model, the energy product and the country of delivery. In the case of a vehicle, customer deposits are fully refundable. In the case of an energy generation or storage product, customer deposits are fully refundable prior to the entry into a purchase agreement or in certain cases for a limited time thereafter (in accordance with applicable laws). Customer deposits are included in current liabilities until refunded or until they are applied towards the customer's purchase balance.

## Note 12 – Debt

The following is a summary of our debt and finance leases as of December 31, 2020 (in millions):

	Net Carrying Value		Unpaid	Unused	Contractual	Contractual
	Current	Long-Term	Principal	Committed	Interest Rates	Maturity Date
			Balance	Amount (1)		
<b>Recourse debt:</b>						
2021 Notes	\$ 419	—	422	—	1.25%	March 2021
2022 Notes	115	366	503	—	2.375%	March 2022
2024 Notes	171	856	1,282	—	2.00%	May 2024
2025 Notes	—	1,785	1,800	—	5.30%	August 2025
Credit Agreement	—	1,895	1,895	278	3.3%	July 2023
Solar Bonds and other Loans	4	49	55	—	3.6%-5.8%	January 2021 - January 2031
Total recourse debt	709	4,951	5,957	278		
<b>Non-recourse debt:</b>						
Automotive Asset-backed Notes	777	921	1,705	—	0.6%-7.9%	August 2021-August 2024
Solar Asset-backed Notes	39	1,076	1,141	—	3.0%-7.7%	September 2024-February 2048
China Loan Agreements	—	616	616	1,372	4.0%	June 2021-December 2024
Cash Equity Debt	18	408	439	—	5.3%-5.8%	July 2033-January 2035
Solar Loan-backed Notes	13	133	152	—	4.8%-7.5%	September 2048-September 2049
Warehouse Agreements	37	257	294	806	1.7%-1.8%	September 2022
Solar Term Loan	151	—	151	—	3.7%	January 2021
Automotive Lease-backed Credit Facilities	14	19	33	153	1.9%-5.9%	September 2022-November 2022
Solar Revolving Credit Facility and other Loans	—	81	81	23	2.7%-5.1%	June 2022-February 2033
Total non-recourse debt	1,049	3,511	4,612	2,354		
Total debt	1,758	8,462	\$ 10,569	\$ 2,632		
Finance leases	374	1,094				
Total debt and finance leases	\$ 2,132	\$ 9,556				

The following is a summary of our debt and finance leases as of December 31, 2019 (in millions):

	Net Carrying Value		Unpaid Principal Balance	Unused Committed Amount (1)	Contractual Interest Rates	Contractual Maturity Date
	Current	Long-Term				
<b>Recourse debt:</b>						
2021 Notes	\$ —	\$ 1,304	\$ 1,380	\$ —	1.25%	March 2021
2022 Notes	—	902	978	—	2.375%	March 2022
2024 Notes	—	1,383	1,840	—	2.00%	May 2024
2025 Notes	—	1,782	1,800	—	5.3%	August 2025
Credit Agreement	141	1,586	1,727	499	2.7%-4.8%	June 2020-July 2023
Zero-Coupon Convertible Senior Notes due in 2020	97	—	103	—	0.0%	December 2020
Solar Bonds and other Loans	15	53	70	—	3.6%-5.8%	March 2020-January 2031
<b>Total recourse debt</b>	<b>253</b>	<b>7,010</b>	<b>7,898</b>	<b>499</b>		
<b>Non-recourse debt:</b>						
Automotive Asset-backed Notes	573	997	1,577	—	2.0%-7.9%	February 2020- May 2023
Solar Asset-backed Notes	32	1,123	1,183	—	4.0%-7.7%	September 2024-February 2048
China Loan Agreements	444	297	741	1,542	3.7%-4.0%	September 2020-December 2024
Cash Equity Debt	10	430	454	—	5.3%-5.8%	July 2033-January 2035
Solar Loan-backed Notes	11	164	182	—	4.8%-7.5%	September 2048-September 2049
Warehouse Agreements	21	146	167	933	3.1%-3.6%	September 2021
Solar Term Loans	8	152	161	—	5.4%	January 2021
Automotive Lease-backed Credit Facility	24	16	40	—	4.2%-5.9%	November 2022
Solar Revolving Credit Facility and other Loans	23	67	89	6	4.5%-7.4%	March 2020-June 2022
<b>Total non-recourse debt</b>	<b>1,146</b>	<b>3,392</b>	<b>4,594</b>	<b>2,481</b>		
<b>Total debt</b>	<b>1,399</b>	<b>10,402</b>	<b>\$ 12,492</b>	<b>\$ 2,980</b>		
Finance leases	386	1,232				
<b>Total debt and finance leases</b>	<b>\$ 1,785</b>	<b>\$ 11,634</b>				

There are no restrictions on draw-down or use for general corporate purposes with respect to any available committed funds under our credit facilities and financing funds, except certain specified conditions prior to

- (1) draw-down, including pledging to our lenders sufficient amounts of qualified receivables, inventories, leased vehicles and our interests in those leases, solar energy systems and the associated customer contracts, our interests in financing funds or various other assets and as may be further described below.

Recourse debt refers to debt that is recourse to our general assets. Non-recourse debt refers to debt that is recourse to only assets of our subsidiaries. The differences between the unpaid principal balances and the net carrying values are due to convertible senior note conversion features, debt discounts or deferred financing costs. As of December 31, 2020, we were in material compliance with all financial debt covenants, which include minimum liquidity and expense-coverage balances and ratios.

### 2021 Notes, Bond Hedges and Warrant Transactions

In March 2014, we issued \$1.20 billion in aggregate principal amount of our 2021 Notes in a public offering. In April 2014, we issued an additional \$180 million in aggregate principal amount of the notes, pursuant to the exercise in full of the overallotment options by the underwriters. The total net proceeds from the issuances, after deducting transaction costs, were \$1.36 billion.

As adjusted to give effect to the Stock Split, each \$1,000 of principal of these notes is now convertible into 13.8940 shares of our common stock, which is equivalent to a conversion price of \$71.97 per share, subject to adjustment upon the occurrence of specified events. Holders of these notes have been able to elect to convert on or after December 1, 2020. The settlement of such an election to convert the outstanding notes would be in cash for the principal amount and, if applicable, cash and/or shares of our common stock for any conversion premium at our election. As of December 1, 2020, holders of these notes have the option to convert. Such holders also had the option to convert prior to December 1, 2020 under the circumstances further described below. Upon the early conversion of the 2021 Notes, we will pay cash for the principal amount and deliver shares of our common stock based on a daily conversion value. If a fundamental change occurs prior to the applicable maturity date, holders of these notes may require us to repurchase all or a portion of their notes for cash at a repurchase price equal to 100% of the principal amount plus any accrued and unpaid interest. In addition, if specific corporate events occur prior to the applicable maturity date, we would increase the conversion rate for a holder who elects to convert their notes in connection with such an event in certain circumstances.

In accordance with GAAP relating to embedded conversion features, we initially valued and bifurcated the conversion features associated with these notes. We recorded to stockholders' equity \$369 million for the conversion feature. The resulting debt discount is being amortized to interest expense at an effective interest rate of 5.96%.





In connection with the offering of these notes in March and April 2014, we entered into convertible note hedge transactions whereby we had the option to purchase 19.2 million shares of our common stock at a price of \$71.97 per share, as adjusted to give effect to the Stock Split. The total cost of the convertible note hedge transactions was \$398 million. In addition, we sold warrants whereby the holders of the warrants have the option to purchase 19.2 million shares of our common stock at a price of \$112.13 per share, as adjusted to give effect to the Stock Split. We received \$257 million in total cash proceeds from the sales of these warrants. Taken together, the purchases of the convertible note hedges and the sales of the warrants are intended to reduce potential dilution and/or cash payments from the conversion of these notes and to effectively increase the overall conversion from \$71.97 to \$112.13 per share, as adjusted to give effect to the Stock Split. As these transactions meet certain accounting criteria, the convertible note hedges and warrants are recorded in stockholders' equity and are not accounted for as derivatives. The net cost incurred in connection with the convertible note hedge and warrant transactions was recorded as a reduction to additional paid-in capital on the consolidated balance sheet.

During each of the quarters of 2020, the closing price of our common stock exceeded 130% of the applicable conversion price of the 2021 Notes on at least 20 of the last 30 consecutive trading days of the quarter, causing the 2021 Notes to be convertible by their holders during the second, third and fourth quarters of 2020. As the settlement of conversion of the 2021 Notes is in cash for the principal amount and, if applicable, cash and/or shares of our common stock for any conversion premium at our election, we reclassified \$3 million, representing the difference between the aggregate principal of our 2021 Notes and the carrying value as of December 31, 2020, as mezzanine equity from permanent equity on our consolidated balance sheet as of December 31, 2020. The debt discounts recorded on the 2021 Notes are recognized as interest expense through March 2021 and early conversions have resulted in the acceleration of such recognition through December 31, 2020, including the losses on extinguishment of debt appearing in the Interest Expense table below.

During the year ended December 31, 2020, \$958 million in aggregate principal amount of the 2021 Notes were converted for \$958 million in cash and 11.1 million shares of our common stock, as adjusted to give effect to the Stock Split. As a result, we recorded a decrease to additional paid-in capital of \$6 million. The note hedges we entered into in connection with the issuance of the 2021 Notes were automatically settled with the respective conversions of the notes, resulting in the receipt of 11.1 million shares of our common stock, as adjusted to give effect to the Stock Split. The related warrants will settle under their terms after the maturity or settlement of the related convertible debt. The remaining notes outstanding are expected to convert in the first quarter of fiscal year 2021. As of December 31, 2020, the if-converted value of the 2021 Notes exceeds the outstanding principal amount by \$3.71 billion.

#### ***2022 Notes, Bond Hedges and Warrant Transactions***

In March 2017, we issued \$978 million in aggregate principal amount of our 2022 Notes in a public offering. The net proceeds from the issuance, after deducting transaction costs, were \$966 million.

As adjusted to give effect to the Stock Split, each \$1,000 of principal of the 2022 Notes is convertible into 15.2670 shares of our common stock, which is equivalent to a conversion price of \$65.50 per share, subject to adjustment upon the occurrence of specified events. Holders of the 2022 Notes may convert, at their option, on or after December 15, 2021. Further, holders of the 2022 Notes may convert, at their option, prior to December 15, 2021 only under the following circumstances: (1) during any quarter beginning after June 30, 2017, if the closing price of our common stock for at least 20 trading days (whether or not consecutive) during the last 30 consecutive trading days immediately preceding the quarter is greater than or equal to 130% of the conversion price; (2) during the five-business day period following any five-consecutive trading day period in which the trading price of the 2022 Notes is less than 98% of the product of the closing price of our common stock and the applicable conversion rate for each day during such five-consecutive trading day period or (3) if we make specified distributions to holders of our common stock or if specified corporate transactions occur. Upon a conversion, the 2022 Notes will be settled in cash, shares of our common stock or a combination thereof, at our election. If a fundamental change occurs prior to the maturity date, holders of the 2022 Notes may require us to repurchase all or a portion of their 2022 Notes for cash at a repurchase price equal to 100% of the principal amount plus any accrued and unpaid interest. In addition, if specific corporate events occur prior to the maturity date, we would increase the conversion rate for a holder who elects to convert its 2022 Notes in connection with such an event in certain circumstances.

In accordance with GAAP relating to embedded conversion features, we initially valued and bifurcated the conversion feature associated with the 2022 Notes. We recorded to stockholders' equity \$146 million for the conversion feature. The resulting debt discount is being amortized to interest expense at an effective interest rate of 6.00%.

In connection with the offering of the 2022 Notes, we entered into convertible note hedge transactions whereby we had the option to purchase 14.9 million shares of our common stock at a price of \$65.50 per share as adjusted to give effect to the Stock Split. The cost of the convertible note hedge transactions was \$204 million. In addition, we sold warrants whereby the holders of the warrants have the option to purchase 14.9 million shares of our common stock at a price of \$131.00 per share. We received \$53 million in cash proceeds from the sale of these warrants. Taken together, the purchase of the convertible note hedges and the sale of the warrants are intended to reduce potential dilution from the conversion of the 2022 Notes and to effectively increase the overall conversion price from \$65.50 to \$131.00 per share, as adjusted to give effect to the Stock Split. As these transactions meet certain accounting criteria, the convertible note hedges and warrants are recorded in stockholders' equity and are not accounted for as derivatives. The net cost incurred in connection with the convertible note hedge and warrant transactions was recorded as a reduction to additional paid-in capital on the consolidated balance sheet.

During each of the quarters of 2020, the closing price of our common stock exceeded 130% of the applicable conversion price of the 2022 Notes on at least 20 of the last 30 consecutive trading days of the quarter, causing the 2022 Notes to be convertible by their holders during the second, third and fourth quarters of 2020 and the first quarter of 2021. As we now expect to settle a portion of the 2022 Notes in the first quarter of 2021, we reclassified \$115 million of the carrying value of the 2022 Notes from debt and finance leases, net of current portion to current portion of debt and finance leases on our consolidated balance sheet as of December 31, 2020. Additionally, we reclassified \$5 million, representing the difference between the current portion of aggregate principal of our 2022 Notes and the current portion of the carrying value as of December 31, 2020, as mezzanine equity from permanent equity on our consolidated balance sheet as of December 31, 2020. As the settlement of conversion of the remainder of the 2022 Notes would be in cash, shares of our common stock or a combination thereof is at our election, the remaining liability is classified as non-current. The debt discounts recorded on the 2022 Notes are recognized as interest expense through March 2022 and early conversions have resulted in the acceleration of such recognition through December 31, 2020, including the losses on extinguishment of debt appearing in the Interest Expense table below.

During the year ended December 31, 2020, \$474 million in aggregate principal amount of the 2022 Notes were converted for \$474 million in cash and 6.2 million shares of our common stock, as adjusted to give effect to the Stock Split. As a result, we recorded a decrease to additional paid-in capital of \$5 million. The note hedges we entered into in connection with the issuance of the 2022 Notes were automatically settled with the respective conversions of the 2022 Notes, resulting in the receipt of 6.2 million shares of our common stock, as adjusted to give effect to the Stock Split. The related warrants will settle under their terms after the maturity or settlement of the 2022 Notes. As of December 31, 2020, the if-converted value of the notes exceeds the outstanding principal amount by \$4.92 billion.

#### ***2024 Notes, Bond Hedges and Warrant Transactions***

In May 2019, we issued \$1.84 billion in aggregate principal amount of our 2024 Notes in a public offering. The net proceeds from the issuance, after deducting transaction costs, were \$1.82 billion.

As adjusted to give effect to the Stock Split, each \$1,000 of principal of the 2024 Notes is convertible into 16.1380 shares of our common stock, which is equivalent to a conversion price of \$61.97 per share, subject to adjustment upon the occurrence of specified events. Holders of the 2024 Notes may convert, at their option, on or after February 15, 2024. Further, holders of the 2024 Notes may convert, at their option, prior to February 15, 2024 only under the following circumstances: (1) during any calendar quarter commencing after September 30, 2019 (and only during such calendar quarter), if the last reported sale price of our common stock for at least 20 trading days (whether or not consecutive) during a period of 30 consecutive trading days ending on the last trading day of immediately preceding calendar quarter is greater than or equal to 130% of the conversion price on each trading day; (2) during the five-business day period after any five-consecutive trading day period in which the trading price per \$1,000 principal amount of the 2024 Notes for each trading day of such period is less than 98% of the product of the last reported sale price of our common stock and the conversion rate on each such trading day, or (3) if specified corporate events occur. Upon conversion, the 2024 Notes will be settled in cash, shares of our common stock or a combination thereof, at our election. If a fundamental change occurs prior to the maturity date, holders of the 2024 Notes may require us to repurchase all or a portion of their 2024 Notes for cash at a repurchase price equal to 100% of the principal amount plus any accrued and unpaid interest. In addition, if specific corporate events occur prior to the maturity date, we would increase the conversion rate for a holder who elects to convert its 2024 Notes in connection with such an event in certain circumstances.

In accordance with GAAP relating to embedded conversion features, we initially valued and bifurcated the conversion feature associated with the 2024 Notes. We recorded to stockholders' equity \$491 million for the conversion feature. The resulting debt discount is being amortized to interest expense at an effective interest rate of 8.68%.



In connection with the offering of the 2024 Notes, we entered into convertible note hedge transactions whereby we had the option to purchase 29.7 million shares of our common stock at a price of \$61.97 per share as adjusted to give effect to the Stock Split. The cost of the convertible note hedge transactions was \$476 million. In addition, we sold warrants whereby the holders of the warrants have the option to purchase 29.7 million shares of our common stock at a price of \$121.50 per share, as adjusted to give effect to the Stock Split. We received \$174 million in cash proceeds from the sale of these warrants. Taken together, the purchase of the convertible note hedges and the sale of the warrants are intended to reduce potential dilution from the conversion of the 2024 Notes and to effectively increase the overall conversion price from \$61.97 to \$121.50 per share. As these transactions meet certain accounting criteria, the convertible note hedges and warrants are recorded in stockholders' equity and are not accounted for as derivatives. The net cost incurred in connection with the convertible note hedge and warrant transactions was recorded as a reduction to additional paid-in capital on the consolidated balance sheet.

During each of the quarters of 2020, the closing price of our common stock exceeded 130% of the applicable conversion price of the 2024 Notes on at least 20 of the last 30 consecutive trading days of the quarter, causing the 2024 Notes to be convertible by their holders during the second, third and fourth quarters of 2020 and the first quarter of 2021. As we now expect to settle a portion of the 2024 Notes in the first quarter of 2021, we reclassified \$171 million, of the carrying value of the 2024 Notes from debt and finance leases, net of current portion to current portion of debt and finance leases on our consolidated balance sheet as of December 31, 2020. Additionally, we reclassified \$43 million, representing the difference between the current portion of aggregate principal of our 2024 Notes and the current portion of the carrying value as of December 31, 2020, as mezzanine equity from permanent equity on our consolidated balance sheet as of December 31, 2020. As the settlement of conversion of the remainder of the 2024 Notes would be in cash, shares of our common stock or a combination thereof is at our election, the remaining liability is classified as non-current. The debt discounts recorded on the 2024 Notes are recognized as interest expense through May 2024 and early conversions have resulted in the acceleration of such recognition through December 31, 2020, including the losses on extinguishment of debt appearing in the Interest Expense table below.

During the year ended December 31, 2020, \$558 million in aggregate principal amount of the 2024 Notes were converted for \$558 million in cash and 8.0 million shares of our common stock, as adjusted to give effect to the Stock Split. As a result, we recorded a decrease to additional paid-in capital of \$31 million. The note hedges we entered into in connection with the issuance of the 2024 Notes were automatically settled with the respective conversions of the 2024 Notes, resulting in the receipt of 8.0 million shares of our common stock, as adjusted to give effect to the Stock Split. The related warrants will settle under their terms after the maturity or settlement of the 2024 Notes. As of December 31, 2020, the if-converted value of the notes exceeds the outstanding principal amount by \$13.32 billion.

### ***2025 Notes***

In August 2017, we issued \$1.80 billion in aggregate principal amount of the 2025 Notes pursuant to Rule 144A and Regulation S under the Securities Act. The net proceeds from the issuance, after deducting transaction costs, were \$1.77 billion.

### ***Credit Agreement***

In June 2015, we entered into a senior asset-based revolving credit agreement (as amended from time to time, the "Credit Agreement") with a syndicate of banks. Borrowed funds bear interest, at our option, at an annual rate of (a) 1% plus LIBOR or (b) the highest of (i) the federal funds rate plus 0.50%, (ii) the lenders' "prime rate" or (iii) 1% plus LIBOR. The fee for undrawn amounts is 0.25% per annum. The Credit Agreement is secured by certain of our accounts receivable, inventory and equipment. Availability under the Credit Agreement is based on the value of such assets, as reduced by certain reserves.

In March 2020, we upsized the Credit Agreement by \$100 million, which matures July 2023, to \$2.525 billion. In June 2020, \$197 million of commitment under the Credit Agreement expired in accordance with its terms and the total commitment decreased to \$2.328 billion .

### ***Zero-Coupon Convertible Senior Notes due in 2020***

In December 2015, SolarCity Corporation ("SolarCity") issued \$113 million in aggregate principal amount of Zero-Coupon Convertible Senior Notes due on December 1, 2020 in a private placement. \$13 million of these notes were issued to related parties.

As adjusted to give effect to the Stock Split, each \$1,000 of principal of these notes was convertible into 16.6665 shares of our common stock, which is equivalent to a conversion price of \$60.00 per share (subject to adjustment upon the occurrence of specified events related to dividends, tender offers or exchange offers). The maximum conversion rate is capped at 21.1538 shares for each \$1,000 of principal of these notes, which is equivalent to a minimum conversion price of \$47.27 per share. The convertible senior notes do not have a cash conversion option. The holders of these notes were able to require us to repurchase their notes for cash only under certain defined fundamental changes. On or after June 30, 2017, these notes are redeemable by us in the event that the closing price of our common stock exceeds 200% of the conversion price for 45 consecutive trading days ending within three trading days of such redemption notice at a redemption price equal to 100% of the principal amount plus any accrued and unpaid interest.

During the year ended December 31, 2020, \$103 million in aggregate principal amount of these notes were converted for 1.7 million shares of our common stock, as adjusted to give effect to the Stock Split. As a result, we recorded an increase to additional paid-in capital of \$101 million.

### ***Solar Bonds and other Loans***

Solar Bonds are senior unsecured obligations that are structurally subordinate to the indebtedness and other liabilities of our subsidiaries. Solar Bonds were issued under multiple series with various terms and interest rates. Additionally, we have assumed the 5.50% Convertible Senior Notes due in 2022 issued by Maxwell (the “Maxwell Notes”), which are convertible into shares of our common stock as a result of our acquisition of Maxwell. As of December 31, 2020, the if-converted value of the Maxwell Notes exceeds the outstanding principal amount by \$447 million.

### ***Automotive Asset-backed Notes***

From time to time, we transfer receivables or beneficial interests related to certain leased vehicles into special purpose entities (“SPEs”) and issue Automotive Asset-backed Notes, backed by these automotive assets to investors. The SPEs are consolidated in the financial statements. The cash flows generated by these automotive assets are used to service the principal and interest payments on the Automotive Asset-backed Notes and satisfy the SPEs’ expenses, and any remaining cash is distributed to the owners of the SPEs. We recognize revenue earned from the associated customer lease contracts in accordance with our revenue recognition policy. The SPEs’ assets and cash flows are not available to our other creditors, and the creditors of the SPEs, including the Automotive Asset-backed Note holders, have no recourse to our other assets. A third party contracted with us to provide administrative and collection services for these automotive assets.

In August 2020, we transferred beneficial interests related to certain leased vehicles into an SPE and issued \$709 million in aggregate principal amount of Automotive Asset-backed Notes, with terms similar to our other Automotive Asset-backed Notes. The proceeds from the issuance, net of discounts and fees, were \$706 million.

### ***Solar Asset-backed Notes***

From time to time, our subsidiaries pool and transfer either qualifying solar energy systems and the associated customer contracts or our interests in certain financing funds into SPEs and issue Solar Asset-backed Notes backed by these solar assets or interests to investors. The SPEs are wholly owned by us and are consolidated in the financial statements. The cash flows generated by these solar assets or distributed by the underlying financing funds to certain SPEs are used to service the principal and interest payments on the Solar Asset-backed Notes and satisfy the SPEs’ expenses, and any remaining cash is distributed to us. We recognize revenue earned from the associated customer contracts in accordance with our revenue recognition policy. The SPEs’ assets and cash flows are not available to our other creditors, and the creditors of the SPEs, including the Solar Asset-backed Note holders, have no recourse to our other assets. We contracted with the SPEs to provide operations & maintenance and administrative services for the solar energy systems. As of December 31, 2020, solar assets pledged as collateral for Solar Asset-backed Notes had a carrying value of \$660 million and are included within solar energy systems, net, on the consolidated balance sheet.

### ***China Loan Agreements***

In September 2019, one of our subsidiaries entered into a loan agreement with a lender in China for an unsecured 12-month revolving facility of up to RMB 5.0 billion (or the equivalent drawn in U.S. dollars), to finance vehicles in-transit to China (the “In-transit Finance Facility”). Borrowed funds incurred interest at an annual rate no greater than 90% of the one-year rate published by the People’s Bank of China. The loan facility is non-recourse to our assets. In September 2020, the In-transit Finance Facility matured.

In December 2019, one of our subsidiaries entered into loan agreements with a syndicate of lenders in China for: (i) a secured term loan facility of up to RMB 9.0 billion or the equivalent amount drawn in U.S. dollars (the “Fixed Asset Facility”) and (ii) an unsecured revolving loan facility of up to RMB 2.25 billion or the equivalent amount drawn in U.S. dollars (the “Working Capital Facility”), in each case to be used in connection with our construction of and production at our Gigafactory Shanghai. Outstanding borrowings pursuant to the Fixed Asset Facility accrue interest at a rate equal to: (i) for RMB-denominated loans, the market quoted interest rate published by the People’s Bank of China minus 0.7625%, and (ii) for U.S. dollar-denominated loans, the sum of one-year LIBOR plus 1.3%. Outstanding borrowings pursuant to the Working Capital Facility incurred interest at a rate equal to the market quoted interest rate published by the People’s Bank of China minus 0.4525 %. The Fixed Asset Facility is secured by certain real property relating to Gigafactory Shanghai and both facilities are non-recourse to our other assets. In December 2020, the Working Capital Facility matured.

In May 2020, one of our subsidiaries entered into an additional Working Capital Loan Contract (the “2020 China Working Capital Facility”) with a lender in China for an unsecured revolving facility of up to RMB 4.00 billion (or the equivalent amount drawn in U.S. dollars), to be used for expenditures related to production at our Gigafactory Shanghai. Borrowed funds bear interest at an annual rate of: (i) for RMB-denominated loans, the market quoted interest rate published by an authority designated by the People’s Bank of China minus 0.35%, (ii) for U.S. dollar-denominated loans, the sum of one-year LIBOR plus 0.8%. The 2020 China Working Capital Facility is non-recourse to our assets and is scheduled to mature in June 2021, the first anniversary of the first borrowing under the loan.

### ***Cash Equity Debt***

In connection with the cash equity financing deals closed in 2016, our subsidiaries issued \$502 million in aggregate principal amount of debt that bears interest at fixed rates. This debt is secured by, among other things, our interests in certain financing funds and is non-recourse to our other assets.

### ***Solar Loan-backed Notes***

In January 2016 and January 2017, our subsidiaries pooled and transferred certain MyPower customer notes receivable into two SPEs and issued \$330 million in aggregate principal amount of Solar Loan-backed Notes, backed by these notes receivable to investors. Accordingly, we did not recognize a gain or loss on the transfer of these notes receivable. The SPEs are wholly owned by us and are consolidated in the financial statements. The payments received by the SPEs from these notes receivable are used to service the semi-annual principal and interest payments on the Solar Loan-backed Notes and satisfy the SPEs’ expenses, and any remaining cash is distributed to us. The SPEs’ assets and cash flows are not available to our other creditors, and the creditors of the SPEs, including the Solar Loan-backed Note holders, have no recourse to our other assets.

### ***Warehouse Agreements***

In August 2016, our subsidiaries entered into a loan and security agreement (as amended from time to time, the “2016 Warehouse Agreement”) for borrowings secured by the future cash flows arising from certain leases and the associated leased vehicles. On August 17, 2017, the 2016 Warehouse Agreement was amended to modify the interest rates and extend the availability period and the maturity date, and our subsidiaries entered into another loan and security agreement (the “2017 Warehouse Agreement”) with substantially the same terms as and that shared the same committed amount with the 2016 Warehouse Agreement. On August 16, 2018, the 2016 Warehouse Agreement and 2017 Warehouse Agreement were amended to extend the availability periods thereunder from August 17, 2018 to August 16, 2019 and extend the maturity dates from September 2019 to September 2020. On December 28, 2018, our subsidiaries terminated the 2017 Warehouse Agreement after having fully repaid all obligations thereunder, and entered into a third loan and security agreement with substantially the same terms as and that shared the same committed amount with the 2016 Warehouse Agreement (the “2018 Warehouse Agreement”). We refer to these agreements together as the “Warehouse Agreements”. Amounts drawn under the Warehouse Agreements generally bear or bore interest at a fixed margin above (i) LIBOR or (ii) the commercial paper rate. The Warehouse Agreements are or were non-recourse to our other assets.

In August 2020, one of our subsidiaries terminated the 2018 Warehouse Agreement after having fully repaid all obligations thereunder, leaving the 2016 Warehouse Agreement as the only remaining Warehouse Agreement. In August 2020, we further amended and restated the 2016 Warehouse Agreement to extend the maturity date to September 2022. The 2016 Warehouse Agreement currently has an aggregate lender commitment of \$1.10 billion, the same amount as the aggregate lender commitment previously shared with the 2018 Warehouse Agreement prior to the termination of the latter.

Pursuant to the Warehouse Agreements, an undivided beneficial interest in the future cash flows arising from certain leases and the related leased vehicles has been sold for legal purposes but continues to be reported in the consolidated financial statements. The interest in the future cash flows arising from these leases and the related vehicles is not available to pay the claims of our creditors other than pursuant to obligations to the lenders under the

Warehouse Agreements. Any excess cash flows not required to pay obligations under the Warehouse Agreements are or were available for distributions.



### ***Solar Term Loans***

Our subsidiaries have entered into agreements for term loans with various financial institutions. The term loans are secured by substantially all of the assets of the subsidiaries, including its interests in certain financing funds, and are non-recourse to our other assets.

### ***Automotive Lease-backed Credit Facilities***

In December 2016, one of our subsidiaries entered into a credit agreement (the “Canada Credit Facility”) with a bank for borrowings secured by our interests in certain vehicle leases. In December 2017 and December 2018, the Canada Credit Facility was amended to add our interests in additional vehicle leases as collateral, allowing us to draw additional funds. Amounts drawn under the Canada Credit Facility bear interest at fixed rates. The Canada Credit Facility is non-recourse to our other assets.

In September 2020, an SPE entered into a revolving credit facility with a bank for borrowings secured by the beneficial interests related to certain leased vehicles that we transferred to the SPE. Amounts drawn under this facility bear interest at 1.85% plus LIBOR and are non-recourse to our other assets.

### ***Solar Revolving Credit Facility and other Loans***

We have entered into various solar revolving credit facility and other loan agreements with various financial institutions. The solar revolving credit facility is secured by certain assets of the subsidiary and is non-recourse to our other assets.

### ***Interest Expense***

The following table presents the interest expense related to the contractual interest coupon, the amortization of debt issuance costs, the amortization of debt discounts and losses on extinguishment of debt on our convertible senior notes with cash conversion features, which include the 1.50% Convertible Senior Notes due in 2018 (matured in June 2018), the 2019 Notes (matured in March 2019), the 2021 Notes, the 2022 Notes and the 2024 Notes (in millions):

	Year Ended December 31,		
	2020	2019	2018
Contractual interest coupon	\$ 73	\$ 65	\$ 43
Amortization of debt issuance costs	7	7	7
Amortization of debt discounts	173	148	123
Losses on extinguishment of debt	105	—	—
Total	<u>\$ 358</u>	<u>\$ 220</u>	<u>\$ 173</u>

### ***Pledged Assets***

As of December 31, 2020 and 2019, we had pledged or restricted \$6.04 billion and \$5.72 billion of our assets (consisting principally of restricted cash, receivables, inventory, SRECs, solar energy systems, operating lease vehicles, land use rights, property and equipment, and equity interests in certain SPEs) as collateral for our outstanding debt.

### ***Schedule of Principal Maturities of Debt***

The future scheduled principal maturities of debt as of December 31, 2020 were as follows (in millions):

	Recourse debt	Non-recourse debt	Total
2021	\$ 760	\$ 1,058	\$ 1,818
2022	427	1,508	1,935
2023	1,895	511	2,406

2024	1,068	783	1,851
2025	1,804	175	1,979
Thereafter	3	577	580
Total	<u>\$ 5,957</u>	<u>\$ 4,612</u>	<u>\$ 10,569</u>

### Note 13 – Leases

We have entered into various operating and finance lease agreements for certain of our offices, manufacturing and warehouse facilities, retail and service locations, equipment, vehicles, and solar energy systems, worldwide. We determine if an arrangement is a lease, or contains a lease, at inception and record the leases in our financial statements upon lease commencement, which is the date when the underlying asset is made available for use by the lessor.

We have lease agreements with lease and non-lease components, and have elected to utilize the practical expedient to account for lease and non-lease components together as a single combined lease component, from both a lessee and lessor perspective with the exception of direct sales-type leases and production equipment classes embedded in supply agreements. From a lessor perspective, the timing and pattern of transfer are the same for the non-lease components and associated lease component and, the lease component, if accounted for separately, would be classified as an operating lease.

We have elected not to present short-term leases on the consolidated balance sheet as these leases have a lease term of 12 months or less at lease inception and do not contain purchase options or renewal terms that we are reasonably certain to exercise. All other lease assets and lease liabilities are recognized based on the present value of lease payments over the lease term at commencement date. Because most of our leases do not provide an implicit rate of return, we used our incremental borrowing rate based on the information available at lease commencement date in determining the present value of lease payments.

Our leases, where we are the lessee, often include options to extend the lease term for up to 10 years. Some of our leases also include options to terminate the lease prior to the end of the agreed upon lease term. For purposes of calculating lease liabilities, lease terms include options to extend or terminate the lease when it is reasonably certain that we will exercise such options.

Lease expense for operating leases is recognized on a straight-line basis over the lease term as cost of revenues or operating expenses depending on the nature of the leased asset. Certain operating leases provide for annual increases to lease payments based on an index or rate. We calculate the present value of future lease payments based on the index or rate at the lease commencement date for new leases commencing after January 1, 2019. For historical leases, we used the index or rate as of January 1, 2019. Differences between the calculated lease payment and actual payment are expensed as incurred. Amortization of finance lease assets is recognized over the lease term as cost of revenues or operating expenses depending on the nature of the leased asset. Interest expense on finance lease liabilities is recognized over the lease term in interest expense.

The balances for the operating and finance leases where we are the lessee are presented as follows (in millions) within our consolidated balance sheet:

	December 31, 2020	December 31, 2019
<b>Operating leases:</b>		
Operating lease right-of-use assets	\$ 1,558	\$ 1,218
Accrued liabilities and other	\$ 286	\$ 228
Other long-term liabilities	1,254	956
Total operating lease liabilities	\$ 1,540	\$ 1,184
<b>Finance leases:</b>		
Solar energy systems, net	\$ 29	\$ 30

Property, plant and equipment, net		1,465		1,600
Total finance lease assets				
	\$	1,494	\$	1,630
Current portion of long-term debt and finance leases	\$	374	\$	386
Long-term debt and finance leases, net of current portion		1,094		1,232
Total finance lease liabilities	\$	1,468	\$	1,618

The components of lease expense are as follows (in millions) within our consolidated statements of operations:

	Year Ended	
	December 31, 2020	December 31, 2019
<b>Operating lease expense:</b>		
Operating lease expense (1)	\$ 451	\$ 426
<b>Finance lease expense:</b>		
Amortization of leased assets	\$ 348	\$ 299
Interest on lease liabilities	100	104
<b>Total finance lease expense</b>	<b>\$ 448</b>	<b>\$ 403</b>
<b>Total lease expense</b>	<b>\$ 899</b>	<b>\$ 829</b>

(1) Includes short-term leases and variable lease costs, which are immaterial.

Other information related to leases where we are the lessee is as follows:

	December 31, 2020	December 31, 2019
<b>Weighted-average remaining lease term:</b>		
Operating leases	6.2 years	6.2 years
Finance leases	4.9 years	3.9 years
<b>Weighted-average discount rate:</b>		
Operating leases	5.8%	6.5%
Finance leases	6.5%	6.5%

Supplemental cash flow information related to leases where we are the lessee is as follows (in millions):

	Year Ended	
	December 31, 2020	December 31, 2019
<b>Cash paid for amounts included in the measurement of lease liabilities:</b>		
Operating cash outflows from operating leases	\$ 456	\$ 396

Operating cash outflows from finance leases (interest payments)	\$	100	\$	104
Financing cash outflows from finance leases	\$	338	\$	321
Leased assets obtained in exchange for finance lease liabilities	\$	188	\$	616
Leased assets obtained in exchange for operating lease liabilities	\$	553	\$	202

As of December 31, 2020, the maturities of our operating and finance lease liabilities (excluding short-term leases) are as follows (in millions):

	Operating Leases	Finance Leases
2021	\$ 366	\$ 462
2022	327	446
2023	279	412
2024	245	299
2025	204	9
Thereafter	425	7
Total minimum lease payments	1,846	1,635
Less: Interest	306	167
Present value of lease obligations	1,540	1,468
Less: Current portion	286	374
Long-term portion of lease obligations	<u>\$ 1,254</u>	<u>\$ 1,094</u>

## Operating Lease and Sales-type Lease Receivables

We are the lessor of certain vehicle and solar energy system arrangements as described in Note 2, *Summary of Significant Accounting Policies*. As of December 31, 2020, maturities of our operating lease and sales-type lease receivables from customers for each of the next five years and thereafter were as follows (in millions):

	Operating Leases	Sales-type Leases
2021	\$ 774	\$ 21
2022	594	21
2023	351	21
2024	206	30
2025	191	5
Thereafter	2,102	4
Gross lease receivables	\$ 4,218	\$ 102

The above table does not include vehicle sales to customers or leasing partners with a resale value guarantee as the cash payments were received upfront. For our solar PPA arrangements, customers are charged solely based on actual power produced by the installed solar energy system at a predefined rate per kilowatt-hour of power produced. The future payments from such arrangements are not included in the above table as they are a function of the power generated by the related solar energy systems in the future.

## Net Investment in Sales-type Leases

Net investment in sales-type leases, which is the sum of the present value of the future contractual lease payments, is presented on the consolidated balance sheet as a component of prepaid expenses and other current assets for the current portion and as other assets for the long-term portion. We introduced sales-type leasing programs in volume during the third quarter of 2020 and therefore have no associated balances as of December 31, 2019. Lease receivables relating to sales-type leases are presented on the consolidated balance sheet as follows (in millions):

	December 31, 2020
Gross lease receivables	\$ 102
Unearned interest income	(11)
Net investment in sales-type leases	\$ 91
<b>Reported as:</b>	
Prepaid expenses and other current assets	\$ 17
Other assets	74
Net investment in sales-type leases	\$ 91

## Note 14 – Equity Incentive Plans

In June 2019, we adopted the 2019 Equity Incentive Plan (the “2019 Plan”). The 2019 Plan provides for the grant of stock options, restricted stock, RSUs, stock appreciation rights, performance units and performance shares to our employees, directors and consultants. Stock options granted under the 2019 Plan may be either incentive stock options or nonstatutory stock options. Incentive stock options may only be granted to our employees. Nonstatutory stock options may be granted to our employees, directors and consultants. Generally, our stock options and RSUs vest over four years and our stock options are exercisable over a maximum period of 10 years from their grant dates. Vesting typically terminates when the employment or consulting relationship ends.

As of December 31, 2020, 49.0 million shares were reserved and available for issuance under the 2019 Plan, as adjusted to give effect to the Stock Split.

The following table summarizes our stock option and RSU activity:

	Stock Options				RSUs	
	Number of Options (in thousands)	Weighted-Average Exercise Price	Weighted-Average Remaining Contractual Life (years)	Aggregate Intrinsic Value (in billions)	Number of RSUs (in thousands)	Weighted-Average Grant Date Fair Value
Balance, December 31, 2019 (1)	149,974	\$ 55.90			24,031	\$ 58.21
Granted	4,780	\$ 421.73			6,876	\$ 300.51
Exercised or released	(6,815)	\$ 44.11			(9,620)	\$ 72.26
Cancelled	(1,006)	\$ 68.67			(2,498)	\$ 82.31
Balance, December 31, 2020	146,933	\$ 68.26	6.08	\$ 93.66	18,789	\$ 136.49
Vested and expected to vest, December 31, 2020	101,617	\$ 69.04	5.80	\$ 64.69	18,778	\$ 136.53
Exercisable and vested, December 31, 2020	66,205	\$ 46.88	4.89	\$ 43.61		

(1) Prior period results have been adjusted to give effect to the Stock Split. See Note 1, *Overview*, for details.

The weighted-average grant date fair value of RSUs in the years ended December 31, 2020, 2019 and 2018 was \$300.51, \$56.55 and \$63.29, respectively, as adjusted to give effect to the Stock Split. The aggregate release date fair value of RSUs in the years ended December 31, 2020, 2019 and 2018 was \$3.25 billion, \$502 million and \$546 million, respectively.

The aggregate intrinsic value of options exercised in the years ended December 31, 2020, 2019, and 2018 was \$1.55 billion, \$237 million and \$293 million, respectively.

## ESPP

Our employees are eligible to purchase our common stock through payroll deductions of up to 15% of their eligible compensation, subject to any plan limitations. The purchase price would be 85% of the lower of the fair market value on the first and last trading days of each six-month offering period. During the years ended December 31, 2020, 2019 and 2018, we issued 1.8 million, 2.5 million and 2.0 million shares under the ESPP, as adjusted to give effect to the Stock Split. There were 34.3 million shares available for issuance under the ESPP as of December 31, 2020.

## Fair Value Assumptions

We use the fair value method in recognizing stock-based compensation expense. Under the fair value method, we estimate the fair value of each stock option award with service or service and performance conditions and the ESPP on the grant date generally using the Black-Scholes option pricing model. The weighted-average assumptions used in the Black-Scholes model for stock options are as follows:

	Year Ended December 31,		
	2020	2019	2018
Risk-free interest rate	0.26%	2.4%	2.5%
Expected term (in years)	3.9	4.5	4.7
Expected volatility	69%	48%	42%
Dividend yield	0.0%	0.0%	0.0%
Grant date fair value per share (1)	\$ 216.14	\$ 22.32	\$ 24.38

(1) Prior period results have been adjusted to give effect to the Stock Split. See Note 1, *Overview*, for details.

The fair value of RSUs with service or service and performance conditions is measured on the grant date based on the closing fair market value of our common stock. The risk-free interest rate is based on the U.S. Treasury yield for zero-coupon U.S. Treasury notes with maturities approximating each grant's expected life. We use our historical data in estimating the expected term of our employee grants. The expected volatility is based on the average of the implied volatility of publicly traded options for our common stock and the historical volatility of our common stock.





## 2018 CEO Performance Award

In March 2018, our stockholders approved the Board of Directors' grant of 101.3 million stock option awards to our CEO (the "2018 CEO Performance Award"), as adjusted to give effect to the Stock Split. The 2018 CEO Performance Award consists of 12 vesting tranches with a vesting schedule based entirely on the attainment of both operational milestones (performance conditions) and market conditions, assuming continued employment either as the CEO or as both Executive Chairman and Chief Product Officer and service through each vesting date. Each of the 12 vesting tranches of the 2018 CEO Performance Award will vest upon certification by the Board of Directors that both (i) the market capitalization milestone for such tranche, which begins at \$100.0 billion for the first tranche and increases by increments of \$50.0 billion thereafter (based on both a six calendar month trailing average and a 30 calendar day trailing average, counting only trading days), has been achieved, and (ii) any one of the following eight operational milestones focused on total revenue or any one of the eight operational milestones focused on Adjusted EBITDA have been achieved for the previous four consecutive fiscal quarters on an annualized basis. Adjusted EBITDA is defined as net income (loss) attributable to common stockholders before interest expense, provision (benefit) for income taxes, depreciation and amortization and stock-based compensation. Upon vesting and exercise, including the payment of the exercise price of \$70.01 per share as adjusted to give effect to the Stock Split, our CEO must hold shares that he acquires for five years post-exercise, other than a cashless exercise where shares are simultaneously sold to pay for the exercise price and any required tax withholding.

The achievement status of the operational milestones as of December 31, 2020 was as follows:

Total Annualized Revenue		Annualized Adjusted EBITDA	
Milestone (in billions)	Achievement Status	Milestone (in billions)	Achievement Status
\$ 20.0	Achieved and certified	\$ 1.5	Achieved and certified
\$ 35.0	Probable	\$ 3.0	Achieved and certified
\$ 55.0	-	\$ 4.5	Achieved and certified
\$ 75.0	-	\$ 6.0	Probable
\$ 100.0	-	\$ 8.0	Probable
\$ 125.0	-	\$ 10.0	-
\$ 150.0	-	\$ 12.0	-
\$ 175.0	-	\$ 14.0	-

Stock-based compensation under the 2018 CEO Performance Award represents a non-cash expense and is recorded as a selling, general, and administrative operating expense in our consolidated statement of operations. In each quarter since the grant of the 2018 CEO Performance Award, we have recognized expense, generally on a prorated basis, for only the number of tranches (up to the maximum of 12 tranches) that corresponds to the number of operational milestones that have been achieved or have been determined probable of being achieved in the future, in accordance with the following principles.

On the grant date, a Monte Carlo simulation was used to determine for each tranche (i) a fixed amount of expense for such tranche and (ii) the future time when the market capitalization milestone for such tranche was expected to be achieved, or its "expected market capitalization milestone achievement time." Separately, based on a subjective assessment of our future financial performance, each quarter we determine whether it is probable that we will achieve each operational milestone that has not previously been achieved or deemed probable of achievement and if so, the future time when we expect to achieve that operational milestone, or its "expected operational milestone achievement time." When we first determine that an operational milestone has become probable of being achieved, we allocate the entire expense for the related tranche over the number of quarters between the grant date and the then-applicable "expected vesting time." The "expected vesting time" at any given time is the later of (i) the expected operational milestone achievement time (if the related operational milestone has not yet been achieved) and (ii) the expected market capitalization milestone achievement time (if the related market capitalization milestone has not yet been achieved). We immediately recognize a catch-up expense for all accumulated expense for the quarters from the grant date through the quarter in which the operational milestone was first deemed probable of being achieved. Each quarter thereafter, we recognize the prorated portion of the then-remaining expense for the tranche based on the number of quarters between such quarter and the then-applicable expected vesting time, except that upon vesting of a tranche, all remaining expense for that tranche is immediately recognized.

As a result, we have experienced, and may experience in the future, significant catch-up expenses in quarters when one or more operational milestones are first determined to be probable of being achieved. Additionally, the expected market capitalization achievement times are generally later than the related expected operational milestone achievement times. Therefore, if market capitalization milestones are achieved earlier than originally forecasted, for example due to periods of rapid stock price appreciation, this has resulted, and may result in the future, in higher catch-up expenses and the remaining expenses being recognized over shorter periods of time at a higher per-quarter rate.

During the three months ended June 30, 2020, the first tranche of the 2018 CEO Performance Award vested upon certification by the Board of Directors that the market capitalization milestone of \$100.0 billion and the operational milestone of \$20.0 billion annualized revenue had been achieved. Therefore, the remaining unamortized expense of \$22 million for that tranche, which was previously expected to be recognized ratably in future quarters as determined on the grant date, was accelerated into the second quarter of 2020. Additionally, the operational milestone of annualized Adjusted EBITDA of \$4.5 billion became probable of being achieved during the second quarter of 2020 and consequently, we recognized a catch-up expense of \$79 million in that quarter.

During the three months ended September 30, 2020, the second and third tranches of the 2018 CEO Performance Award vested upon certification by the Board of Directors that the market capitalization milestones of \$150.0 billion and \$200.0 billion and the operational milestones of annualized Adjusted EBITDA of \$1.5 billion and annualized Adjusted EBITDA of \$3.0 billion had been achieved. Therefore, the remaining unamortized expense of \$95 million and \$118 million associated with the second and third tranches, respectively, which were previously expected to be recognized ratably in future quarters as determined on the grant date were accelerated into the third quarter of 2020. Additionally, the operational milestone of annualized Adjusted EBITDA of \$6.0 billion became probable of being achieved during the third quarter of 2020 and consequently, we recognized a catch-up expense of \$77 million in that quarter.

During the three months ended December 31, 2020, the fourth tranche of the 2018 CEO Performance Award vested upon certification by the Board of Directors that the market capitalization milestone of \$250.0 billion and the operational milestone of annualized Adjusted EBITDA of \$4.5 billion had been achieved. Therefore, the remaining unamortized expense of \$122 million for that tranche, which was previously expected to be recognized ratably in future quarters through the third quarter of 2023 as determined on the grant date, was accelerated into the fourth quarter of 2020. Additionally, during the fourth quarter of 2020, the operational milestone of annualized Adjusted EBITDA of \$8.0 billion became probable of being achieved and consequently, we recognized a catch-up expense of \$75 million in that quarter.

As of December 31, 2020, we had \$264 million of total unrecognized stock-based compensation expense for the operational milestones that were considered either probable of achievement or achieved but not yet certified, which will be recognized over a weighted-average period of 0.6 years. As of December 31, 2020, we had unrecognized stock-based compensation expense of \$712 million for the operational milestones that were considered not probable of achievement. For the years ended December 31, 2020, 2019 and 2018 we recorded stock-based compensation expense of \$838 million, \$296 million and \$175 million related to the 2018 CEO Performance Award.

#### **2014 Performance-Based Stock Option Awards**

In 2014, to create incentives for continued long-term success beyond the Model S program and to closely align executive pay with our stockholders' interests in the achievement of significant milestones by us, the Compensation Committee of our Board of Directors granted stock option awards to certain employees (excluding our CEO) to purchase an aggregate of 5.4 million shares of our common stock, as adjusted to give effect to the Stock Split. Each award consisted of the following four vesting tranches with the vesting schedule based entirely on the attainment of the future performance milestones, assuming continued employment and service through each vesting date:

- 1/4th of each award vests upon completion of the first Model X production vehicle;
- 1/4th of each award vests upon achieving aggregate production of 100,000 vehicles in a trailing 12-month period;
- 1/4th of each award vests upon completion of the first Model 3 production vehicle; and
- 1/4th of each award vests upon achieving an annualized gross margin of greater than 30% for any three-year period.

As of December 31, 2020, the following performance milestones had been achieved:

- Completion of the first Model X production vehicle;
- Completion of the first Model 3 production vehicle; and
- Aggregate production of 100,000 vehicles in a trailing 12-month period.

We begin recognizing stock-based compensation expense as each performance milestone becomes probable of achievement. As of December 31, 2020, we had unrecognized stock-based compensation expense of \$4 million for the performance milestone that was considered not probable of achievement. For the years ended December 31, 2020, 2019 and 2018, we did not record any additional stock-based compensation related to the 2014 Performance-Based Stock Option Awards.



## 2012 CEO Performance Award

In August 2012, our Board of Directors granted 26.4 million stock option awards to our CEO (the “2012 CEO Performance Award”), as adjusted to give effect to the Stock Split. The 2012 CEO Performance Award consists of 10 vesting tranches with a vesting schedule based entirely on the attainment of both performance conditions and market conditions, assuming continued employment and service through each vesting date. Each vesting tranche requires a combination of a pre-determined performance milestone and an incremental increase in our market capitalization of \$4.00 billion, as compared to our initial market capitalization of \$3.20 billion at the time of grant. As of December 31, 2020, the market capitalization conditions for all of the vesting tranches and the following performance milestones had been achieved:

- Successful completion of the Model X alpha prototype;
- Successful completion of the Model X beta prototype;
- Completion of the first Model X production vehicle;
- Aggregate production of 100,000 vehicles;
- Successful completion of the Model 3 alpha prototype;
- Successful completion of the Model 3 beta prototype;
- Completion of the first Model 3 production vehicle;
- Aggregate production of 200,000 vehicles; and
- Aggregate production of 300,000 vehicles.

We begin recognizing stock-based compensation expense as each milestone becomes probable of achievement. As of December 31, 2020, we had unrecognized stock-based compensation expense of \$6 million for the performance milestone that was considered not probable of achievement. For the years ended December 31, 2020 and 2019, we did not record any additional stock-based compensation expense related to the 2012 CEO Performance Award. For the year ended December 31, 2018, the stock-based compensation we recorded related to this award was immaterial.

## Summary Stock-Based Compensation Information

The following table summarizes our stock-based compensation expense by line item in the consolidated statements of operations (in millions):

	Year Ended December 31,		
	2020	2019	2018
Cost of revenues	\$ 281	\$ 128	\$ 109
Research and development	346	285	261
Selling, general and administrative	1,107	482	375
Restructuring and other	—	3	4
Total	<u>\$ 1,734</u>	<u>\$ 898</u>	<u>\$ 749</u>

Our income tax benefits recognized from stock-based compensation arrangements in each of the periods presented were immaterial due to cumulative losses and valuation allowances. During the years ended December 31, 2020, 2019, and 2018, stock-based compensation expense capitalized to our consolidated balance sheets was \$89 million, \$52 million and \$18 million, respectively. As of December 31, 2020, we had \$3.51 billion of total unrecognized stock-based compensation expense related to non-performance awards, which will be recognized over a weighted-average period of 2.7 years.

**Note 15 – Income Taxes**

A provision for income taxes of \$292 million, \$110 million and \$58 million has been recognized for the years ended December 31, 2020, 2019 and 2018, respectively, related primarily to our subsidiaries located outside of the U.S. Our income (loss) before provision for income taxes for the years ended December 31, 2020, 2019 and 2018 was as follows (in millions):

	Year Ended December 31,		
	2020	2019	2018
Domestic	\$ (198)	\$ (287)	\$ (412)
Noncontrolling interest and redeemable noncontrolling interest	141	87	(87)
Foreign	1,211	(465)	(506)
Income (loss) before income taxes	<u>\$ 1,154</u>	<u>\$ (665)</u>	<u>\$ (1,005)</u>

The components of the provision for income taxes for the years ended December 31, 2020, 2019 and 2018 consisted of the following (in millions):

	Year Ended December 31,		
	2020	2019	2018
Current:			
Federal	\$ —	\$ —	\$ (1)
State	4	5	3
Foreign	248	86	24
Total current	<u>252</u>	<u>91</u>	<u>26</u>
Deferred:			
Federal	—	(4)	—
State	—	—	—
Foreign	40	23	32
Total deferred	<u>40</u>	<u>19</u>	<u>32</u>
Total provision for income taxes	<u>\$ 292</u>	<u>\$ 110</u>	<u>\$ 58</u>

Deferred tax assets (liabilities) as of December 31, 2020 and 2019 consisted of the following (in millions):

	December 31, 2020	December 31, 2019
<b>Deferred tax assets:</b>		
Net operating loss carry-forwards	\$ 2,172	\$ 1,846
Research and development credits	624	486
Other tax credits	168	126
Deferred revenue	450	301
Inventory and warranty reserves	315	243
Stock-based compensation	98	102
Operating lease right-of-use liabilities	335	290
Deferred GILTI tax assets	581	—
Accruals and others	205	16
Total deferred tax assets	<u>4,948</u>	<u>3,410</u>
Valuation allowance	<u>(2,930)</u>	<u>(1,956)</u>
Deferred tax assets, net of valuation allowance	<u>2,018</u>	<u>1,454</u>
<b>Deferred tax liabilities:</b>		
Depreciation and amortization	(1,488)	(1,185)
Investment in certain financing funds	(198)	(17)
Operating lease right-of-use assets	(305)	(263)
Deferred revenue	(50)	—
Other	(61)	(24)
Total deferred tax liabilities	<u>(2,102)</u>	<u>(1,489)</u>
Deferred tax liabilities, net of valuation allowance and deferred tax assets	<u>\$ (84)</u>	<u>\$ (35)</u>





As of December 31, 2020, we recorded a valuation allowance of \$2.93 billion for the portion of the deferred tax asset that we do not expect to be realized. The valuation allowance on our net deferred taxes increased by \$974 million, increased by \$150 million, and decreased by \$38 million during the years ended December 31, 2020, 2019 and 2018, respectively. The changes in valuation allowance are primarily due to additional U.S. deferred tax assets and liabilities incurred in the respective year. We have net \$260 million of deferred tax assets in foreign jurisdictions, which management believes are more-likely-than-not to be fully realized given the expectation of future earnings in these jurisdictions. We did not have material release of valuation allowance for the years ended December 31, 2020, 2019 and 2018. We continue to monitor the realizability of the U.S. deferred tax assets taking into account multiple factors, including the results of operations and magnitude of excess tax deductions for stock-based compensation. We intend to continue maintaining a full valuation allowance on our U.S. deferred tax assets until there is sufficient evidence to support the reversal of all or some portion of these allowances. Given the improvement in our operating results and depending on the amount of stock-based compensation tax deduction available in the future, we may release the valuation allowance associated with the U.S. deferred tax assets in the next few years. Release of all, or a portion, of the valuation allowance would result in the recognition of certain deferred tax assets and a decrease to income tax expense for the period the release is recorded.

The reconciliation of taxes at the federal statutory rate to our provision for income taxes for the years ended December 31, 2020, 2019 and 2018 was as follows (in millions):

	Year Ended December 31,		
	2020	2019	2018
Tax at statutory federal rate	\$ 242	\$ (139)	\$ (211)
State tax, net of federal benefit	4	5	3
Nondeductible executive compensations	184	62	39
Other nondeductible expenses	52	32	26
Excess tax benefits related to stock based compensation	(666)	(7)	(44)
Foreign income rate differential	33	189	161
U.S. tax credits	(181)	(107)	(80)
Noncontrolling interests and redeemable noncontrolling interests adjustment	5	(29)	32
GILTI inclusion	133	—	—
Convertible debt	—	(4)	—
Unrecognized tax benefits	1	17	1
Change in valuation allowance	485	91	131
Provision for income taxes	<u>\$ 292</u>	<u>\$ 110</u>	<u>\$ 58</u>

As of December 31, 2020, we had \$9.65 billion of federal and \$6.60 billion of state net operating loss carry-forwards available to offset future taxable income, which will not begin to significantly expire until 2024 for federal and 2031 for state purposes. A portion of these losses were generated by SolarCity and some of the companies we acquired, and therefore are subject to change of control provisions, which limit the amount of acquired tax attributes that can be utilized in a given tax year. We do not expect these change of control limitations to significantly impact our ability to utilize these attributes.

As of December 31, 2020, we had research and development tax credits of \$417 million and \$373 million for federal and state income tax purposes, respectively. If not utilized, the federal research and development tax credits will expire in various amounts beginning in 2024. However, the state of California research and development tax credits can be carried forward indefinitely. In addition, we have other general business tax credits of \$167 million for federal income tax purposes, which will not begin to significantly expire until 2033.

Federal and state laws can impose substantial restrictions on the utilization of net operating loss and tax credit carry-forwards in the event of an “ownership change,” as defined in Section 382 of the Internal Revenue Code. We have determined that no significant limitation would be placed on the utilization of our net operating loss and tax credit carry-forwards due to prior ownership changes.

The local government of Shanghai granted a beneficial corporate income tax rate of 15% to certain eligible enterprises, compared to the 25% statutory corporate income tax rate in China. Our Gigafactory Shanghai subsidiary was granted this beneficial income tax rate of 15% for 2019 through 2023.

No deferred tax liabilities for foreign withholding taxes have been recorded relating to the earnings of our foreign subsidiaries since all such earnings are intended to be indefinitely reinvested. The amount of the unrecognized deferred tax liability associated with these earnings is immaterial.



## Uncertain Tax Positions

The changes to our gross unrecognized tax benefits were as follows (in millions):

December 31, 2017	\$ 199
Decreases in balances related to prior year tax positions	(6)
Increases in balances related to current year tax positions	60
December 31, 2018	253
Decreases in balances related to prior year tax positions	(39)
Increases in balances related to current year tax positions	59
December 31, 2019	273
Increases in balances related to prior year tax positions	66
Increases in balances related to current year tax positions	41
December 31, 2020	\$ 380

As of December 31, 2020, accrued interest and penalties related to unrecognized tax benefits are classified as income tax expense and were immaterial. Unrecognized tax benefits of \$353 million, if recognized, would not affect our effective tax rate since the tax benefits would increase a deferred tax asset that is currently fully offset by a full valuation allowance.

We file income tax returns in the U.S., California and various state and foreign jurisdictions. We are currently under examination by the IRS for the years 2015 to 2018. Additional tax years within the period 2004 to 2014 and 2019 remain subject to examination for federal income tax purposes, and tax years 2004 to 2019 remain subject to examination for California income tax purposes. All net operating losses and tax credits generated to date are subject to adjustment for U.S. federal and California income tax purposes. Tax years 2008 to 2019 remain subject to examination in other U.S. state and foreign jurisdictions.

The potential outcome of the current examination could result in a change to unrecognized tax benefits within the next twelve months. However, we cannot reasonably estimate possible adjustments at this time.

The U.S. Tax Court issued a decision in *Altera Corp v. Commissioner* related to the treatment of stock-based compensation expense in a cost-sharing arrangement. On June 7, 2019, the Ninth Circuit Court of Appeals (Ninth Circuit) reversed the Tax Court decision and upheld the validity of Treas. Reg. Section 1.482-7A(d)(2), requiring stock-based compensation costs be included in the costs shared under a cost sharing agreement. On June 22, 2020, the U.S. Supreme Court denied to review the Ninth Circuit decision. Prior to the U.S. Supreme Court's denial, Tesla has already included stock-based compensation in cost sharing allocation agreement and hence retains its position.

## Note 16 – Commitments and Contingencies

### *Operating Lease Arrangement in Buffalo, New York*

We have an operating lease through the Research Foundation for the State University of New York (the "SUNY Foundation") with respect to Gigafactory New York. Under the lease and a related research and development agreement, we are continuing to designate further buildouts at the facility. The SUNY Foundation covered (i) construction costs related to the manufacturing facility up to \$350 million, (ii) the acquisition and commissioning of the manufacturing equipment in an amount up to \$275 million and (iii) \$125 million for additional specified scope costs, in cases (i) and (ii) only, subject to the maximum funding allocation from the State of New York; and we were responsible for any construction or equipment costs in excess of such amounts. The SUNY Foundation owns the manufacturing facility and the manufacturing equipment purchased by the SUNY Foundation. Following completion of the manufacturing facility, we have commenced leasing of the manufacturing facility and the manufacturing equipment owned by the SUNY Foundation for an initial period of 10 years, with an option to renew, for \$2.00 per year plus utilities.

Under this agreement, we are obligated to, among other things, meet employment targets as well as specified minimum numbers of personnel in the State of New York and in Buffalo, New York and spend or incur \$5.00 billion in combined capital, operational expenses, costs of goods sold and other costs in the State of New York during the

10-year period beginning April 30, 2018. On an annual basis during the initial lease term, as measured on each anniversary of such date, if we fail to meet these specified investment and job creation requirements, then we would be obligated to pay a \$41 million “program payment” to the SUNY Foundation for each year that we fail to meet these requirements. Furthermore, if the arrangement is terminated due to a material breach by us, then additional amounts may become payable by us.

As we temporarily suspended most of our manufacturing operations at Gigafactory New York pursuant to a New York State executive order issued in March 2020 as a result of the COVID-19 pandemic, we were granted a one-year deferral of our obligation to be compliant with our applicable targets under such agreement on April 30, 2020, which was memorialized in an amendment to our agreement with the SUNY Foundation in July 2020. Moreover, we had exceeded our investment and employment obligations under this agreement prior to such mandated reduction of operations. We do not currently expect any issues meeting all applicable future obligations under this agreement. However, if our expectations as to the costs and timelines of our investment and operations at Buffalo or our production ramp of the Solar Roof prove incorrect, we may incur additional expenses or substantial payments to the SUNY Foundation.

### ***Operating Lease Arrangement in Shanghai, China***

We have an operating lease arrangement for an initial term of 50 years with the local government of Shanghai for land use rights where we are constructing Gigafactory Shanghai. Under the terms of the arrangement, we are required to spend RMB 14.08 billion in capital expenditures, and to generate RMB 2.23 billion of annual tax revenues starting at the end of 2023. If we are unwilling or unable to meet such target or obtain periodic project approvals, in accordance with the Chinese government's standard terms for such arrangements, we would be required to revert the site to the local government and receive compensation for the remaining value of the land lease, buildings and fixtures. We believe the capital expenditure requirement and the tax revenue target will be attainable even if our actual vehicle production was far lower than the volumes we are forecasting.

### ***Legal Proceedings***

#### ***Securities Litigation Relating to the SolarCity Acquisition***

Between September 1, 2016 and October 5, 2016, seven lawsuits were filed in the Delaware Court of Chancery by purported stockholders of Tesla challenging our acquisition of SolarCity Corporation ("SolarCity"). Following consolidation, the lawsuit names as defendants the members of Tesla's board of directors as then constituted and alleges, among other things, that board members breached their fiduciary duties in connection with the acquisition. The complaint asserts both derivative claims and direct claims on behalf of a purported class and seeks, among other relief, unspecified monetary damages, attorneys' fees, and costs. On January 27, 2017, defendants filed a motion to dismiss the operative complaint. Rather than respond to the defendants' motion, the plaintiffs filed an amended complaint. On March 17, 2017, defendants filed a motion to dismiss the amended complaint. On December 13, 2017, the Court heard oral argument on the motion. On March 28, 2018, the Court denied defendants' motion to dismiss. Defendants filed a request for interlocutory appeal, and the Delaware Supreme Court denied that request without ruling on the merits but electing not to hear an appeal at this early stage of the case. Defendants filed their answer on May 18, 2018, and mediations were held on June 10, 2019. Plaintiffs and defendants filed respective motions for summary judgment on August 25, 2019, and further mediations were held on October 3, 2019. The Court held a hearing on the motions for summary judgment on November 4, 2019. On January 22, 2020, all of the director defendants except Elon Musk reached a settlement to resolve the lawsuit against them for an amount that would be paid entirely under the applicable insurance policy. The settlement, which does not involve an admission of any wrongdoing by any party, was approved by the Court on August 17, 2020. Tesla received payment of approximately \$43 million on September 16, 2020, which has been recognized in our consolidated statement of operations as a reduction to selling, general and administrative operating expenses for costs previously incurred in the securities litigation related to the acquisition of SolarCity. On February 4, 2020, the Court issued a ruling that denied plaintiffs' previously-filed motion and granted in part and denied in part defendants' previously-filed motion. Fact and expert discovery is complete, and the case was set for trial in March 2020 until it was postponed by the Court due to safety precautions concerning COVID-19. The current tentative dates for the trial are from July 12 to July 23, 2021, subject to change based on any further safety measures implemented by the Court.

These plaintiffs and others filed parallel actions in the U.S. District Court for the District of Delaware on or about April 21, 2017. They include claims for violations of the federal securities laws and breach of fiduciary duties by Tesla's board of directors. Those actions have been consolidated and stayed pending the above-referenced Chancery Court litigation.

We believe that claims challenging the SolarCity acquisition are without merit and intend to defend against them vigorously. We are unable to estimate the possible loss or range of loss, if any, associated with these claims.

### *Securities Litigation Relating to Production of Model 3 Vehicles*

On October 10, 2017, a purported stockholder class action was filed in the U.S. District Court for the Northern District of California against Tesla, two of its current officers, and a former officer. The complaint alleges violations of federal securities laws and seeks unspecified compensatory damages and other relief on behalf of a purported class of purchasers of Tesla securities from May 4, 2016 to October 6, 2017. The lawsuit claims that Tesla supposedly made materially false and misleading statements regarding Tesla's preparedness to produce Model 3 vehicles. Plaintiffs filed an amended complaint on March 23, 2018, and defendants filed a motion to dismiss on May 25, 2018. The court granted defendants' motion to dismiss with leave to amend. Plaintiffs filed their amended complaint on September 28, 2018, and defendants filed a motion to dismiss the amended complaint on February 15, 2019. The hearing on the motion to dismiss was held on March 22, 2019, and on March 25, 2019, the Court ruled in favor of defendants and dismissed the complaint with prejudice. On April 8, 2019, plaintiffs filed a notice of appeal and on July 17, 2019 filed their opening brief. We filed our opposition on September 16, 2019. A hearing on the appeal before the U.S. Court of Appeals for the Ninth Circuit ("Ninth Circuit") was held on April 30, 2020. On January 26, 2021, the Ninth Circuit affirmed the District Court's dismissal of the stockholder claims. We continue to believe that the claims are without merit and intend to defend against this lawsuit vigorously. We are unable to estimate the possible loss or range of loss, if any, associated with this lawsuit.

On October 26, 2018, in a similar action, a purported stockholder class action was filed in the Superior Court of California in Santa Clara County against Tesla, Elon Musk, and seven initial purchasers in an offering of debt securities by Tesla in August 2017. The complaint alleges misrepresentations made by Tesla regarding the number of Model 3 vehicles Tesla expected to produce by the end of 2017 in connection with such offering and seeks unspecified compensatory damages and other relief on behalf of a purported class of purchasers of Tesla securities in such offering. Tesla thereafter removed the case to federal court. On January 22, 2019, plaintiff abandoned its effort to proceed in state court, instead filing an amended complaint against Tesla, Elon Musk and seven initial purchasers in the debt offering before the same judge in the U.S. District Court for the Northern District of California who is hearing the above-referenced earlier filed federal case. On February 5, 2019, the Court stayed this new case pending a ruling on the motion to dismiss the complaint in such earlier filed federal case. After such earlier filed federal case was dismissed, defendants filed a motion on July 2, 2019 to dismiss this case as well. This case is now stayed pending a ruling from the Ninth Circuit on the earlier filed federal case with an agreement that if defendants prevail on appeal in such case, this case will be dismissed. We believe that the claims are without merit and intend to defend against this lawsuit vigorously. We are unable to estimate the possible loss or range of loss, if any, associated with this lawsuit.

### *Litigation Relating to 2018 CEO Performance Award*

On June 4, 2018, a purported Tesla stockholder filed a putative class and derivative action in the Delaware Court of Chancery against Elon Musk and the members of Tesla's board of directors as then constituted, alleging corporate waste, unjust enrichment, and that such board members breached their fiduciary duties by approving the stock-based compensation plan. The complaint seeks, among other things, monetary damages and rescission or reformation of the stock-based compensation plan. On August 31, 2018, defendants filed a motion to dismiss the complaint; plaintiff filed its opposition brief on November 1, 2018 and defendants filed a reply brief on December 13, 2018. The hearing on the motion to dismiss was held on May 9, 2019. On September 20, 2019, the Court granted the motion to dismiss as to the corporate waste claim but denied the motion as to the breach of fiduciary duty and unjust enrichment claims. Our answer was filed on December 3, 2019, and trial is set for April 2022. Fact discovery is ongoing. We believe the claims asserted in this lawsuit are without merit and intend to defend against them vigorously. We are unable to estimate the possible loss or range of loss, if any, associated with this lawsuit.

### *Litigation Related to Directors' Compensation*

On June 17, 2020, a purported Tesla stockholder filed a derivative action in the Delaware Court of Chancery, purportedly on behalf of Tesla, against certain of Tesla's current and former directors regarding compensation awards granted to Tesla's directors, other than Elon Musk, between 2017 and 2020. The suit asserts claims for breach of fiduciary duty and unjust enrichment and seeks declaratory and injunctive relief, unspecified damages, and other relief. Defendants filed their answer on September 17, 2020. Trial is set for September 2022, and fact discovery is ongoing. We believe that the claims are without merit and intend to defend against this lawsuit vigorously. We are unable to estimate the possible loss or range of loss, if any, associated with this lawsuit.

### *Securities Litigation Relating to Potential Going Private Transaction*

Between August 10, 2018 and September 6, 2018, nine purported stockholder class actions were filed against Tesla and Elon Musk in connection with Mr. Musk's August 7, 2018 Twitter post that he was considering taking Tesla private. All of the suits are now pending in the U.S. District Court for the Northern District of California. Although the complaints vary in certain respects, they each purport to assert claims for violations of federal securities laws related to Mr. Musk's statement and seek unspecified compensatory damages and other relief on behalf of a purported class of purchasers of Tesla's securities. Plaintiffs filed their consolidated complaint on January 16, 2019 and added as defendants the members of Tesla's board of directors. The now-consolidated purported stockholder class action was stayed while the issue of selection of lead counsel was briefed and argued before the Ninth Circuit. The Ninth Circuit ruled regarding lead counsel. Defendants filed a motion to dismiss the complaint on November 22, 2019. The hearing on the motion was held on March 6, 2020. On April 15, 2020, the Court denied defendants' motion to dismiss. The parties stipulated to certification of a class of stockholders, which the court granted on November 25, 2020. Trial is set for May 2022. We believe that the claims have no merit and intend to defend against them vigorously. We are unable to estimate the potential loss, or range of loss, associated with these claims.

Between October 17, 2018 and November 9, 2018, five derivative lawsuits were filed in the Delaware Court of Chancery against Mr. Musk and the members of Tesla's board of directors as then constituted in relation to statements made and actions connected to a potential going private transaction. In addition to these cases, on October 25, 2018, another derivative lawsuit was filed in the U.S. District Court for the District of Delaware against Mr. Musk and the members of the Tesla board of directors as then constituted. The Courts in both the Delaware federal court and Delaware Court of Chancery actions have consolidated their respective actions and stayed each consolidated action pending resolution of the above-referenced consolidated purported stockholder class action. We believe that the claims have no merit and intend to defend against them vigorously. We are unable to estimate the potential loss or range of loss, if any, associated with these lawsuits.

Beginning on March 7, 2019, various stockholders filed derivative suits in the Delaware Court of Chancery, purportedly on behalf of Tesla, naming Mr. Musk and Tesla's board of directors as then constituted, also related to Mr. Musk's August 7, 2018 Twitter post that is the basis of the above-referenced consolidated purported stockholder class action, as well as to Mr. Musk's February 19, 2019 Twitter post regarding Tesla's vehicle production. The suit asserts claims for breach of fiduciary duty and seeks declaratory and injunctive relief, unspecified damages, and other relief. Plaintiffs agreed to a stipulation that these derivative cases would be stayed pending the outcome of the above-referenced consolidated purported stockholder class action. In March 2019, plaintiffs in one of these derivative suits moved to lift the stay and for an expedited trial. Briefs were filed on March 13, 2019, and the hearing was held on March 18, 2019. Defendants prevailed, with the Court denying the plaintiffs' request for an expedited trial and granting defendants' request to continue to stay this suit pending the outcome of the above-referenced consolidated purported stockholder class action. On May 4, 2020, the same plaintiffs again filed a motion requesting to lift the stay and for an expedited trial. Briefs were filed on May 13, 2020 and May 15, 2020 and a hearing was held on May 19, 2020. Defendants again prevailed, with the Court denying plaintiffs' request to lift the stay and for an expedited trial. The plaintiffs also sought leave to file an amended complaint, which was granted. The Court entered an order implementing its ruling on May 21, 2020. The amended complaint asserts additional allegations of breach of fiduciary duty related to two additional Twitter posts by Mr. Musk, dated July 29, 2019 and May 1, 2020, and seeks unspecified damages and declaratory and injunctive relief. We believe that the claims have no merit and intend to defend against them vigorously. We are unable to estimate the potential loss or range of loss, if any, associated with these lawsuits.

### *Certain Investigations and Other Matters*

We receive requests for information from regulators and governmental authorities, such as the National Highway Traffic Safety Administration, the National Transportation Safety Board, the SEC, the Department of Justice ("DOJ") and various state, federal, and international agencies. We routinely cooperate with such regulatory and governmental requests.

In particular, the SEC had issued subpoenas to Tesla in connection with (a) Elon Musk's prior statement that he was considering taking Tesla private and (b) certain projections that we made for Model 3 production rates during 2017 and other public statements relating to Model 3 production. The take-private investigation was resolved and closed with a settlement entered into with the SEC in September 2018 and as further clarified in April 2019 in an amendment. On December 4, 2019, the SEC (i) closed the investigation into the projections and other public statements regarding Model 3 production rates and (ii) issued a subpoena seeking information concerning certain financial data and contracts including Tesla's regular financing arrangements. Separately, the DOJ had also asked us to voluntarily provide it with information about the above matters related to taking Tesla private and Model 3 production rates.

Aside from the settlement, as amended, with the SEC relating to Mr. Musk's statement that he was considering taking Tesla private, there have not been any developments in these matters that we deem to be material, and to our

knowledge no government agency in any ongoing investigation has concluded that any wrongdoing occurred. As is our normal practice, we have been cooperating and will continue to cooperate with government authorities. We cannot predict the outcome or impact of any ongoing matters. Should the government decide to pursue an enforcement action, there exists the possibility of a material adverse impact on our business, results of operation, prospects, cash flows, and financial position.



We are also subject to various other legal proceedings and claims that arise from the normal course of business activities. If an unfavorable ruling or development were to occur, there exists the possibility of a material adverse impact on our business, results of operations, prospects, cash flows, financial position, and brand.

### ***Indemnification and Guaranteed Returns***

We are contractually obligated to compensate certain fund investors for any losses that they may suffer in certain limited circumstances resulting from reductions in investment tax credits claimed under U.S. federal laws for the installation of solar power facilities and energy storage systems that are charged from a co-sited solar power facility (“ITC”s). Generally, such obligations would arise as a result of reductions to the value of the underlying solar energy systems as assessed by the U.S. Internal Revenue Service (the “IRS”) for purposes of claiming ITCs. For each balance sheet date, we assess and recognize, when applicable, a distribution payable for the potential exposure from this obligation based on all the information available at that time, including any audits undertaken by the IRS. We believe that any payments to the fund investors in excess of the amounts already recognized by us for this obligation are not probable or material based on the facts known at the filing date.

The maximum potential future payments that we could have to make under this obligation would depend on the difference between the fair values of the solar energy systems sold or transferred to the funds as determined by us and the values that the IRS would determine as the fair value for the systems for purposes of claiming ITCs. We claim ITCs based on guidelines provided by the U.S. Treasury department and the statutory regulations from the IRS. We use fair values determined with the assistance of independent third-party appraisals commissioned by us as the basis for determining the ITCs that are passed-through to and claimed by the fund investors. Since we cannot determine exactly how the IRS will evaluate system values used in claiming ITCs, we are unable to reliably estimate the maximum potential future payments that it could have to make under this obligation as of each balance sheet date.

We are eligible to receive certain state and local incentives that are associated with renewable energy generation. The amount of incentives that can be claimed is based on the projected or actual solar energy system size and/or the amount of solar energy produced. We also currently participate in one state’s incentive program that is based on either the fair market value or the tax basis of solar energy systems placed in service. State and local incentives received are allocated between us and fund investors in accordance with the contractual provisions of each fund. We are not contractually obligated to indemnify any fund investor for any losses they may incur due to a shortfall in the amount of state or local incentives actually received.

### ***Letters of Credit***

As of December 31, 2020, we had \$233 million of unused letters of credit outstanding.

### **Note 17 – Variable Interest Entity Arrangements**

We have entered into various arrangements with investors to facilitate the funding and monetization of our solar energy systems and vehicles. In particular, our wholly owned subsidiaries and fund investors have formed and contributed cash and assets into various financing funds and entered into related agreements. We have determined that the funds are variable interest entities (“VIEs”) and we are the primary beneficiary of these VIEs by reference to the power and benefits criterion under ASC 810, *Consolidation*. We have considered the provisions within the agreements, which grant us the power to manage and make decisions that affect the operation of these VIEs, including determining the solar energy systems or vehicles and the associated customer contracts to be sold or contributed to these VIEs, redeploying solar energy systems or vehicles and managing customer receivables. We consider that the rights granted to the fund investors under the agreements are more protective in nature rather than participating.

As the primary beneficiary of these VIEs, we consolidate in the financial statements the financial position, results of operations and cash flows of these VIEs, and all intercompany balances and transactions between us and these VIEs are eliminated in the consolidated financial statements. Cash distributions of income and other receipts by a fund, net of agreed upon expenses, estimated expenses, tax benefits and detriments of income and loss and tax credits, are allocated to the fund investor and our subsidiary as specified in the agreements.

Generally, our subsidiary has the option to acquire the fund investor’s interest in the fund for an amount based on the market value of the fund or the formula specified in the agreements.

Upon the sale or liquidation of a fund, distributions would occur in the order and priority specified in the agreements.

Pursuant to management services, maintenance and warranty arrangements, we have been contracted to provide services to the funds, such as operations and maintenance support, accounting, lease servicing and performance

reporting. In some instances, we have guaranteed payments to the fund investors as specified in the agreements. A fund's creditors have no recourse to our general credit or to that of other funds. None of the assets of the funds had been pledged as collateral for their obligations.

The aggregate carrying values of the VIEs' assets and liabilities, after elimination of any intercompany transactions and balances, in the consolidated balance sheets were as follows (in millions):

	December 31, 2020	December 31, 2019
<b>Assets</b>		
Current assets		
Cash and cash equivalents	\$ 87	\$ 106
Accounts receivable, net	28	27
Prepaid expenses and other current assets	105	100
Total current assets	220	233
Operating lease vehicles, net	—	1,183
Solar energy systems, net	4,749	5,030
Other non-current assets	182	156
Total assets	\$ 5,151	\$ 6,602
<b>Liabilities</b>		
Current liabilities		
Accrued liabilities and other	\$ 63	\$ 80
Deferred revenue	11	78
Customer deposits	14	9
Current portion of debt and finance leases	797	608
Total current liabilities	885	775
Deferred revenue, net of current portion	168	264

Debt and finance leases, net of current portion	1,346	1,516
Other long-term liabilities	19	22
<b>Total liabilities</b>	<b>\$ 2,418</b>	<b>\$ 2,577</b>

#### **Note 18 – Lease Pass-Through Financing Obligation**

Through December 31, 2020, we had entered into eight transactions referred to as “lease pass-through fund arrangements”. Under these arrangements, our wholly owned subsidiaries finance the cost of solar energy systems with investors through arrangements contractually structured as master leases for an initial term ranging between 10 and 25 years. These solar energy systems are subject to lease or PPAs with customers with an initial term not exceeding 25 years. These solar energy systems are included within solar energy systems, net on the consolidated balance sheets.

The cost of the solar energy systems under lease pass-through fund arrangements as of December 31, 2020 and 2019 was \$1.05 billion. The accumulated depreciation on these assets as of December 31, 2020 and 2019 was \$137 million and \$101 million, respectively. The total lease pass-through financing obligation as of December 31, 2020 was \$68 million, of which \$41 million is classified as a current liability. The total lease pass-through financing obligation as of December 31, 2019 was \$94 million, of which \$57 million was classified as a current liability. Lease pass-through financing obligation is included in accrued liabilities and other for the current portion and other long-term liabilities for the long-term portion on the consolidated balance sheets.

Under a lease pass-through fund arrangement, the investor makes a large upfront payment to the lessor, which is one of our subsidiaries, and in some cases, subsequent periodic payments. We allocate a portion of the aggregate investor payments to the fair value of the assigned ITCs, which is estimated by discounting the projected cash flow impact of the ITCs using a market interest rate and is accounted for separately. We account for the remainder of the investor payments as a borrowing by recording the proceeds received as a lease pass-through financing obligation, which is repaid from the future customer lease payments and any incentive rebates. A portion of the amounts received by the investor is allocated to interest expense using the effective interest rate method.

The lease pass-through financing obligation is non-recourse once the associated solar energy systems have been placed in-service and the associated customer arrangements have been assigned to the investors. In addition, we are responsible for any warranties, performance guarantees, accounting and performance reporting. Furthermore, we continue to account for the customer arrangements and any incentive rebates in the consolidated financial statements, regardless of whether the cash is received by us or directly by the investors.

As of December 31, 2020, the future minimum master lease payments to be received from investors, for each of the next five years and thereafter, were as follows (in millions):

2021	\$	41
2022		33
2023		26
2024		18
2025		27
Thereafter		423
Total	\$	<u>568</u>

For two of the lease pass-through fund arrangements, our subsidiaries have pledged its assets to the investors as security for its obligations under the contractual agreements.

Each lease pass-through fund arrangement has a one-time master lease prepayment adjustment mechanism that occurs when the capacity and the placed-in-service dates of the associated solar energy systems are finalized or on an agreed-upon date. As part of this mechanism, the master lease prepayment amount is updated, and we may be obligated to refund a portion of a master lease prepayment or entitled to receive an additional master lease prepayment. Any additional master lease prepayments are recorded as an additional lease pass-through financing obligation while any master lease prepayment refunds would reduce the lease pass-through financing obligation.

#### **Note 19 – Defined Contribution Plan**

We have a 401(k) savings plan that is intended to qualify as a deferred salary arrangement under Section 401(k) of the Internal Revenue Code. Under the 401(k) savings plan, participating employees may elect to contribute up to 100% of their eligible compensation, subject to certain limitations. Participants are fully vested in their contributions. We did not make any contributions to the 401(k) savings plan during the years ended December 31, 2020, 2019 and 2018 (other than employee deferrals of eligible compensation).

#### **Note 20 – Related Party Transactions**

In November 2018, our CEO purchased from us 284,575 shares of our common stock in a private placement at a per share price equal to the last closing price of our stock prior to the execution of the purchase agreement for an aggregate \$20 million, as adjusted to give effect to the Stock Split.

In May 2019, our CEO purchased from us 514,400 shares of our common stock in a public offering at the public offering price for an aggregate \$25 million, as adjusted to give effect to the Stock Split.

In February 2020, our CEO and a member of our Board of Directors purchased from us 65,185 and 6,250 shares, respectively, of our common stock in a public offering at the public offering price for an aggregate \$10 million and \$1 million, respectively, as adjusted to give effect to the Stock Split.

In June 2020, our CEO entered into an indemnification agreement with us for an interim term of 90 days. During the interim term, we resumed our annual evaluation of all available options for providing directors' and officers' indemnity coverage, which we had suspended during the height of shelter-in-place requirements related to the COVID-19 pandemic. As part of such process, we obtained a binding market quote for a directors' and officers' liability insurance policy with an aggregate coverage limit of \$100 million.

Pursuant to the indemnification agreement, our CEO provided, from his personal funds, directors' and officers' indemnity coverage to us during the interim term in the event such coverage is not indemnifiable by us, up to a total of \$100 million. In return, we paid our CEO a total of \$3 million, which represents the market-based premium for the market quote described above as prorated for 90 days and further discounted by 50%. Following the lapse of the 90-day period, we did not extend the term of the indemnification agreement with our CEO and instead bound a customary directors' and officers' liability insurance policy with third-party carriers.

**Note 21 – Segment Reporting and Information about Geographic Areas**

We have two operating and reportable segments: (i) automotive and (ii) energy generation and storage. The automotive segment includes the design, development, manufacturing, sales, and leasing of electric vehicles as well as sales of automotive regulatory credits. Additionally, the automotive segment is also comprised of services and other, which includes non-warranty after-sales vehicle services, sales of used vehicles, retail merchandise, sales by our acquired subsidiaries to third party customers, and vehicle insurance revenue. The energy generation and storage segment includes the design, manufacture, installation, sales, and leasing of solar energy generation and energy storage products and related services and sales of solar energy systems incentives. Our CODM does not evaluate operating segments using asset or liability information. The following table presents revenues and gross profit by reportable segment (in millions):

	Year Ended December 31,		
	2020	2019	2018
Automotive segment			
Revenues	\$ 29,542	\$ 23,047	\$ 19,906
Gross profit	\$ 6,612	\$ 3,879	\$ 3,852
Energy generation and storage segment			
Revenues	\$ 1,994	\$ 1,531	\$ 1,555
Gross profit	\$ 18	\$ 190	\$ 190

The following table presents revenues by geographic area based on the sales location of our products (in millions):

	Year Ended December 31,		
	2020	2019	2018
United States	\$ 15,207	\$ 12,653	\$ 14,872
China	6,662	2,979	1,757
Other	9,667	8,946	4,832
Total	<u>\$ 31,536</u>	<u>\$ 24,578</u>	<u>\$ 21,461</u>

The revenues in certain geographic areas were impacted by the price adjustments we made to our vehicle offerings during the years ended December 31, 2020 and 2019. Refer to Note 2, *Summary of Significant Accounting Policies*, for details.

The following table presents long-lived assets by geographic area (in millions):

	December 31, 2020	December 31, 2019
United States	\$ 15,989	\$ 15,644
International	2,737	890
Total	<u>\$ 18,726</u>	<u>\$ 16,534</u>

**Note 22 – Restructuring and Other**

During the year ended December 31, 2019, we carried out certain restructuring actions in order to reduce costs and improve efficiency. As a result, we recognized \$50 million of costs primarily related to employee termination expenses and losses from closing certain stores impacting both segments. We recognized \$47 million in impairment related to the IPR&D intangible asset as we abandoned further development efforts and \$15 million for the related equipment within the energy generation and storage segment. We also incurred a loss of \$37 million for closing operations in certain facilities. On the statement of cash flows, the amounts were presented in the captions in which such amounts would have been recorded absent the impairment charges. The employee termination expenses were substantially paid by December 31, 2019, while the remaining amounts were non-cash.

During the year ended December 31, 2018, we carried-out certain restructuring actions in order to reduce costs and improve efficiency and recognized \$37 million of employee termination expenses and estimated losses from sub-leasing a certain facility. The employee termination cash expenses of \$27 million were substantially paid by the end

of 2018, while the remaining amounts were non-cash. Also included within restructuring and other activities was \$55 million of expenses (materially all of which were non-cash) from restructuring the energy generation and storage segment, which comprised of disposals of certain tangible assets, the shortening of the useful life of a trade name intangible asset and a contract termination penalty. In addition, we concluded that a small portion of the IPR&D asset is not commercially feasible. Consequently, we recognized an impairment loss of \$13 million. We recognized settlement and legal expenses of \$30 million in the year ended December 31, 2018 for the settlement with the SEC relating to a take-private proposal for Tesla. These expenses were substantially paid by the end of 2018.

## Note 23 – Subsequent Events

### *Early Conversions of Convertible Senior Notes*

Between January 1, 2021 and February 5, 2021, we have received additional conversion notices on our 2022 Notes and 2024 Notes for \$62 million and \$623 million in aggregate principal amounts, respectively, for which we intend to settle the principal amounts in cash during the three months ended March 31, 2021.

### *Investments*

In January 2021, we updated our investment policy to provide us with more flexibility to further diversify and maximize returns on our cash that is not required to maintain adequate operating liquidity. As part of the policy, we may invest a portion of such cash in certain specified alternative reserve assets. Thereafter, we invested an aggregate \$1.50 billion in bitcoin under this policy. Moreover, we expect to begin accepting bitcoin as a form of payment for our products in the near future, subject to applicable laws and initially on a limited basis, which we may or may not liquidate upon receipt.

We will account for digital assets as indefinite-lived intangible assets in accordance with ASC 350, *Intangibles—Goodwill and Other*. The digital assets are initially recorded at cost and are subsequently remeasured on the consolidated balance sheet at cost, net of any impairment losses incurred since acquisition. We will perform an analysis each quarter to identify impairment. If the carrying value of the digital asset exceeds the fair value based on the lowest price quoted in the active exchanges during the period, we will recognize an impairment loss equal to the difference in the consolidated statement of operations.

The cost basis of the digital assets will not be adjusted upward for any subsequent increases in their quoted prices on the active exchanges. Gains (if any) will not be recorded until realized upon sale.

## Note 24 – Quarterly Results of Operations (Unaudited)

The following table presents selected quarterly results of operations data for the years ended December 31, 2020 and 2019 (in millions, except per share amounts):

	Three Months Ended			
	March 31	June 30	September 30	December 31
<b>2020</b>				
Total revenues	\$ 5,985	\$ 6,036	\$ 8,771	\$ 10,744
Gross profit	\$ 1,234	\$ 1,267	\$ 2,063	\$ 2,066
Net income attributable to common stockholders	\$ 16	\$ 104	\$ 331	\$ 270
Net income per share of common stock attributable to common stockholders, basic (1)	\$ 0.02	\$ 0.11	\$ 0.32	\$ 0.28
Net income per share of common stock attributable to common stockholders, diluted (1)	\$ 0.02	\$ 0.10	\$ 0.27	\$ 0.24
<b>2019</b>				
Total revenues	\$ 4,541	\$ 6,350	\$ 6,303	\$ 7,384
Gross profit	\$ 566	\$ 921	\$ 1,191	\$ 1,391
Net (loss) income attributable to common stockholders	\$ (702)	\$ (408)	\$ 143	\$ 105
Net (loss) income per share of common stock attributable to common stockholders, basic (1)	\$ (0.82)	\$ (0.46)	\$ 0.16	\$ 0.12
Net (loss) income per share of common stock attributable to common stockholders, diluted (1)	\$ (0.82)	\$ (0.46)	\$ 0.16	\$ 0.11

(1) Prior period results have been adjusted to reflect the Stock Split. See Note 1, *Overview*, for details.



## **ITEM 9. CHANGES IN AND DISAGREEMENTS WITH ACCOUNTANTS ON ACCOUNTING AND FINANCIAL DISCLOSURE**

None.

### **ITEM 9A. CONTROLS AND PROCEDURES**

#### *Evaluation of Disclosure Controls and Procedures*

Our management, with the participation of our Chief Executive Officer and our Chief Financial Officer, evaluated the effectiveness of our disclosure controls and procedures pursuant to Rule 13a-15 under the Securities Exchange Act of 1934, as amended (the “Exchange Act”). In designing and evaluating the disclosure controls and procedures, our management recognizes that any controls and procedures, no matter how well designed and operated, can provide only reasonable assurance of achieving the desired control objectives. In addition, the design of disclosure controls and procedures must reflect the fact that there are resource constraints and that our management is required to apply its judgment in evaluating the benefits of possible controls and procedures relative to their costs.

Based on this evaluation, our Chief Executive Officer and our Chief Financial Officer concluded that, as of December 31, 2020, our disclosure controls and procedures were designed at a reasonable assurance level and were effective to provide reasonable assurance that the information we are required to disclose in reports that we file or submit under the Exchange Act is recorded, processed, summarized and reported within the time periods specified in the Securities and Exchange Commission rules and forms, and that such information is accumulated and communicated to our management, including our Chief Executive Officer and our Chief Financial Officer, as appropriate, to allow timely decisions regarding required disclosures.

#### *Management’s Report on Internal Control over Financial Reporting*

Our management is responsible for establishing and maintaining adequate internal control over financial reporting. Internal control over financial reporting is a process designed by, or under the supervision of, our Chief Executive Officer and Chief Financial Officer to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles and includes those policies and procedures that (1) pertain to the maintenance of records that in reasonable detail accurately and fairly reflect the transactions and dispositions of our assets; (2) provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with generally accepted accounting principles, and that our receipts and expenditures are being made only in accordance with authorizations of our management and directors and (3) provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use or disposition of our assets that could have a material effect on the financial statements.

Under the supervision and with the participation of our management, including our Chief Executive Officer and Chief Financial Officer, we conducted an evaluation of the effectiveness of our internal control over financial reporting based on criteria established in *Internal Control – Integrated Framework (2013)* issued by the Committee of Sponsoring Organizations of the Treadway Commission (“COSO”). Our management concluded that our internal control over financial reporting was effective as of December 31, 2020.

Our independent registered public accounting firm, PricewaterhouseCoopers LLP, has audited the effectiveness of our internal control over financial reporting as of December 31, 2020, as stated in their report which is included herein.

#### *Limitations on the Effectiveness of Controls*

Because of inherent limitations, internal control over financial reporting may not prevent or detect misstatements and projections of any evaluation of effectiveness to future periods are subject to the risk that controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate.

#### *Changes in Internal Control over Financial Reporting*

There was no change in our internal control over financial reporting that occurred during the fourth fiscal quarter of the year ended December 31, 2020, which has materially affected, or is reasonably likely to materially affect, our internal control over financial reporting.

### **ITEM 9B. OTHER INFORMATION**

None.

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### **PART III**

#### **ITEM 10. DIRECTORS, EXECUTIVE OFFICERS AND CORPORATE GOVERNANCE**

The information required by this Item 10 of Form 10-K will be included in our 2021 Proxy Statement to be filed with the Securities and Exchange Commission in connection with the solicitation of proxies for our 2021 Annual Meeting of Stockholders and is incorporated herein by reference. The 2021 Proxy Statement will be filed with the Securities and Exchange Commission within 120 days after the end of the fiscal year to which this report relates.

#### **ITEM 11. EXECUTIVE COMPENSATION**

The information required by this Item 11 of Form 10-K will be included in our 2021 Proxy Statement and is incorporated herein by reference.

#### **ITEM 12. SECURITY OWNERSHIP OF CERTAIN BENEFICIAL OWNERS AND MANAGEMENT AND RELATED STOCKHOLDER MATTERS**

The information required by this Item 12 of Form 10-K will be included in our 2021 Proxy Statement and is incorporated herein by reference.

#### **ITEM 13. CERTAIN RELATIONSHIPS AND RELATED TRANSACTIONS AND DIRECTOR INDEPENDENCE**

The information required by this Item 13 of Form 10-K will be included in our 2021 Proxy Statement and is incorporated herein by reference.

#### **ITEM 14. PRINCIPAL ACCOUNTANT FEES AND SERVICES**

The information required by this Item 14 of Form 10-K will be included in our 2021 Proxy Statement and is incorporated herein by reference.

### **PART IV**

#### **ITEM 15. EXHIBITS AND FINANCIAL STATEMENT SCHEDULES**

1. Financial statements (see *Index to Consolidated Financial Statements* in Part II, Item 8 of this report)
2. All financial statement schedules have been omitted since the required information was not applicable or was not present in amounts sufficient to require submission of the schedules, or because the information required is included in the consolidated financial statements or the accompanying notes
3. The exhibits listed in the following *Index to Exhibits* are filed or incorporated by reference as part of this report

## INDEX TO EXHIBITS

Exhibit Number	Exhibit Description	Incorporated by Reference				Filed Herewith
		Form	File No.	Exhibit	Filing Date	
3.1	<a href="#"><u>Amended and Restated Certificate of Incorporation of the Registrant.</u></a>	10-K	001-34756	3.1	March 1, 2017	
3.2	<a href="#"><u>Certificate of Amendment to the Amended and Restated Certificate of Incorporation of the Registrant.</u></a>	10-K	001-34756	3.2	March 1, 2017	
3.3	<a href="#"><u>Amended and Restated Bylaws of the Registrant.</u></a>	8-K	001-34756	3.2	February 1, 2017	
4.1	<a href="#"><u>Specimen common stock certificate of the Registrant.</u></a>	10-K	001-34756	4.1	March 1, 2017	
4.2	<a href="#"><u>Fifth Amended and Restated Investors' Rights Agreement, dated as of August 31, 2009, between Registrant and certain holders of the Registrant's capital stock named therein.</u></a>	S-1	333-164593	4.2	January 29, 2010	
4.3	<a href="#"><u>Amendment to Fifth Amended and Restated Investors' Rights Agreement, dated as of May 20, 2010, between Registrant and certain holders of the Registrant's capital stock named therein.</u></a>	S-1/A	333-164593	4.2A	May 27, 2010	
4.4	<a href="#"><u>Amendment to Fifth Amended and Restated Investors' Rights Agreement between Registrant, Toyota Motor Corporation and certain holders of the Registrant's capital stock named therein.</u></a>	S-1/A	333-164593	4.2B	May 27, 2010	
4.5	<a href="#"><u>Amendment to Fifth Amended and Restated Investor's Rights Agreement, dated as of June 14, 2010, between Registrant and certain holders of the Registrant's capital stock named therein.</u></a>	S-1/A	333-164593	4.2C	June 15, 2010	
4.6	<a href="#"><u>Amendment to Fifth Amended and Restated Investor's Rights Agreement, dated as of November 2, 2010, between Registrant and certain holders of the Registrant's capital stock named therein.</u></a>	8-K	001-34756	4.1	November 4, 2010	
4.7	<a href="#"><u>Waiver to Fifth Amended and Restated Investor's Rights Agreement, dated as of May 22, 2011, between Registrant and certain holders of the Registrant's capital stock named therein.</u></a>	S-1/A	333-174466	4.2E	June 2, 2011	
4.8	<a href="#"><u>Amendment to Fifth Amended and Restated Investor's Rights Agreement, dated as of May 30, 2011, between Registrant and certain holders of the Registrant's capital stock named therein.</u></a>	8-K	001-34756	4.1	June 1, 2011	
4.9	<a href="#"><u>Sixth Amendment to Fifth Amended and Restated Investors' Rights Agreement, dated as of May 15, 2013 among the Registrant, the Elon Musk</u></a>	8-K	001-34756	4.1	May 20, 2013	

Revocable Trust dated July 22, 2003  
and certain other holders of the capital  
stock of the Registrant named therein.

Exhibit Number	Exhibit Description	Incorporated by Reference				Filed Herewith
		Form	File No.	Exhibit	Filing Date	
4.10	<a href="#"><u>Waiver to Fifth Amended and Restated Investor's Rights Agreement, dated as of May 14, 2013, between the Registrant and certain holders of the capital stock of the Registrant named therein.</u></a>	8-K	001-34756	4.2	May 20, 2013	
4.11	<a href="#"><u>Waiver to Fifth Amended and Restated Investor's Rights Agreement, dated as of August 13, 2015, between the Registrant and certain holders of the capital stock of the Registrant named therein.</u></a>	8-K	001-34756	4.1	August 19, 2015	
4.12	<a href="#"><u>Waiver to Fifth Amended and Restated Investors' Rights Agreement, dated as of May 18, 2016, between the Registrant and certain holders of the capital stock of the Registrant named therein.</u></a>	8-K	001-34756	4.1	May 24, 2016	
4.13	<a href="#"><u>Waiver to Fifth Amended and Restated Investors' Rights Agreement, dated as of March 15, 2017, between the Registrant and certain holders of the capital stock of the Registrant named therein.</u></a>	8-K	001-34756	4.1	March 17, 2017	
4.14	<a href="#"><u>Waiver to Fifth Amended and Restated Investors' Rights Agreement, dated as of May 1, 2019, between the Registrant and certain holders of the capital stock of the Registrant named therein.</u></a>	8-K	001-34756	4.1	May 3, 2019	
4.15	<a href="#"><u>Indenture, dated as of May 22, 2013, by and between the Registrant and U.S. Bank National Association.</u></a>	8-K	001-34756	4.1	May 22, 2013	
4.16	<a href="#"><u>Third Supplemental Indenture, dated as of March 5, 2014, by and between the Registrant and U.S. Bank National Association.</u></a>	8-K	001-34756	4.4	March 5, 2014	
4.17	<a href="#"><u>Form of 1.25% Convertible Senior Note Due March 1, 2021 (included in Exhibit 4.16).</u></a>	8-K	001-34756	4.4	March 5, 2014	
4.18	<a href="#"><u>Fourth Supplemental Indenture, dated as of March 22, 2017, by and between the Registrant and U.S. Bank National Association.</u></a>	8-K	001-34756	4.2	March 22, 2017	
4.19	<a href="#"><u>Form of 2.375% Convertible Senior Note Due March 15, 2022 (included in Exhibit 4.18).</u></a>	8-K	001-34756	4.2	March 22, 2017	
4.20	<a href="#"><u>Fifth Supplemental Indenture, dated as of May 7, 2019, by and between Registrant and U.S. Bank National Association, related to 2.00% Convertible Senior Notes due May 15, 2024.</u></a>	8-K	001-34756	4.2	May 8, 2019	
4.21		8-K	001-34756	4.2	May 8, 2019	

	<a href="#"><u>Form of 2.00% Convertible Senior Notes due May 15, 2024 (included in Exhibit 4.20).</u></a>				
4.22	<a href="#"><u>Indenture, dated as of August 18, 2017, by and among the Registrant, SolarCity, and U.S. Bank National Association, as trustee.</u></a>	8-K	001-34756	4.1	August 23, 2017
4.23	<a href="#"><u>Form of 5.30% Senior Note due August 15, 2025.</u></a>	8-K	001-34756	4.2	August 23, 2017

Exhibit Number	Exhibit Description	Incorporated by Reference				Filed Herewith
		Form	File No.	Exhibit	Filing Date	
4.24	<a href="#">Indenture, dated as of October 15, 2014, between SolarCity and U.S. Bank National Association, as trustee.</a>	S-3ASR(1)	333-199321	4.1	October 15, 2014	
4.25	<a href="#">Fourth Supplemental Indenture, dated as of October 15, 2014, by and between SolarCity and the Trustee, related to SolarCity's 4.00% Solar Bonds, Series 2014/4-7.</a>	8-K(1)	001-35758	4.5	October 15, 2014	
4.26	<a href="#">Eighth Supplemental Indenture, dated as of January 29, 2015, by and between SolarCity and the Trustee, related to SolarCity's 4.00% Solar Bonds, Series 2015/4-7.</a>	8-K(1)	001-35758	4.5	January 29, 2015	
4.27	<a href="#">Tenth Supplemental Indenture, dated as of March 9, 2015, by and between SolarCity and the Trustee, related to SolarCity's 5.00% Solar Bonds, Series 2015/6-10.</a>	8-K(1)	001-35758	4.3	March 9, 2015	
4.28	<a href="#">Eleventh Supplemental Indenture, dated as of March 9, 2015, by and between SolarCity and the Trustee, related to SolarCity's 5.75% Solar Bonds, Series 2015/7-15.</a>	8-K(1)	001-35758	4.4	March 9, 2015	
4.29	<a href="#">Fifteenth Supplemental Indenture, dated as of March 19, 2015, by and between SolarCity and the Trustee, related to SolarCity's 4.70% Solar Bonds, Series 2015/C4-10.</a>	8-K(1)	001-35758	4.5	March 19, 2015	
4.30	<a href="#">Sixteenth Supplemental Indenture, dated as of March 19, 2015, by and between SolarCity and the Trustee, related to SolarCity's 5.45% Solar Bonds, Series 2015/C5-15.</a>	8-K(1)	001-35758	4.6	March 19, 2015	
4.31	<a href="#">Twentieth Supplemental Indenture, dated as of March 26, 2015, by and between SolarCity and the Trustee, related to SolarCity's 4.70% Solar Bonds, Series 2015/C9-10.</a>	8-K(1)	001-35758	4.5	March 26, 2015	
4.32	<a href="#">Twenty-First Supplemental Indenture, dated as of March 26, 2015, by and between SolarCity and the Trustee, related to SolarCity's 5.45% Solar Bonds, Series 2015/C10-15.</a>	8-K(1)	001-35758	4.6	March 26, 2015	
4.33	<a href="#">Twenty-Sixth Supplemental Indenture, dated as of April 2, 2015, by and between SolarCity and the Trustee, related to SolarCity's 4.70% Solar Bonds, Series 2015/C14-10.</a>	8-K(1)	001-35758	4.5	April 2, 2015	
4.34	<a href="#">Thirtieth Supplemental Indenture, dated as of April 9, 2015, by and between SolarCity and the Trustee, related to SolarCity's 4.70% Solar Bonds, Series 2015/C19-10.</a>	8-K(1)	001-35758	4.5	April 9, 2015	
4.35	<a href="#">Thirty-First Supplemental Indenture, dated as of April 9, 2015, by and</a>	8-K(1)	001-35758	4.6	April 9, 2015	



[between SolarCity and the Trustee,  
related to SolarCity's 5.45% Solar  
Bonds, Series 2015/C20-15.](#)

4.36	<a href="#"><u>Thirty-Fifth Supplemental Indenture, dated as of April 14, 2015, by and between SolarCity and the Trustee, related to SolarCity's 4.70% Solar Bonds, Series 2015/C24-10.</u></a>	8-K(1)	001-35758	4.5	April 14, 2015
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Exhibit Number	Exhibit Description	Incorporated by Reference				Filed Herewith
		Form	File No.	Exhibit	Filing Date	
4.37	<a href="#"><u>Thirty-Sixth Supplemental Indenture, dated as of April 14, 2015, by and between SolarCity and the Trustee, related to SolarCity's 5.45% Solar Bonds, Series 2015/C25-15.</u></a>	8-K(1)	001-35758	4.6	April 14, 2015	
4.38	<a href="#"><u>Thirty-Eighth Supplemental Indenture, dated as of April 21, 2015, by and between SolarCity and the Trustee, related to SolarCity's 4.70% Solar Bonds, Series 2015/C27-10.</u></a>	8-K(1)	001-35758	4.3	April 21, 2015	
4.39	<a href="#"><u>Thirty-Ninth Supplemental Indenture, dated as of April 21, 2015, by and between SolarCity and the Trustee, related to SolarCity's 5.45% Solar Bonds, Series 2015/C28-15.</u></a>	8-K(1)	001-35758	4.4	April 21, 2015	
4.40	<a href="#"><u>Forty-Third Supplemental Indenture, dated as of April 27, 2015, by and between SolarCity and the Trustee, related to SolarCity's 4.70% Solar Bonds, Series 2015/C32-10.</u></a>	8-K(1)	001-35758	4.5	April 27, 2015	
4.41	<a href="#"><u>Forty-Fourth Supplemental Indenture, dated as of April 27, 2015, by and between SolarCity and the Trustee, related to SolarCity's 5.45% Solar Bonds, Series 2015/C33-15.</u></a>	8-K(1)	001-35758	4.6	April 27, 2015	
4.42	<a href="#"><u>Forty-Eighth Supplemental Indenture, dated as of May 1, 2015, by and between SolarCity and the Trustee, related to SolarCity's 5.00% Solar Bonds, Series 2015/12-10.</u></a>	8-K(1)	001-35758	4.5	May 1, 2015	
4.43	<a href="#"><u>Forty-Ninth Supplemental Indenture, dated as of May 1, 2015, by and between SolarCity and the Trustee, related to SolarCity's 5.75% Solar Bonds, Series 2015/13-15.</u></a>	8-K(1)	001-35758	4.6	May 1, 2015	
4.44	<a href="#"><u>Fifty-Second Supplemental Indenture, dated as of May 11, 2015, by and between SolarCity and the Trustee, related to SolarCity's 4.70% Solar Bonds, Series 2015/C36-10.</u></a>	8-K(1)	001-35758	4.4	May 11, 2015	
4.45	<a href="#"><u>Fifty-Third Supplemental Indenture, dated as of May 11, 2015, by and between SolarCity and the Trustee, related to SolarCity's 5.45% Solar Bonds, Series 2015/C37-15.</u></a>	8-K(1)	001-35758	4.5	May 11, 2015	
4.46	<a href="#"><u>Fifty-Seventh Supplemental Indenture, dated as of May 18, 2015, by and between SolarCity and the Trustee, related to SolarCity's 4.70% Solar Bonds, Series 2015/C40-10.</u></a>	8-K(1)	001-35758	4.4	May 18, 2015	

4.47	<a href="#"><u>Fifty-Eighth Supplemental Indenture, dated as of May 18, 2015, by and between SolarCity and the Trustee, related to SolarCity's 5.45% Solar Bonds, Series 2015/C41-15.</u></a>	8-K(1)	001-35758	4.5	May 18, 2015
4.48	<a href="#"><u>Sixty-First Supplemental Indenture, dated as of May 26, 2015, by and between SolarCity and the Trustee, related to SolarCity's 4.70% Solar Bonds, Series 2015/C44-10.</u></a>	8-K(1)	001-35758	4.4	May 26, 2015
4.49	<a href="#"><u>Sixty-Second Supplemental Indenture, dated as of May 26, 2015, by and between SolarCity and the Trustee, related to SolarCity's 5.45% Solar Bonds, Series 2015/C45-15.</u></a>	8-K(1)	001-35758	4.5	May 26, 2015

Exhibit Number	Exhibit Description	Incorporated by Reference				Filed Herewith
		Form	File No.	Exhibit	Filing Date	
4.50	<a href="#"><u>Seventieth Supplemental Indenture, dated as of June 16, 2015, by and between SolarCity and the Trustee, related to SolarCity's 4.70% Solar Bonds, Series 2015/C52-10.</u></a>	8-K(1)	001-35758	4.4	June 16, 2015	
4.51	<a href="#"><u>Seventy-First Supplemental Indenture, dated as of June 16, 2015, by and between SolarCity and the Trustee, related to SolarCity's 5.45% Solar Bonds, Series 2015/C53-15.</u></a>	8-K(1)	001-35758	4.5	June 16, 2015	
4.52	<a href="#"><u>Seventy-Fourth Supplemental Indenture, dated as of June 22, 2015, by and between SolarCity and the Trustee, related to SolarCity's 4.70% Solar Bonds, Series 2015/C56-10.</u></a>	8-K(1)	001-35758	4.4	June 23, 2015	
4.53	<a href="#"><u>Seventy-Fifth Supplemental Indenture, dated as of June 22, 2015, by and between SolarCity and the Trustee, related to SolarCity's 5.45% Solar Bonds, Series 2015/C57-15.</u></a>	8-K(1)	001-35758	4.5	June 23, 2015	
4.54	<a href="#"><u>Eightieth Supplemental Indenture, dated as of June 29, 2015, by and between SolarCity and the Trustee, related to SolarCity's 4.70% Solar Bonds, Series 2015/C61-10.</u></a>	8-K(1)	001-35758	4.5	June 29, 2015	
4.55	<a href="#"><u>Eighty-First Supplemental Indenture, dated as of June 29, 2015, by and between SolarCity and the Trustee, related to SolarCity's 5.45% Solar Bonds, Series 2015/C62-15.</u></a>	8-K(1)	001-35758	4.6	June 29, 2015	
4.56	<a href="#"><u>Ninetieth Supplemental Indenture, dated as of July 20, 2015, by and between SolarCity and the Trustee, related to SolarCity's 4.70% Solar Bonds, Series 2015/C71-10.</u></a>	8-K(1)	001-35758	4.5	July 21, 2015	
4.57	<a href="#"><u>Ninety-First Supplemental Indenture, dated as of July 20, 2015, by and between SolarCity and the Trustee, related to SolarCity's 5.45% Solar Bonds, Series 2015/C72-15.</u></a>	8-K(1)	001-35758	4.6	July 21, 2015	
4.58	<a href="#"><u>Ninety-Fifth Supplemental Indenture, dated as of July 31, 2015, by and between SolarCity and the Trustee, related to SolarCity's 5.00% Solar Bonds, Series 2015/20-10.</u></a>	8-K(1)	001-35758	4.5	July 31, 2015	
4.59	<a href="#"><u>Ninety-Sixth Supplemental Indenture, dated as of July 31, 2015, by and between SolarCity and the Trustee, related to SolarCity's 5.75% Solar Bonds, Series 2015/21-15.</u></a>	8-K(1)	001-35758	4.6	July 31, 2015	

4.60	<a href="#"><u>One Hundred-and-Fifth Supplemental Indenture, dated as of August 10, 2015, by and between SolarCity and the Trustee, related to SolarCity's 4.70% Solar Bonds, Series 2015/C81-10.</u></a>	8-K(1)	001-35758	4.5	August 10, 2015
4.61	<a href="#"><u>One Hundred-and-Eleventh Supplemental Indenture, dated as of August 17, 2015, by and between SolarCity and the Trustee, related to SolarCity's 5.45% Solar Bonds, Series 2015/C87-15.</u></a>	8-K(1)	001-35758	4.6	August 17, 2015

Exhibit Number	Exhibit Description	Incorporated by Reference				Filed Herewith
		Form	File No.	Exhibit	Filing Date	
4.62	<a href="#"><u>One Hundred-and-Sixteenth Supplemental Indenture, dated as of August 24, 2015, by and between SolarCity and the Trustee, related to SolarCity's 5.45% Solar Bonds, Series 2015/C92-15.</u></a>	8-K(1)	001-35758	4.6	August 24, 2015	
4.63	<a href="#"><u>One Hundred-and-Twenty-First Supplemental Indenture, dated as of August 31, 2015, by and between SolarCity and the Trustee, related to SolarCity's 5.45% Solar Bonds, Series 2015/C97-15.</u></a>	8-K(1)	001-35758	4.6	August 31, 2015	
4.64	<a href="#"><u>One Hundred-and-Twenty-Eighth Supplemental Indenture, dated as of September 14, 2015, by and between SolarCity and the Trustee, related to SolarCity's 4.70% Solar Bonds, Series 2015/C101-10.</u></a>	8-K(1)	001-35758	4.5	September 15, 2015	
4.65	<a href="#"><u>One Hundred-and-Twenty-Ninth Supplemental Indenture, dated as of September 14, 2015, by and between SolarCity and the Trustee, related to SolarCity's 5.45% Solar Bonds, Series 2015/C102-15.</u></a>	8-K(1)	001-35758	4.6	September 15, 2015	
4.66	<a href="#"><u>One Hundred-and-Thirty-Third Supplemental Indenture, dated as of September 28, 2015, by and between SolarCity and the Trustee, related to SolarCity's 4.70% Solar Bonds, Series 2015/C106-10.</u></a>	8-K(1)	001-35758	4.5	September 29, 2015	
4.67	<a href="#"><u>One Hundred-and-Thirty-Fourth Supplemental Indenture, dated as of September 28, 2015, by and between SolarCity and the Trustee, related to SolarCity's 5.45% Solar Bonds, Series 2015/C107-15.</u></a>	8-K(1)	001-35758	4.6	September 29, 2015	
4.68	<a href="#"><u>One Hundred-and-Thirty-Eighth Supplemental Indenture, dated as of October 13, 2015, by and between SolarCity and the Trustee, related to SolarCity's 4.70% Solar Bonds, Series 2015/C111-10.</u></a>	8-K(1)	001-35758	4.5	October 13, 2015	
4.69	<a href="#"><u>One Hundred-and-Forty-Third Supplemental Indenture, dated as of October 30, 2015, by and between SolarCity and the Trustee, related to SolarCity's 5.00% Solar Bonds, Series 2015/25-10.</u></a>	8-K(1)	001-35758	4.5	October 30, 2015	
4.70	<a href="#"><u>One Hundred-and-Forty-Fourth Supplemental Indenture, dated as of October 30, 2015, by and between SolarCity and the Trustee, related to SolarCity's 5.75% Solar Bonds, Series 2015/26-15.</u></a>	8-K(1)	001-35758	4.6	October 30, 2015	
4.71	<a href="#"><u>One Hundred-and-Forty-Eighth Supplemental Indenture, dated as of</u></a>	8-K(1)	001-35758	4.5	November 4, 2015	

[November 4, 2015, by and between SolarCity and the Trustee, related to SolarCity's 4.70% Solar Bonds, Series 2015/C116-10.](#)

4.72	<a href="#"><u>One Hundred-and-Fifty-Third Supplemental Indenture, dated as of November 16, 2015, by and between SolarCity and the Trustee, related to SolarCity's 4.70% Solar Bonds, Series 2015/C121-10.</u></a>	8-K(1)	001-35758	4.5	November 17, 2015
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Exhibit Number	Exhibit Description	Incorporated by Reference				Filed Herewith
		Form	File No.	Exhibit	Filing Date	
4.73	<a href="#"><u>One Hundred-and-Fifty-Fourth Supplemental Indenture, dated as of November 16, 2015, by and between SolarCity and the Trustee, related to SolarCity's 5.45% Solar Bonds, Series 2015/C122-15.</u></a>	8-K(1)	001-35758	4.6	November 17, 2015	
4.74	<a href="#"><u>One Hundred-and-Fifty-Eighth Supplemental Indenture, dated as of November 30, 2015, by and between SolarCity and the Trustee, related to SolarCity's 4.70% Solar Bonds, Series 2015/C126-10.</u></a>	8-K(1)	001-35758	4.5	November 30, 2015	
4.75	<a href="#"><u>One Hundred-and-Fifty-Ninth Supplemental Indenture, dated as of November 30, 2015, by and between SolarCity and the Trustee, related to SolarCity's 5.45% Solar Bonds, Series 2015/C127-15.</u></a>	8-K(1)	001-35758	4.6	November 30, 2015	
4.76	<a href="#"><u>One Hundred-and-Sixty-Third Supplemental Indenture, dated as of December 14, 2015, by and between SolarCity and the Trustee, related to SolarCity's 4.70% Solar Bonds, Series 2015/C131-10.</u></a>	8-K(1)	001-35758	4.5	December 14, 2015	
4.77	<a href="#"><u>One Hundred-and-Sixty-Fourth Supplemental Indenture, dated as of December 14, 2015, by and between SolarCity and the Trustee, related to SolarCity's 5.45% Solar Bonds, Series 2015/C132-15.</u></a>	8-K(1)	001-35758	4.6	December 14, 2015	
4.78	<a href="#"><u>One Hundred-and-Sixty-Seventh Supplemental Indenture, dated as of December 28, 2015, by and between SolarCity and the Trustee, related to SolarCity's 3.60% Solar Bonds, Series 2015/C135-5.</u></a>	8-K(1)	001-35758	4.4	December 28, 2015	
4.79	<a href="#"><u>One Hundred-and-Sixty-Eighth Supplemental Indenture, dated as of December 28, 2015, by and between SolarCity and the Trustee, related to SolarCity's 4.70% Solar Bonds, Series 2015/C136-10.</u></a>	8-K(1)	001-35758	4.5	December 28, 2015	
4.80	<a href="#"><u>One Hundred-and-Sixty-Ninth Supplemental Indenture, dated as of December 28, 2015, by and between SolarCity and the Trustee, related to SolarCity's 5.45% Solar Bonds, Series 2015/C137-15.</u></a>	8-K(1)	001-35758	4.6	December 28, 2015	
4.81	<a href="#"><u>One Hundred-and-Seventy-Second Supplemental Indenture, dated as of January 29, 2016, by and between SolarCity and the Trustee, related to SolarCity's 4.00% Solar Bonds, Series 2016/3-5.</u></a>	8-K(1)	001-35758	4.4	January 29, 2016	
4.82		8-K(1)	001-35758	4.5		



One Hundred-and-Seventy-Third  
Supplemental Indenture, dated as of  
January 29, 2016, by and between  
SolarCity and the Trustee, related to  
SolarCity's 5.00% Solar Bonds, Series  
2016/4-10.

January 29,  
2016

Exhibit Number	Exhibit Description	Incorporated by Reference				Filed Herewith
		Form	File No.	Exhibit	Filing Date	
4.83	<a href="#">One Hundred-and-Seventy-Fourth Supplemental Indenture, dated as of January 29, 2016, by and between SolarCity and the Trustee, related to SolarCity's 5.75% Solar Bonds, Series 2016/5-15.</a>	8-K(1)	001-35758	4.6	January 29, 2016	
4.84	<a href="#">One Hundred-and-Seventy-Seventh Supplemental Indenture, dated as of February 26, 2016, by and between SolarCity and the Trustee, related to SolarCity's 5.25% Solar Bonds, Series 2016/8-5.</a>	8-K(1)	001-35758	4.4	February 26, 2016	
4.85	<a href="#">One Hundred-and-Seventy-Ninth Supplemental Indenture, dated as of March 21, 2016, by and between SolarCity and the Trustee, related to SolarCity's 5.25% Solar Bonds, Series 2016/10-5.</a>	8-K(1)	001-35758	4.3	March 21, 2016	
4.86	<a href="#">One Hundred-and-Eighty-First Supplemental Indenture, dated as of June 10, 2016, by and between SolarCity and the Trustee, related to SolarCity's 5.25% Solar Bonds, Series 2016/12-5.</a>	8-K(1)	001-35758	4.3	June 10, 2016	
4.87	<a href="#">Description of Registrant's Securities</a>	10-K	001-34756	4.119	February 13, 2020	
10.1**	<a href="#">Form of Indemnification Agreement between the Registrant and its directors and officers.</a>	S-1/A	333-164593	10.1	June 15, 2010	
10.2**	<a href="#">2003 Equity Incentive Plan.</a>	S-1/A	333-164593	10.2	May 27, 2010	
10.3**	<a href="#">Form of Stock Option Agreement under 2003 Equity Incentive Plan.</a>	S-1	333-164593	10.3	January 29, 2010	
10.4**	<a href="#">Amended and Restated 2010 Equity Incentive Plan.</a>	10-K	001-34756	10.4	February 23, 2018	
10.5**	<a href="#">Form of Stock Option Agreement under 2010 Equity Incentive Plan.</a>	10-K	001-34756	10.6	March 1, 2017	
10.6**	<a href="#">Form of Restricted Stock Unit Award Agreement under 2010 Equity Incentive Plan.</a>	10-K	001-34756	10.7	March 1, 2017	
10.7**	<a href="#">Amended and Restated 2010 Employee Stock Purchase Plan, effective as of February 1, 2017.</a>	10-K	001-34756	10.8	March 1, 2017	
10.8**	<a href="#">2019 Equity Incentive Plan.</a>	S-8	333-232079	4.2	June 12, 2019	
10.9**	<a href="#">Form of Stock Option Agreement under 2019 Equity Incentive Plan.</a>	S-8	333-232079	4.3	June 12, 2019	
10.10**	<a href="#">Form of Restricted Stock Unit Award Agreement under 2019 Equity Incentive Plan.</a>	S-8	333-232079	4.4	June 12, 2019	
10.11**	<a href="#">Employee Stock Purchase Plan, effective as of June 12, 2019.</a>	S-8	333-232079	4.5	June 12, 2019	
10.12**		S-1(1)	333-184317	10.2		

	<a href="#"><u>2007 SolarCity Stock Plan and form of agreements used thereunder.</u></a>				October 5, 2012
10.13**	<a href="#"><u>2012 SolarCity Equity Incentive Plan and form of agreements used thereunder.</u></a>	S-1(1)	333-184317	10.3	October 5, 2012
10.14**	<a href="#"><u>2010 Zep Solar, Inc. Equity Incentive Plan and form of agreements used thereunder.</u></a>	S-8(1)	333-192996	4.5	December 20, 2013
10.15**	<a href="#"><u>Offer Letter between the Registrant and Elon Musk dated October 13, 2008.</u></a>	S-1	333-164593	10.9	January 29, 2010

Exhibit Number	Exhibit Description	Incorporated by Reference				Filed Herewith
		Form	File No.	Exhibit	Filing Date	
10.16**	<a href="#">Performance Stock Option Agreement between the Registrant and Elon Musk dated January 21, 2018.</a>	DEF 14A	001-34756	Appendix A	February 8, 2018	
10.17**	<a href="#">Maxwell Technologies, Inc. 2005 Omnibus Equity Incentive Plan, as amended through May 6, 2010</a>	8-K(2)	001-15477	10.1	May 10, 2010	
10.18**	<a href="#">Maxwell Technologies, Inc. 2013 Omnibus Equity Incentive Plan</a>	DEF 14A(2)	001-15477	Appendix A	June 2, 2017	
10.19	<a href="#">Indemnification Agreement, effective as of June 23, 2020, between Registrant and Elon R. Musk.</a>	10-Q	001-34756	10.4	July 28, 2020	
10.20	<a href="#">Indemnification Agreement, dated as of February 27, 2014, by and between the Registrant and J.P. Morgan Securities LLC.</a>	8-K	001-34756	10.1	March 5, 2014	
10.21	<a href="#">Form of Call Option Confirmation relating to 1.25% Convertible Senior Notes Due March 1, 2021.</a>	8-K	001-34756	10.3	March 5, 2014	
10.22	<a href="#">Form of Warrant Confirmation relating to 1.25% Convertible Senior Notes Due March 1, 2021.</a>	8-K	001-34756	10.5	March 5, 2014	
10.23	<a href="#">Form of Call Option Confirmation relating to 2.375% Convertible Notes due March 15, 2022.</a>	8-K	001-34756	10.1	March 22, 2017	
10.24	<a href="#">Form of Warrant Confirmation relating to 2.375% Convertible Notes due March 15, 2022.</a>	8-K	001-34756	10.2	March 22, 2017	
10.25	<a href="#">Form of Call Option Confirmation relating to 2.00% Convertible Senior Notes due May 15, 2024.</a>	8-K	001-34756	10.1	May 3, 2019	
10.26	<a href="#">Form of Warrant Confirmation relating to 2.00% Convertible Senior Notes due May 15, 2024.</a>	8-K	001-34756	10.2	May 3, 2019	
10.27†	<a href="#">Supply Agreement between Panasonic Corporation and the Registrant dated October 5, 2011.</a>	10-K	001-34756	10.50	February 27, 2012	
10.28†	<a href="#">Amendment No. 1 to Supply Agreement between Panasonic Corporation and the Registrant dated October 29, 2013.</a>	10-K	001-34756	10.35A	February 26, 2014	
10.29	<a href="#">Agreement between Panasonic Corporation and the Registrant dated July 31, 2014.</a>	10-Q	001-34756	10.1	November 7, 2014	
10.30†	<a href="#">General Terms and Conditions between Panasonic Corporation and the Registrant dated October 1, 2014.</a>	8-K	001-34756	10.2	October 11, 2016	
10.31	<a href="#">Letter Agreement, dated as of February 24, 2015, regarding</a>	10-K	001-34756	10.25A	February 24, 2016	

[addition of co-party to General  
Terms and Conditions, Production  
Pricing Agreement and Investment  
Letter Agreement between Panasonic  
Corporation and the Registrant.](#)

Exhibit Number	Exhibit Description	Incorporated by Reference				Filed Herewith
		Form	File No.	Exhibit	Filing Date	
10.32†	<a href="#">Amendment to Gigafactory General Terms, dated March 1, 2016, by and among the Registrant, Panasonic Corporation and Panasonic Energy Corporation of North America.</a>	8-K	001-34756	10.1	October 11, 2016	
10.33††	<a href="#">Amended and Restated General Terms and Conditions for Gigafactory, entered into on June 10, 2020, by and among Registrant, Tesla Motors Netherlands B.V., Panasonic Corporation and Panasonic Corporation of North America.</a>	10-Q	001-34756	10.2	July 28, 2020	
10.34†	<a href="#">Production Pricing Agreement between Panasonic Corporation and the Registrant dated October 1, 2014.</a>	10-Q	001-34756	10.3	November 7, 2014	
10.35†	<a href="#">Investment Letter Agreement between Panasonic Corporation and the Registrant dated October 1, 2014.</a>	10-Q	001-34756	10.4	November 7, 2014	
10.36	<a href="#">Amendment to Gigafactory Documents, dated April 5, 2016, by and among the Registrant, Panasonic Corporation, Panasonic Corporation of North America and Panasonic Energy Corporation of North America.</a>	10-Q	001-34756	10.2	May 10, 2016	
10.37††	<a href="#">2019 Pricing Agreement (Japan Cells) with respect to 2011 Supply Agreement, executed September 20, 2019, by and among the Registrant, Tesla Motors Netherlands B.V., Panasonic Corporation and SANYO Electric Co., Ltd.</a>	10-Q	001-34756	10.6	October 29, 2019	
10.38††	<a href="#">2020 Pricing Agreement (Gigafactory 2170 Cells), entered into on June 9, 2020, by and among Registrant, Tesla Motors Netherlands B.V., Panasonic Corporation and Panasonic Corporation of North America.</a>	10-Q	001-34756	10.3	July 28, 2020	
10.39††	<a href="#">2021 Pricing Agreement (Japan Cells) with respect to 2011 Supply Agreement, executed December 29, 2020, by and among the Registrant, Tesla Motors Netherlands B.V., Panasonic Corporation of North America and SANYO Electric Co., Ltd.</a>	—	—	—	—	X
10.40††	<a href="#">Amended and Restated Factory Lease, executed as of March 26, 2019, by and between the Registrant and Panasonic Energy North America, a division of Panasonic Corporation of North America, as tenant.</a>	10-Q	001-34756	10.3	July 29, 2019	
10.41††	<a href="#">Lease Amendment, executed September 20, 2019, by and among the Registrant, Panasonic Corporation of North America, on behalf of its division Panasonic Energy of North America, with respect to the Amended and</a>	10-Q	001-34756	10.7	October 29, 2019	

[Restated Factory Lease, executed as of March 26, 2019.](#)

10.42††	<a href="#"><u>Second Lease Amendment, entered into on June 9, 2020, by and between the Registrant and Panasonic Energy of North America, a division of Panasonic Corporation of North America, with respect to the Amended and Restated Factory Lease dated January 1, 2017.</u></a>	10-Q	001-34756	10.1	July 28, 2020
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Exhibit Number	Exhibit Description	Incorporated by Reference				Filed Herewith
		Form	File No.	Exhibit	Filing Date	
10.43	<a href="#"><u>Amendment and Restatement in respect of ABL Credit Agreement, dated as of March 6, 2019, by and among certain of the Registrant's and Tesla Motors Netherlands B.V.'s direct or indirect subsidiaries from time to time party thereto, as borrowers, Wells Fargo Bank, National Association, as documentation agent, JPMorgan Chase Bank, N.A., Goldman Sachs Bank USA, Morgan Stanley Senior Funding Inc. and Bank of America, N.A., as syndication agents, the lenders from time to time party thereto, and Deutsche Bank AG New York Branch, as administrative agent and collateral agent.</u></a>	S-4/A	3 33-229749	10.68	April 3, 2019	
10.44	<a href="#"><u>First Amendment to Amended and Restated ABL Credit Agreement, dated as of December 23, 2020, in respect of the Amended and Restated ABL Credit Agreement, dated as of March 6, 2019, by and among certain of the Registrant's and Tesla Motors Netherlands B.V.'s direct or indirect subsidiaries from time to time party thereto, as borrowers, Wells Fargo Bank, National Association, as documentation agent, JPMorgan Chase Bank, N.A., Goldman Sachs Bank USA, Morgan Stanley Senior Funding Inc. and Bank of America, N.A., as syndication agents, the lenders from time to time party thereto, and Deutsche Bank AG New York Branch, as administrative agent and collateral agent.</u></a>	—	—	—	—	X
10.45†	<a href="#"><u>Agreement for Tax Abatement and Incentives, dated as of May 7, 2015, by and between Tesla Motors, Inc. and the State of Nevada, acting by and through the Nevada Governor's Office of Economic Development.</u></a>	10-Q	001-34756	10.1	August 7, 2015	
10.46††	<a href="#"><u>Second Amended and Restated Loan and Security Agreement, dated as of August 28, 2020, by and among Tesla 2014 Warehouse SPV LLC, Tesla Finance LLC, the Lenders and Group Agents from time to time party thereto, Deutsche Bank Trust Company Americas, as Paying Agent, and Deutsche Bank AG, New York Branch, as Administrative Agent.</u></a>	10-Q	001-34756	10.2	October 26, 2020	
10.47†	<a href="#"><u>Loan and Security Agreement, executed on December 28, 2018, by and among LML 2018 Warehouse SPV, LLC, Tesla Finance LLC, the Lenders and Group Agents from time to time party thereto, Deutsche Bank Trust Company</u></a>	10-K	001-34756	10.55	February 19, 2019	



Americas, as Paying Agent, and  
Deutsche Bank AG, New York Branch,  
as Administrative Agent.

Exhibit Number	Exhibit Description	Incorporated by Reference				Filed Herewith
		Form	File No.	Exhibit	Filing Date	
10.48††	<a href="#"><u>Letter of Consent, dated as of June 14, 2019, by and among LML 2018 Warehouse SPV, LLC, Deutsche Bank AG, New York Branch, as Administrative Agent, and the Group Agents party thereto, in respect of the Loan and Security Agreement, dated as of August 17, 2017 and as amended from time to time, by and among LML Warehouse SPV, LLC, Tesla Finance LLC, and the Lenders, Group Agents and Administrative Agent from time to time party thereto.</u></a>	10-Q	001-34756	10.1	July 29, 2019	
10.49††	<a href="#"><u>Amendment No. 1 to Loan and Security Agreement, dated as of August 16, 2019, by and among LML 2018 Warehouse SPV, LLC, Deutsche Bank Trust Company Americas, as Paying Agent, and Deutsche Bank AG, New York Branch, as Administrative Agent, and the Lenders and Group Agents from time to time party thereto.</u></a>	10-Q	001-34756	10.2	October 29, 2019	
10.50	<a href="#"><u>Amendment No. 2 to Loan and Security Agreement, dated as of December 13, 2019, by and among LML 2018 Warehouse SPV, LLC, Deutsche Bank Trust Company Americas, as Paying Agent, and Deutsche Bank AG, New York Branch, as Administrative Agent, and the Lenders and Group Agents from time to time party thereto.</u></a>	10-K	001-34756	10.69	February 13, 2020	
10.51	<a href="#"><u>Letter of Consent, dated February 18, 2020, by and among LML 2018 Warehouse SPV, LLC, Tesla 2014 Warehouse SPV LLC, LLC and Deutsche Bank AG, New York Branch, as Administrative Agent and as Group Agent under the 2018 Loan Agreement and the 2014 Loan Agreement, and the Group Agents party thereto, in respect of (i) the Loan and Security Agreement, dated December 27, 2018 and as amended from time to time, among LML 2018 Warehouse SPV, LLC, Tesla Finance LLC, Deutsche Bank Trust Company Americans, as Paying Agent, Deutsche Bank AG, New York Branch, as Administrative Agent, the lenders parties and agent parties thereto, and (ii) the Amended and Restated Loan and Security Agreement, dated August 17, 2017 and as amended from time to time, among Tesla 2014 Warehouse SPV LLC, Tesla Finance LLC, the lenders and group agents party thereto, Deutsche Bank Trust Company Americas, as Paying Agent, and Deutsche Bank AG, New York Branch, as Administrative Agent.</u></a>	10-Q	001-34756	10.1	April 30, 2020	



Exhibit Number	Exhibit Description	Incorporated by Reference				Filed Herewith
		Form	File No.	Exhibit	Filing Date	
10.52††	<a href="#"><u>Letter of Consent, dated as of August 14, 2020, by and among LML 2018 Warehouse SPV, LLC, Tesla 2014 Warehouse SPV LLC, Deutsche Bank AG, New York Branch, as Administrative Agent and Group Agent, and the Group Agents party thereto, in respect of (i) the Loan and Security Agreement, dated as of December 27, 2018 and as amended from time to time, by and among LML 2018 Warehouse SPV, LLC, Tesla Finance LLC, and the Lenders, Group Agents, Paying Agent and Administrative Agent from time to time party thereto, and (ii) the Amended and Restated Loan and Security Agreement, dated as of August 17, 2017 and as amended from time to time, by and among LML Warehouse SPV, LLC, Tesla Finance LLC, and the Lenders, Group Agents and Administrative Agent from time to time party thereto.</u></a>	10-Q	001-34756	10.1	October 26, 2020	
10.53	<a href="#"><u>Payoff and Termination Letter, executed on August 28, 2020, by and among LML 2018 Warehouse SPV, LLC, the Lenders and Group Agents from time to time party thereto, Deutsche Bank Trust Company Americas, as Paying Agent and Deutsche Bank AG, New York Branch, as Administrative Agent, relating to Loan and Security Agreement.</u></a>	10-Q	001-34756	10.3	October 26, 2020	
10.54	<a href="#"><u>Purchase Agreement, dated as of August 11, 2017, by and among the Registrant, SolarCity and Goldman Sachs &amp; Co. LLC and Morgan Stanley &amp; Co. LLC as representatives of the several initial purchasers named therein.</u></a>	8-K	001-34756	10.1	August 23, 2017	
10.55	<a href="#"><u>Amended and Restated Agreement For Research &amp; Development Alliance on Triex Module Technology, effective as of September 2, 2014, by and between The Research Foundation For The State University of New York, on behalf of the College of Nanoscale Science and Engineering of the State University of New York, and Silevo, Inc.</u></a>	10-Q(1)	001-35758	10.16	November 6, 2014	
10.56	<a href="#"><u>First Amendment to Amended and Restated Agreement For Research &amp; Development Alliance on Triex Module Technology, effective as of October 31, 2014, by and between The Research Foundation For The State University of New York, on behalf of the College of Nanoscale Science and Engineering of the State University of New York, and Silevo, Inc.</u></a>	10-K(1)	001-35758	10.16a	February 24, 2015	



Exhibit Number	Exhibit Description	Incorporated by Reference				Filed Herewith
		Form	File No.	Exhibit	Filing Date	
10.57	<a href="#"><u>Second Amendment to Amended and Restated Agreement For Research &amp; Development Alliance on Triex Module Technology, effective as of December 15, 2014, by and between The Research Foundation For The State University of New York, on behalf of the College of Nanoscale Science and Engineering of the State University of New York, and Silevo, Inc.</u></a>	10-K(1)	001-35758	10.16b	February 24, 2015	
10.58	<a href="#"><u>Third Amendment to Amended and Restated Agreement For Research &amp; Development Alliance on Triex Module Technology, effective as of February 12, 2015, by and between The Research Foundation For The State University of New York, on behalf of the College of Nanoscale Science and Engineering of the State University of New York, and Silevo, Inc.</u></a>	10-Q(1)	001-35758	10.16c	May 6, 2015	
10.59	<a href="#"><u>Fourth Amendment to Amended and Restated Agreement For Research &amp; Development Alliance on Triex Module Technology, effective as of March 30, 2015, by and between The Research Foundation For The State University of New York, on behalf of the College of Nanoscale Science and Engineering of the State University of New York, and Silevo, Inc.</u></a>	10-Q(1)	001-35758	10.16d	May 6, 2015	
10.60	<a href="#"><u>Fifth Amendment to Amended and Restated Agreement For Research &amp; Development Alliance on Triex Module Technology, effective as of June 30, 2015, by and between The Research Foundation For The State University of New York, on behalf of the College of Nanoscale Science and Engineering of the State University of New York, and Silevo, LLC.</u></a>	10-Q(1)	001-35758	10.16e	July 30, 2015	
10.61	<a href="#"><u>Sixth Amendment to Amended and Restated Agreement For Research &amp; Development Alliance on Triex Module Technology, effective as of September 1, 2015, by and between The Research Foundation For The State University of New York, on behalf of the College of Nanoscale Science and Engineering of the State University of New York, and Silevo, LLC.</u></a>	10-Q(1)	001-35758	10.16f	October 30, 2015	
10.62	<a href="#"><u>Seventh Amendment to Amended and Restated Agreement For Research &amp; Development Alliance on Triex Module Technology, effective as of October 9, 2015, by and between The Research Foundation For The State University of New York, on behalf of the College of Nanoscale Science and Engineering of</u></a>	10-Q(1)	001-35758	10.16g	October 30, 2015	

[the State University of New York, and  
Silevo, LLC.](#)

Exhibit Number	Exhibit Description	Incorporated by Reference				Filed Herewith
		Form	File No.	Exhibit	Filing Date	
10.63	<a href="#"><u>Eighth Amendment to Amended and Restated Agreement For Research &amp; Development Alliance on Triex Module Technology, effective as of October 26, 2015, by and between The Research Foundation For The State University of New York, on behalf of the College of Nanoscale Science and Engineering of the State University of New York, and Silevo, LLC.</u></a>	10-Q(1)	001-35758	10.16h	October 30, 2015	
10.64	<a href="#"><u>Ninth Amendment to Amended and Restated Agreement For Research &amp; Development Alliance on Triex Module Technology, effective as of December 9, 2015, by and between The Research Foundation For The State University of New York, on behalf of the College of Nanoscale Science and Engineering of the State University of New York, and Silevo, LLC.</u></a>	10-K(1)	001-35758	10.16i	February 10, 2016	
10.65	<a href="#"><u>Tenth Amendment to Amended and Restated Agreement For Research &amp; Development Alliance on Triex Module Technology, effective as of March 31, 2017, by and between The Research Foundation For The State University of New York, on behalf of the Colleges of Nanoscale Science and Engineering of the State University of New York, and Silevo, LLC.</u></a>	10-Q	001-34756	10.8	May 10, 2017	
10.66	<a href="#"><u>Eleventh Amendment to Amended and Restated Agreement for Research &amp; Development Alliance on Triex Module Technology, effective as of July 22, 2020, among the Research Foundation for the State University of New York, Silevo, LLC and Tesla Energy Operations, Inc.</u></a>	10-Q	001-34756	10.6	July 28, 2020	
10.67††	<a href="#"><u>Grant Contract for State-Owned Construction Land Use Right, dated as of October 17, 2018, by and between Shanghai Planning and Land Resource Administration Bureau, as grantor, and Tesla (Shanghai) Co., Ltd., as grantee (English translation).</u></a>	10-Q	001-34756	10.2	July 29, 2019	
10.68††	<a href="#"><u>Facility Agreement, dated as of September 26, 2019, by and between China Merchants Bank Co., Ltd. Beijing Branch and Tesla Automobile (Beijing) Co., Ltd. (English translation).</u></a>	10-Q	001-34756	10.3	October 29, 2019	
10.69††	<a href="#"><u>Statement Letter to China Merchants Bank Co., Ltd. Beijing Branch from Tesla Automobile (Beijing) Co., Ltd., dated as of September 26, 2019 (English translation).</u></a>	10-Q	001-34756	10.4	October 29, 2019	



Exhibit Number	Exhibit Description	Incorporated by Reference				Filed Herewith
		Form	File No.	Exhibit	Filing Date	
10.70††	<a href="#">Fixed Asset Syndication Loan Agreement, dated as of December 18, 2019, by and among Tesla (Shanghai) Co., Ltd., China Construction Bank Corporation, China (Shanghai) Pilot Free Trade Zone Special Area Branch, Agricultural Bank of China Shanghai Changning Sub-branch, Shanghai Pudong Development Bank Co., Ltd., Shanghai Branch, and Industrial and Commercial Bank of China Limited, China (Shanghai) Pilot Free Trade Zone Special Area Branch (English translation).</a>	10-K	001-34756	10.85	February 13, 2020	
10.71††	<a href="#">Fixed Asset Syndication Loan Agreement and Supplemental Agreement, dated as of December 18, 2019, by and among Tesla (Shanghai) Co., Ltd., China Construction Bank Corporation, China (Shanghai) Pilot Free Trade Zone Special Area Branch, Agricultural Bank of China Shanghai Changning Sub-branch, Shanghai Pudong Development Bank Co., Ltd., Shanghai Branch, and Industrial and Commercial Bank of China Limited, China (Shanghai) Pilot Free Trade Zone Special Area Branch (English translation).</a>	10-K	001-34756	10.86	February 13, 2020	
10.72††	<a href="#">Syndication Revolving Loan Agreement, dated as of December 18, 2019, by and among Tesla (Shanghai) Co., Ltd. China Construction Bank Corporation, China (Shanghai) Pilot Free Trade Zone Special Area Branch, Agricultural Bank of China Shanghai Changning Sub-branch, Shanghai Pudong Development Bank Co., Ltd., Shanghai Branch, and Industrial and Commercial Bank of China Limited, China (Shanghai) Pilot Free Trade Zone Special Area Branch (English translation).</a>	10-K	001-34756	10.87	February 13, 2020	
10.73††	<a href="#">Working Capital Loan Contact, dated as of May 7, 2020, between Industrial and Commercial Bank of China, China (Shanghai) Pilot Free Trade Zone Lingang Special Area Branch and Tesla (Shanghai) Co., Ltd.</a>	10-Q	001-34756	10.5	July 28, 2020	
21.1	<a href="#">List of Subsidiaries of the Registrant</a>	—	—	—	—	X
23.1	<a href="#">Consent of PricewaterhouseCoopers LLP, Independent Registered Public Accounting Firm</a>	—	—	—	—	X
31.1	<a href="#">Rule 13a-14(a) / 15(d)-14(a) Certification of Principal Executive Officer</a>	—	—	—	—	X
31.2		—	—	—	—	X

[Rule 13a-14\(a\) / 15\(d\)-14\(a\)  
Certification of Principal Financial  
Officer](#)

32.1*	<a href="#"><u>Section 1350 Certifications</u></a>	—	—	—	—	X
101.INS	Inline XBRL Instance Document	—	—	—	—	X
101.SCH	Inline XBRL Taxonomy Extension Schema Document	—	—	—	—	X

Exhibit Number	Exhibit Description	Incorporated by Reference				Filed Herewith
		Form	File No.	Exhibit	Filing Date	
101.CAL	Inline XBRL Taxonomy Extension Calculation Linkbase Document.	—	—	—	—	X
101.DEF	Inline XBRL Taxonomy Extension Definition Linkbase Document	—	—	—	—	X
101.LAB	Inline XBRL Taxonomy Extension Label Linkbase Document	—	—	—	—	X
101.PRE	Inline XBRL Taxonomy Extension Presentation Linkbase Document	—	—	—	—	X
104	Cover Page Interactive Data File (formatted as inline XBRL with applicable taxonomy extension information contained in Exhibits 101)					

\* Furnished herewith

\*\* Indicates a management contract or compensatory plan or arrangement

† Confidential treatment has been requested for portions of this exhibit

†† Portions of this exhibit have been redacted in compliance with Regulation S-K Item 601(b)(10).

(1) Indicates a filing of SolarCity

(2) Indicates a filing of Maxwell Technologies, Inc.

#### ITEM 16. SUMMARY

None

## SIGNATURES

Pursuant to the requirements of Section 13 or 15(d) the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned, thereunto duly authorized.

Tesla, Inc.

Date: February 8, 2021

/s/ Elon Musk

Elon Musk  
Chief Executive Officer  
(Principal Executive Officer)

Pursuant to the requirements of the Securities Exchange Act of 1934, this report has been signed below by the following persons on behalf of the registrant and in the capacities and on the dates indicated.

<u>Signature</u>	<u>Title</u>	<u>Date</u>
<u>/s/ Elon Musk</u> Elon Musk	Chief Executive Officer and Director (Principal Executive Officer)	February 8, 2021
<u>/s/ Zachary J. Kirkhorn</u> Zachary J. Kirkhorn	Chief Financial Officer (Principal Financial Officer)	February 8, 2021
<u>/s/ Vaibhav Taneja</u> Vaibhav Taneja	Chief Accounting Officer (Principal Accounting Officer)	February 8, 2021
<u>/s/ Robyn Denholm</u> Robyn Denholm	Director	February 8, 2021
<u>/s/ Ira Ehrenpreis</u> Ira Ehrenpreis	Director	February 8, 2021
<u>/s/ Lawrence J. Ellison</u> Lawrence J. Ellison	Director	February 8, 2021
<u>/s/ Antonio J. Gracias</u> Antonio J. Gracias	Director	February 8, 2021
<u>/s/ Hiromichi Mizuno</u> Hiromichi Mizuno	Director	February 8, 2021
<u>/s/ James Murdoch</u> James Murdoch	Director	February 8, 2021
<u>/s/ Kimbal Musk</u> Kimbal Musk	Director	February 8, 2021
<u>/s/ Kathleen Wilson-Thompson</u> Kathleen Wilson-Thompson	Director	February 8, 2021

(Mark One)

☒

**ANNUAL REPORT PURSUANT TO SECTION 13  
OR 15(d) OF THE SECURITIES EXCHANGE  
ACT OF 1934**

For the fiscal year ended December 31, 2019

OR

☐

**TRANSITION REPORT PURSUANT TO SECTION 13  
OR 15(d) OF THE SECURITIES EXCHANGE  
ACT OF 1934**

For the transition period from \_\_\_\_\_ to \_\_\_\_\_

Commission File Number: 001-34756

**Tesla, Inc.**

(Exact name of registrant as specified in its charter)

Delaware  
(State or other jurisdiction of  
incorporation or organization)

3500 Deer Creek Road  
Palo Alto, California  
(Address of principal executive offices)

91-2197729  
(I.R.S. Employer  
Identification No.)

94304  
(Zip Code)

(650) 681-5000

(Registrant's telephone number, including area code)

Securities registered pursuant to Section 12(b) of the Act:

Title of each class	Trading Symbol(s)	Name of each exchange on which registered
Common stock	TSLA	The Nasdaq Global Select Market

Securities registered pursuant to Section 12(g) of the Act:

None

Indicate by check mark whether the registrant is a well-known seasoned issuer, as defined in Rule 405 of the Securities Act. Yes ☒ No ☐

Indicate by check mark if the registrant is not required to file reports pursuant to Section 13 or 15(d) of the Act. Yes ☐ No ☒

Indicate by check mark whether the registrant (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 ("Exchange Act") during the preceding 12 months (or for such shorter period that the registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days. Yes ☒ No ☐

Indicate by check mark whether the registrant has submitted electronically every Interactive Data File required to be submitted pursuant to Rule 405 of Regulation S-T (§ 232.405 of this chapter) during the preceding 12 months (or for such shorter period that the registrant was required to submit such files). Yes ☒ No ☐

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, a smaller reporting company or an emerging growth company. See the definitions of "large accelerated filer," "accelerated filer," "smaller reporting company" and "emerging growth company" in Rule 12b-2 of the Exchange Act:

Large accelerated filer	<input checked="" type="checkbox"/>	Accelerated filer	<input type="checkbox"/>
Non-accelerated filer	<input type="checkbox"/>	Smaller reporting company	<input type="checkbox"/>
Emerging growth company	<input type="checkbox"/>		

If an emerging growth company, indicate by check mark if the registrant has elected not to use the extended transition period for complying with any new or revised financial accounting standards provided pursuant to Section 13(a) of the Exchange Act. ☐

Indicate by check mark whether the registrant is a shell company (as defined in Rule 12b-2 of the Exchange Act). Yes ☐ No ☒

The aggregate market value of voting stock held by non-affiliates of the registrant, as of June 30, 2019, the last day of the registrant's most recently completed second fiscal quarter, was \$31.54 billion (based on the closing price for shares of the registrant's Common Stock as reported by the NASDAQ Global Select Market on June 30, 2019). Shares of Common Stock held by each executive officer, director, and holder of 5% or more of the outstanding Common Stock have been excluded in that such persons may be deemed to be affiliates. This determination of affiliate status is not necessarily a conclusive determination for other purposes.

As of February 7, 2020, there were 181,341,586 shares of the registrant's Common Stock outstanding.

**DOCUMENTS INCORPORATED BY REFERENCE**

Portions of the registrant's Proxy Statement for the 2020 Annual Meeting of Stockholders are incorporated herein by reference in Part III of this Annual Report on Form 10-K to the extent stated herein. Such proxy statement will be filed with the Securities and Exchange Commission within 120 days of the registrant's fiscal year ended December 31, 2019.

TESLA, INC.

ANNUAL REPORT ON FORM 10-K FOR THE YEAR ENDED DECEMBER 31, 2019

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## Forward-Looking Statements

*The discussions in this Annual Report on Form 10-K contain forward-looking statements reflecting our current expectations that involve risks and uncertainties. These forward-looking statements include, but are not limited to, statements concerning our strategy, future operations, future financial position, future revenues, projected costs, profitability, expected cost reductions, capital adequacy, expectations regarding demand and acceptance for our technologies, growth opportunities and trends in the market in which we operate, prospects and plans and objectives of management. The words “anticipates,” “believes,” “could,” “estimates,” “expects,” “intends,” “may,” “plans,” “projects,” “will,” “would” and similar expressions are intended to identify forward-looking statements, although not all forward-looking statements contain these identifying words. We may not actually achieve the plans, intentions or expectations disclosed in our forward-looking statements and you should not place undue reliance on our forward-looking statements. Actual results or events could differ materially from the plans, intentions and expectations disclosed in the forward-looking statements that we make. These forward-looking statements involve risks and uncertainties that could cause our actual results to differ materially from those in the forward-looking statements, including, without limitation, the risks set forth in Part I, Item 1A, “Risk Factors” in this Annual Report on Form 10-K and in our other filings with the Securities and Exchange Commission. We do not assume any obligation to update any forward-looking statements.*

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## PART I

### ITEM 1. BUSINESS

#### **Overview**

We design, develop, manufacture, sell and lease high-performance fully electric vehicles and energy generation and storage systems, and offer services related to our products. We are the world's first vertically integrated sustainable energy company, offering end-to-end clean energy products, including generation, storage and consumption. We generally sell our products directly to customers, including through our website and retail locations. We also continue to grow our customer-facing infrastructure through a global network of vehicle service centers, Mobile Service technicians, body shops, Supercharger stations and Destination Chargers to accelerate the widespread adoption of our products. We emphasize performance, attractive styling and the safety of our users and workforce in the design and manufacture of our products, and are continuing to develop full self-driving technology for improved safety. We also strive to lower the cost of ownership for our customers through continuous efforts to reduce manufacturing costs and by offering financial services tailored to our vehicles. Our sustainable energy products, engineering expertise, intense focus to accelerate the world's transition to sustainable energy and achieve the benefits of autonomous driving, and business model differentiate us from other companies.

We currently offer or are planning to introduce electric vehicles to address a wide range of consumer and commercial vehicle markets, including Model 3, Model Y, Model S, Model X, Cybertruck, Tesla Semi and a new Tesla Roadster. In order to meet customers' range, functionality and performance expectations, we have employed our considerable design and vehicle engineering capabilities to overcome the design, styling and performance issues that have historically limited broad adoption of electric vehicles. Combined with technical advancements in our powertrain system, Autopilot and Full Self-Driving ("FSD") hardware, and neural net, our electric vehicles boast advantages such as leading range and recharging flexibility; superior acceleration, handling and safety characteristics; a unique suite of user convenience and infotainment features; the ability to have additional features enabled through over-the-air updates; and savings in charging, maintenance and other costs of ownership.

In furtherance of our mission to accelerate the world's transition to sustainable energy, we have also developed an expertise in solar energy systems. We sell and lease retrofit solar energy systems for residential and commercial customers, and alternatively provide certain customers with access to our solar energy systems through power purchase or subscription-based arrangements. We also offer the Solar Roof, which features attractive and durable glass roof tiles integrated with solar energy generation. Our approach to the solar business emphasizes simplicity, standardization and accessibility to make it easy and cost-effective for customers to adopt clean energy, while reducing our customer acquisition costs.

Finally, we have leveraged our technological expertise in batteries, energy management, power electronics, and integrated systems from our vehicle powertrain systems to develop and manufacture energy storage products, including Powerwall, Powerpack and Megapack. These scalable systems may be used in homes, commercial facilities and on the utility grid, and are capable of numerous applications including backup or off-grid power, peak demand reduction, demand response, reducing intermittency of renewable energy generation, facilitation of the use of renewable energy generation over fossil fuel generation, and other grid services and wholesale electric market services. Drawing on our solar business expertise, we can also offer integrated systems combining energy generation and storage. Like our vehicles, our energy storage products can be remotely updated over-the-air with software or firmware improvements.

#### **Segment Information**

We operate as two reportable segments: (i) automotive and (ii) energy generation and storage.

The automotive segment includes the design, development, manufacturing, sales, and leasing of electric vehicles as well as sales of automotive regulatory credits. Additionally, the automotive segment is also comprised of services and other, which includes non-warranty after-sales vehicle services, sales of used vehicles, retail merchandise, sales by our acquired subsidiaries to third party customers, and vehicle insurance revenue. The energy generation and storage segment includes the design, manufacture, installation, sales, and leasing of solar energy generation and energy storage products, services related to such products, and sales of solar energy system incentives.



## **Our Products and Services**

### **Automotive**

#### ***Model 3***

Model 3 is a four-door mid-size sedan that we designed for manufacturability with a base price for mass-market appeal, which we began delivering in July 2017. We currently manufacture Model 3 at the Fremont Factory as well as at Gigafactory Shanghai, where we are ramping production with an installed annual production capacity for 150,000 Model 3 vehicles. We currently offer Model 3 in rear-wheel drive and dual motor all-wheel drive variants, including a Performance version of the latter.

#### ***Model Y***

Model Y is a compact sport utility vehicle (“SUV”) built on the Model 3 platform with the capability for seating for up to seven adults, which we began producing in January 2020 and expect to commence delivering in the first quarter of 2020. We currently manufacture Model Y at the Fremont Factory, and are further ramping production there and making preparations for production next at Gigafactory Shanghai. We currently offer Model Y in dual motor all-wheel drive Long Range and Performance versions.

#### ***Model S and Model X***

Model S is a four-door full-size sedan that we began delivering in June 2012. Model S introduced Tesla vehicle mainstays such as a large touchscreen driver interface, Autopilot hardware, over-the-air software updates, and fast charging through our Supercharger network.

Model X is a mid-size SUV with seating for up to seven adults, which we began delivering in September 2015. Model X introduced features including unique falcon wing doors for easy access to passenger seating and an all-glass panoramic windshield.

Model S and Model X feature the highest performance characteristics and longest ranges that we offer in a sedan and SUV, respectively. These vehicles are equipped with a standard dual motor all-wheel drive powertrain, and are also available in Performance versions with enhanced acceleration and/or top speed and styling. We manufacture Model S and Model X at the Fremont Factory.

#### ***Future Consumer and Commercial Electric Vehicles***

In addition, we have unveiled a number of planned electric vehicles to address a broader cross-section of the vehicle market, including specialized consumer electric vehicles in Cybertruck and the new Tesla Roadster and a commercial electric vehicle in Tesla Semi.

### **Energy Generation and Storage**

#### ***Energy Storage Products***

We began deliveries of the current generations of our Powerwall and Powerpack products in late 2016 and 2017, respectively, and of our Megapack product in late 2019. Powerwall is a 13.5 kilowatt hour (“kWh”) rechargeable lithium-ion battery with integrated inverter, designed to store energy at a home or small commercial facility. Powerpack and Megapack are fully integrated energy storage solutions for commercial, industrial, utility and energy generation customers, comprised of up to 232kWh (AC) battery packs and up to 700 kilovolt-ampere (at 480V) inverters for Powerpack and up to 3 megawatt hour (“MWh”) (AC) battery packs and up to 1.54 megavolt-ampere inverters for Megapack, multiple units of which may be grouped together to form larger installations, capable of reaching gigawatt hours (“GWh”) or greater. Powerpack and Megapack can also be combined with renewable energy generation sources to create microgrids that provide communities with clean, resilient and affordable power.

We also develop and advance our software capabilities for the control and optimal dispatch of energy storage systems across a wide range of markets and applications, which can be sent to our systems through over-the-air updates.

### ***Solar Energy Offerings***

The major components of our retrofit solar energy systems include solar panels that convert sunlight into electrical current, inverters that convert the electrical output from the panels to a usable current compatible with the electric grid, racking that attaches the solar panels to the roof or ground, electrical hardware that connects the solar energy system to the electric grid, and our monitoring device. We purchase the majority of these components, and we do so from multiple sources to ensure competitive pricing and adequate supply. We also design and manufacture certain components for our solar energy products. In addition to selling retrofit solar energy systems to customers and certain channel partners, we also make them available through lease and power purchase agreement (“PPA”) arrangements, currently with 20-year terms and typically with renewal options, and a subscription-based sale of solar power, which is currently available in California.

In 2019, we commenced direct customer and channel partner sales of the third generation of our Solar Roof, which features aesthetically pleasing and durable glass roofing tiles designed to complement the architecture of homes and commercial buildings while turning sunlight into electricity. We are ramping the volume production of this version of the Solar Roof at Gigafactory New York, and are increasing our installation capabilities by training our personnel and third party partners.

### **Technology**

#### **Automotive**

Our core vehicle technology competencies include battery and powertrain engineering and manufacturing, as well as our ability to design vehicles that utilize the unique advantages of an electric powertrain. Our core intellectual property includes our electric powertrain and our work on developing self-driving technologies. Our powertrain consists of our battery pack, power electronics, motor, gearbox, and control software. We offer several powertrain variants for our vehicles that incorporate years of research and development. In addition, we have designed our vehicles to incorporate the latest advances in consumer technologies, such as mobile computing, sensing, displays, and connectivity.

#### ***Battery and Powertrain***

We optimize the design of the lithium-ion cells we use and of our battery packs to achieve high energy density at decreasing costs while also maintaining safety, reliability and long life in the rigors of an automotive environment. Our proprietary technology includes systems for high density energy storage, cooling, safety, charge balancing, structural durability, and electronics management. We have also pioneered advanced manufacturing techniques to manufacture large volumes of battery packs with high quality at low cost. Moreover, we maintain extensive testing and R&D capabilities for battery cells, packs and systems, and have built an expansive body of knowledge on lithium-ion cell vendors, chemistry types and performance characteristics. We believe that the flexibility that we have built into our designs, combined with our research and real-world performance data, will enable us to continue to evaluate new battery cells and optimize battery pack system performance and cost for our current and future vehicles.

The power electronics in our electric powertrain govern the flow of electrical current throughout our vehicles as needed, convert direct current from the battery pack into alternating current to drive our vehicles’ motors (and vice versa from an external electricity source to charge the battery pack), and provide regenerative braking functionality. The primary technological advantages to our proprietary power electronics designs include the ability to drive large amounts of electrical current in a small physical package with high efficiency and low cost, and to recharge on a wide variety of electricity sources at home, at the office or on the road, including at our Superchargers.

We offer dual motor powertrain vehicles, which use two electric motors to maximize traction and performance in an all-wheel drive configuration. Tesla’s dual motor powertrain digitally and independently controls torque to the front and rear wheels. The near-instantaneous response of the motors, combined with low centers of gravity, provides drivers with controlled performance and increased traction control. We are also developing vehicle powertrain technology featuring three electric motors for further increased performance.

### ***Vehicle Control and Infotainment Software***

The performance and safety systems of our vehicles and their battery packs require sophisticated control software. There are numerous processors in our vehicles to control these functions, and we write custom firmware for many of these processors. Software algorithms control traction, vehicle stability, the acceleration and regenerative braking of the vehicle, climate control and thermal management, and are also used extensively to monitor the charge state of the battery pack and to manage all of its safety systems. Drivers use the information and control systems in our vehicles to optimize performance, customize vehicle behavior, manage charging modes and times and control all infotainment functions. We develop almost all of this software, including most of the user interfaces, internally.

### ***Self-Driving Development***

We have expertise in developing technologies, systems and software to achieve self-driving vehicles. We are equipping all new Tesla vehicles with hardware needed for full self-driving in the future, including a new powerful and proprietary on-board computer that we introduced in 2019. This hardware suite enables field data from the on-board camera, radar, ultrasonics, and GPS to continually train and improve our neural network for real-world performance.

Currently, we offer in our vehicles certain advanced driver assist systems under our Autopilot and FSD options, including auto-steering, traffic aware cruise control, automated lane changing, automated parking, driver warning systems, and a Smart Summon feature that enables vehicles to be remotely summoned over short distances in parking lots and driveways. These systems relieve our drivers of the most tedious and potentially dangerous aspects of road travel, and the field data feedback loops from the on-board hardware, as well as over-the-air firmware updates, allow us to improve them over time. Although at present the driver is ultimately responsible for controlling the vehicle, our systems provide safety and convenience functionality that allows our customers to rely on them much like the system that airplane pilots use when conditions permit.

### **Energy Generation and Storage**

#### ***Energy Storage Products***

We are leveraging many of the component-level technologies from our vehicles to advance our energy storage products, including high density energy storage, cooling, safety, charge balancing, structural durability, and electronics management. By taking a modular approach to the design of battery systems, we are able to maximize manufacturing capacity to produce our Powerwall, Powerpack and Megapack products. Additionally, we are making significant strides in the area of bi-directional, grid-tied power electronics that enable us to interconnect our battery systems seamlessly with global electricity grids while providing fast-acting systems for power injection and absorption.

#### ***Solar Energy Systems***

We are continually innovating and developing new technologies to facilitate the growth of our solar energy business. For example, we have developed proprietary software to reduce solar energy system design and installation timelines and costs, and the Solar Roof is designed to work seamlessly with Powerwall.

### **Design and Engineering**

#### **Automotive**

We have created significant in-house capabilities in the design and test engineering of electric vehicles and their components and systems. We design, engineer and test bodies, chassis, exteriors, interiors, heating and cooling and low voltage electrical systems in-house, and to a lesser extent, in conjunction with our suppliers. Our team has core competencies in computer aided design and crash test simulations, which reduces the product development time of new models. We continue to grow our capabilities, including for on-site crash testing, durability testing and component validation.

Additionally, our team has expertise in selecting and working with various materials. For example, given the impact of mass on range, which is very important for passenger vehicles, Model S and Model X are built with lightweight aluminum bodies and chassis which incorporate a variety of materials and production methods that help optimize vehicle weight, and Model 3 and Model Y are built with a mix of materials to be lightweight and safe while also increasing cost-effectiveness for these mass-market vehicles. On the other hand, to accommodate the durability required of work vehicles, we plan to use a thick cold-rolled stainless steel alloy and ultra-strong glass for Cybertruck while employing our expertise in battery engineering to maintain excellent range.

## **Energy Generation and Storage**

### ***Energy Storage Products***

We have an in-house engineering team that both designs our energy storage products themselves, and works with our residential, commercial and utility customers to design bespoke systems incorporating our products. Our team's expertise in electrical, mechanical, civil and software engineering enables us to create integrated energy storage solutions that meet the various and particular needs of our customers.

### ***Solar Energy Systems***

We also have an in-house team that designs a customized solar energy system or Solar Roof for each of our customers, including an integrated energy storage system when requested by the customer. We have developed software that simplifies and expedites the design process and optimizes the design to maximize the energy production of each system. This team completes a structural analysis of each building and produces a full set of structural design and electrical blueprints that contain the specifications for all system components. Additionally, this team specifies complementary mounting and grounding hardware where required.

## **Sales and Marketing**

Historically, we have been able to generate significant media coverage of our company and our products, and we believe we will continue to do so. Such media coverage and word of mouth are the current primary drivers of our sales leads and have helped us achieve sales without traditional advertising and at relatively low marketing costs.

## **Automotive**

### ***Direct Sales***

We market and sell our vehicles directly to customers using means that we believe will maximize our reach, improve the overall customer experience and maximize capital efficiency. Currently, our sales channels include our website and an international network of company-owned stores. In some states, we have also opened galleries to educate and inform customers about our products, but such locations do not actually transact in the sale of vehicles. We believe this infrastructure enables us to better control costs of inventory, manage warranty service and pricing, educate consumers about electric vehicles and charging, maintain and strengthen the Tesla brand, and obtain rapid customer feedback.

We reevaluate our sales strategy both globally and at a location-by-location level from time to time to optimize our current sales channels. Sales of vehicles in the automobile industry also tend to be cyclical in many markets, which may expose us to volatility from time to time.

### ***Used Vehicle Sales***

Our used vehicle business supports new vehicle sales by integrating the sale of a new Tesla vehicle with a customer's trade-in needs for their existing Tesla and non-Tesla vehicles. The Tesla and non-Tesla vehicles we acquire through trade-ins are subsequently remarketed, either directly by us or through third-parties. We also receive used Tesla vehicles to resell through lease returns and other sources.

### ***Public Charging***

We continue to build out our global Supercharger network for our customers' convenience, including to enable long-distance travel and urban ownership, which is a part of our strategy to remove a barrier to the broader adoption of electric vehicles caused by the perception of limited range. Each Tesla Supercharger is an industrial grade, high-speed charger designed to recharge a Tesla vehicle significantly more quickly than other charging options, and we continue to evolve our technology to allow for even faster charging times at lower cost to us. Where possible, we are co-locating Superchargers with our solar and energy storage systems to further reduce costs and promote renewable power. Supercharger stations typically are strategically placed along well-traveled routes and in dense city centers to allow Tesla vehicle owners the ability to enjoy quick, reliable and ubiquitous charging with convenient, minimal stops. Use of the Supercharger network is either free under certain sales programs or requires a competitive fee.

We also work with a wide variety of hospitality, retail, and public destinations, as well as businesses with commuting employees, to offer additional charging options for our customers. These Destination Charging and workplace locations deploy Tesla Wall Connectors to provide charging to Tesla vehicle owners who patronize or are employed at their businesses. We also work with single-family homeowners and multi-family residential entities to deploy home charging solutions in our communities.

### **Energy Generation and Storage**

We market and sell our solar and energy storage products to individuals, commercial and industrial customers and utilities through a variety of channels.

In the U.S., we offer residential solar and energy storage products directly through our website, stores and galleries, as well as through our network of channel partners. Outside of the U.S., we use our international sales organization and a network of channel partners to market and sell these products for the residential market. We also sell Powerwall directly to utilities. In the case of products sold to such utilities or channel partners, such partners typically sell and install the product in customer homes.

We sell Powerpack and Megapack systems to commercial and utility customers through our international sales organization, which consists of experienced energy industry professionals in all of our target markets, as well as through our channel partner network. In certain jurisdictions, we also sell installed solar energy systems (with or without energy storage) to commercial customers through cash, lease and PPA transactions.

### **Service and Warranty**

#### **Automotive**

##### ***Service***

We provide service for our electric vehicles at our company-owned service locations and through an expanding fleet of Tesla Mobile Service technicians who provide services that do not require a vehicle lift remotely at customers' homes or other locations. Performing vehicle service ourselves provides us with the capability to identify problems, find solutions, and incorporate improvements faster, and optimize logistics and inventory for service parts better, than traditional automobile manufacturers. Our vehicles are also designed with the capability to wirelessly upload data to us via an on-board system with cellular connectivity, allowing us to diagnose and remedy many problems before ever looking at the vehicle.

##### ***Vehicle Limited Warranty and Extended Service Plans***

We provide a manufacturer's warranty on all new and used Tesla vehicles. Each new vehicle has a four year or 50,000 mile New Vehicle Limited Warranty, subject to separate limited warranties for the supplemental restraint system, battery and drive unit, and body rust perforation. For the battery and drive unit on our current new Model S and Model X vehicles, we offer an eight year, 150,000 mile limited warranty, with minimum 70% retention of battery capacity over the warranty period. For the battery and drive unit on our current new Model 3 and Model Y vehicles, we offer an eight year or 100,000 mile limited warranty for our Standard or Standard Range Plus battery and an eight year or 120,000 mile limited warranty for our Long Range or Performance battery, with minimum 70% retention of battery capacity over the warranty period.

In addition to the New Vehicle Limited Warranty, we currently offer for Model S and Model X Extended Service plans for new vehicles in specified regions. The Extended Service plans cover the repair or replacement of vehicle parts for up to an additional four years or up to an additional 50,000 miles after the expiration of the New Vehicle Limited Warranty.

## **Energy Generation and Storage**

### ***Energy Storage Systems***

We generally provide a 10-year “no defect” and “energy retention” warranty with every current Powerwall and a 15-year “no defect” and “energy retention” warranty with every current Powerpack or Megapack system. Pursuant to these energy retention warranties, we guarantee that the energy capacity of the applicable product will be at least a specified percentage (within a range up to 80%) of its nameplate capacity during specified time periods, depending on the product, battery pack size and/or region of installation, and subject to specified use restrictions or kWh throughputs caps. In addition, we offer certain extended warranties, which customers are able to purchase from us at the time they purchase an energy storage system, including a 20 year extended protection plan for Powerwall and a selection of 10 or 20 year performance guarantees for Powerpack and Megapack. In circumstances where we install a Powerwall or Powerpack system, we also provide certain warranties on our installation workmanship. All of the warranties for our energy storage systems are subject to customary limitations and exclusions.

### ***Solar Energy Systems***

For retrofit solar energy systems, we provide a workmanship warranty for up to 20 years from installation and a separate warranty against roof leaks. We also pass-through the inverter and module manufacturer warranties (typically 10 years and 25 years respectively). When we lease a retrofit solar energy system, we compensate the customer if their system produces less energy than guaranteed over a specified period. For the Solar Roof, we provide a warranty against defects for 25 years, a 25 year weatherization warranty and a power output warranty. For all systems (retrofit and Solar Roof) we also provide service and repair (either under warranty or for a fee) during the entire term of the customer relationship.

## **Financial Services**

### **Automotive**

#### ***Purchase Financing and Leases***

We offer leasing and/or loan financing arrangements for our vehicles in certain jurisdictions in North America, Europe and Asia through various financial institutions. In certain international markets, we offer resale value guarantees to customers who purchase and finance their vehicles through one of our specified commercial banking partners, under which those customers have the option of selling their vehicles back to us at preset future dates, generally at the end of the terms of the applicable loans or financing programs, for pre-determined resale values. In certain markets, we also offer vehicle buyback guarantees to financial institutions, which may obligate us to repurchase the vehicles for pre-determined prices.

We also currently offer leasing directly through our local subsidiaries for Model S, Model X and Model 3 in the U.S. and for Model S and Model X in Canada.

#### ***Insurance***

In August 2019, we launched an insurance product designed for our customers, which offers rates that are often better than other alternatives. This product is currently available in California, and we plan to expand both the markets in which we offer insurance products and our ability to offer such products, as part of our ongoing effort to decrease the total cost of ownership for our customers.

## **Energy Generation and Storage**

### ***Energy Storage Systems***

We currently offer a loan product to residential customers who purchase Powerwall together with a new solar energy system, and lease and PPA options to commercial customers who purchase a Powerpack system together with a new solar energy system. We intend to introduce financial services offerings for customers who purchase standalone energy storage products in the future.

### ***Solar Energy Systems***

We are an industry leader in offering innovative financing alternatives that allow our customers to take direct advantage of available tax credits and incentives to reduce the cost of owning a solar energy system through a solar loan, or to make the switch to solar energy with little to no upfront costs under a lease or PPA. Our solar loan offers third-party financing directly to a qualified customer to enable the customer to purchase and own a solar energy system. We are not a party to the loan agreement between the customer and the third-party lender, and the third-party lender has no recourse against us with respect to the loan. Our solar lease offers customers a fixed monthly fee, at rates that typically translate into lower monthly utility bills, and an electricity production guarantee. Our solar PPA charges customers a fee per kWh based on the amount of electricity produced by our solar energy systems. We monetize the customer payments we receive from our leases and PPAs through funds we have formed with investors. We also intend to introduce financial services offerings for our Solar Roof customers in the future.

## **Manufacturing**

We manufacture our products and related components primarily at the Fremont Factory and at nearby facilities in the Bay Area, California; Gigafactory Nevada near Reno, Nevada; Gigafactory New York in Buffalo, New York; and Gigafactory Shanghai in China. We have also selected a site near Berlin, Germany to build a factory for the European market, which we refer to as Gigafactory Berlin.

### **Manufacturing Facilities in the Bay Area, California**

We manufacture our vehicles, and certain parts and components that are critical to our intellectual property and quality standards, at our manufacturing facilities in the Bay Area in California, including the Fremont Factory, and other local manufacturing facilities. Our Bay Area facilities contain several manufacturing operations, including stamping, machining, casting, plastics, body assembly, paint operations, seat assembly, final vehicle assembly and end-of-line testing for our vehicles, as well as production of battery packs and drive units for Model S and Model X. Some major vehicle component systems are purchased from suppliers; however, we have a high level of vertical integration in our manufacturing processes at our Bay Area facilities.

### **Gigafactory Nevada**

Gigafactory Nevada is a facility where we work together with our suppliers to integrate battery material, cell, module and battery pack production in one location. We use the battery packs manufactured at Gigafactory Nevada for Model 3, Model Y and our energy storage products. We also manufacture Model 3 and Model Y drive units at Gigafactory Nevada. Finally, the assembly of Megapack systems takes place at Gigafactory Nevada, allowing us to ship deployment-ready systems directly to customers.

We have designed Gigafactory Nevada to allow us access to high volumes of lithium-ion battery cells while achieving a significant reduction in the cost of our battery packs, and we have an agreement with Panasonic to partner with us on Gigafactory Nevada with investments in production equipment that it is using to manufacture and supply us with battery cells. Given its importance to the production of our vehicle and energy storage products, in particular Model 3, Model Y and Megapack, we continue to invest in Gigafactory Nevada to achieve additional production output there.

### **Gigafactory New York**

We have primarily used our manufacturing facility in Buffalo, New York, which we refer to as Gigafactory New York, for the development and production of our Solar Roof and other solar products and components, energy storage components, and Supercharger components, and for other lessor-approved functions. In particular, our manufacturing operations at Gigafactory New York are increasing significantly as we ramp the production of the third generation of our Solar Roof there.

### **Gigafactory Shanghai**

In December 2019, we commenced production of Model 3 vehicles at Gigafactory Shanghai, which we have established in order to increase the affordability of our vehicles for customers in local markets by reducing transportation and manufacturing costs and eliminating certain tariffs on vehicles imported into China from the U.S. At Gigafactory Shanghai, we have installed annual production capacity for 150,000 Model 3 vehicles that we believe we will eventually be able to push to actual rates of production in excess of such number, subject to local production of battery packs, which we began ramping there later than other processes. We have also commenced construction of the next phase of Gigafactory Shanghai to add Model Y manufacturing capacity at least equivalent to that for Model 3. Much of the investment in Gigafactory Shanghai has been and is expected to continue to be provided through local debt financing, including a RMB 9.0 billion (or the equivalent amount in U.S. dollars) fixed asset term facility and a RMB 2.25 billion (or the equivalent amount in U.S. dollars) working capital revolving facility that our subsidiary entered into in December 2019. We are supplementing such financing with limited direct capital expenditures by us, at a lower cost per unit of production capacity than that of Model 3 production at the Fremont Factory.

### **Other Manufacturing**

Generally, we continue to expand production capacity at our existing facilities. We also intend to further increase cost-competitiveness in our significant markets by strategically adding local manufacturing, including at our planned Gigafactory Berlin.

### **Supply Chain**

Our products use thousands of purchased parts that are sourced from hundreds of suppliers across the world. We have developed close relationships with vendors of key parts such as battery cells, electronics and complex vehicle assemblies. Certain components purchased from these suppliers are shared or are similar across many product lines, allowing us to take advantage of pricing efficiencies from economies of scale.

As is the case for most automotive companies, most of our procured components and systems are sourced from single suppliers. Certain key components we use have multiple available sources, and we work to qualify multiple suppliers for each such component where it is sensible to do so, in order to minimize production risks owing to disruptions in their supply. We also mitigate risk by maintaining safety stock for key parts and assemblies and die banks for components with lengthy procurement lead times.

Our products use various raw materials including aluminum, steel, cobalt, lithium, nickel and copper. Pricing for these materials is governed by market conditions and may fluctuate due to various factors outside of our control, such as supply and demand and market speculation. We currently believe that we have adequate access to raw materials supplies in order to meet the needs of our operations.

### **Governmental Programs, Incentives and Regulations**

Globally, both the operation of our business by us and the ownership of our products by our customers are impacted by a number of government programs, incentives and other arrangements. Our business and products are also subject to a number of governmental regulations that vary among jurisdictions.



## **Programs and Incentives**

### ***California Alternative Energy and Advanced Transportation Financing Authority Tax Incentives***

We have entered into multiple agreements over the past few years with the California Alternative Energy and Advanced Transportation Financing Authority (“CAEATFA”) that provide multi-year sales tax exclusions on purchases of manufacturing equipment that will be used for specific purposes, including the expansion and ongoing development of Model S, Model X, Model 3, Model Y and future electric vehicles and the expansion of electric vehicle powertrain production in California.

### ***Gigafactory Nevada—Nevada Tax Incentives***

In connection with the construction of Gigafactory Nevada, we have entered into agreements with the State of Nevada and Storey County in Nevada that provide abatements for sales, use, real property, personal property and employer excise taxes, discounts to the base tariff energy rates and transferable tax credits. These incentives are available for the applicable periods beginning on October 17, 2014 and ending on either June 30, 2024 or June 30, 2034 (depending on the incentive). Under these agreements, we were eligible for a maximum of \$195.0 million of transferable tax credits, subject to capital investments by us and our partners for Gigafactory Nevada of at least \$3.50 billion, which we exceeded during 2017, and specified hiring targets for Gigafactory Nevada, which we exceeded during 2018. As a result, as of December 31, 2018, we had earned the maximum amount of credits.

### ***Gigafactory New York—New York State Investment and Lease***

We have a lease through the Research Foundation for the State University of New York (the “SUNY Foundation”) for Gigafactory New York, which was constructed on behalf of the SUNY Foundation. Under the lease and a related research and development agreement, there continues to be, on behalf of the SUNY Foundation, installation of certain utilities and other improvements and acquisition of certain manufacturing equipment designated by us to be used at Gigafactory New York. The terms of such agreement require us to comply with a number of covenants, including required hiring and cumulative investment targets, which we have met to date as of the applicable measurement dates.

### ***Gigafactory Shanghai—Lease and Land Use Rights***

We have a lease arrangement with the local government of Shanghai for land use rights at Gigafactory Shanghai. Under the terms of the arrangement, we are required to meet a cumulative capital expenditure target and an annual tax revenue target starting at the end of 2023, which we believe will be attainable even if our actual vehicle production at Gigafactory Shanghai were far lower than the volumes we are forecasting.

### ***Tesla Regulatory Credits***

In connection with the production, delivery, placement into service and ongoing operation of our zero emission vehicles, charging infrastructure and solar systems in global markets, we have earned and will continue to earn various tradable regulatory credits. We have sold these credits, and will continue to sell future credits, to automotive companies and other regulated entities who can use the credits to comply with emission standards and other regulatory requirements. For example, under California’s Zero Emission Vehicle Regulation and those of states that have adopted California’s standard, vehicle manufacturers are required to earn or purchase credits, referred to as ZEV credits, for compliance with their annual regulatory requirements. These laws provide that automakers may bank or sell to other regulated parties their excess credits if they earn more credits than the minimum quantity required by those laws. Tesla also earns other types of saleable regulatory credits in the United States and abroad, including greenhouse gas, fuel economy, renewable energy, and clean fuels credits. Likewise, several U.S. states have adopted procurement requirements for renewable energy production. These requirements enable companies deploying solar energy to earn tradable credits known as Solar Renewable Energy Certificates (“SRECs”).

### ***Energy Storage Systems—Incentives***

The regulatory regime for energy storage projects is still under development. Nevertheless, there are various policies, incentives and financial mechanisms at the federal, state and local levels that support the adoption of energy storage. For example, energy storage systems that are charged using solar energy are eligible for the 26% tax credit in 2020 with a ramp down in 2021 and beyond under Section 48(a)(3) of the Internal Revenue Code, or the IRC, as described below. In addition, California and a number of other states have adopted procurement targets for energy storage, and behind the meter energy storage systems qualify for funding under the California Self Generation Incentive Program.

The Federal Energy Regulatory Commission (“FERC”) has also taken steps to enable the participation of energy storage in wholesale energy markets. For example, in late 2016, FERC issued a final rule, Order No. 821, to further break down barriers preventing energy storage from fully participating in wholesale energy markets. Order 821 is currently under review before the U.S. Court of Appeals for the D.C. Circuit.

### ***Solar Energy Systems—Government and Utility Programs and Incentives***

U.S. federal, state and local governments have established various policies, incentives and financial mechanisms to reduce the cost of solar energy and to accelerate the adoption of solar energy. These incentives include tax credits, cash grants, tax abatements and rebates.

The federal government currently provides an uncapped investment tax credit (“ITC”) under two sections of the IRC: Section 48 and Section 25D. Section 48(a)(3) of the IRC allows a taxpayer to claim a credit of 26% of qualified expenditures for a commercial solar energy system that commences construction by December 31, 2020. The credit then declines to 22% in 2021 and a permanent 10% thereafter. We claim the Section 48 commercial credit when available for both our residential and commercial projects, based on ownership of the solar energy system. The federal government also provides accelerated depreciation for eligible commercial solar energy systems. Section 25D of the IRC allows a homeowner-taxpayer to claim a credit of 26% of qualified expenditures for a residential solar energy system owned by the homeowner that is placed in service by December 31, 2020. The credit then declines to 22% in 2021 and is scheduled to expire thereafter. Customers who purchase their solar energy systems for cash or through our solar loan offering are eligible to claim the Section 25D investment tax credit.

In addition to the federal ITC, many U.S. states offer personal and corporate tax credits and incentives for solar energy systems.

## **Regulations**

### ***Vehicle Safety and Testing***

Our vehicles are subject to, and comply with or are otherwise exempt from, numerous regulatory requirements established by the National Highway Traffic Safety Administration (“NHTSA”), including all applicable United States Federal Motor Vehicle Safety Standards (“FMVSS”). Our vehicles fully comply with all applicable FMVSSs without the need for any exemptions, and we expect future Tesla vehicles to either fully comply or comply with limited exemptions related to new technologies. Additionally, there are regulatory changes being considered for several FMVSS, and while we anticipate compliance, there is no assurance until final regulation changes are enacted.

As a manufacturer, we must self-certify that our vehicles meet all applicable FMVSS, as well as the NHTSA bumper standard, or otherwise are exempt, before the vehicles can be imported or sold in the U.S. Numerous FMVSS apply to our vehicles, such as crash-worthiness requirements, crash avoidance requirements, and electric vehicle requirements. We are also required to comply with other federal laws administered by NHTSA, including the CAFE standards, Theft Prevention Act requirements, consumer information labeling requirements, Early Warning Reporting requirements regarding warranty claims, field reports, death and injury reports and foreign recalls, and owner’s manual requirements.

The Automobile Information and Disclosure Act requires manufacturers of motor vehicles to disclose certain information regarding the manufacturer’s suggested retail price, optional equipment and pricing. In addition, this law allows inclusion of city and highway fuel economy ratings, as determined by EPA, as well as crash test ratings as determined by NHTSA if such tests are conducted.

Our vehicles sold outside of the U.S. are subject to similar foreign safety, environmental and other regulations. Many of those regulations are different from those applicable in the U.S. and may require redesign and/or retesting. The European Union has established new rules regarding additional compliance oversight that are scheduled to commence in 2020, and there is also regulatory uncertainty related to the United Kingdom's withdrawal from the European Union. These changes could impact the rollout of new vehicle features in Europe.

### ***Self-Driving***

There are no federal U.S. regulations pertaining to the safety of self-driving vehicles; however, NHTSA has established recommended guidelines. Certain U.S. states have legal restrictions on self-driving vehicles, and many other states are considering them. This patchwork increases the legal complexity for our vehicles. In Europe, certain vehicle safety regulations apply to self-driving braking and steering systems, and certain treaties also restrict the legality of certain higher levels of self-driving vehicles. Self-driving laws and regulations are expected to continue to evolve in numerous jurisdictions in the U.S. and foreign countries, and may create restrictions on self-driving features that we develop.

### ***Automobile Manufacturer and Dealer Regulation***

State laws regulate the manufacture, distribution, sale and service of automobiles, and generally require motor vehicle manufacturers and dealers to be licensed in order to sell vehicles directly to consumers in the state. As we open additional Tesla stores and service centers, we secure dealer licenses (or their equivalent) and engage in sales activities to sell our vehicles directly to consumers. Certain states do not permit automobile manufacturers to be licensed as dealers or to act in the capacity of a dealer, or otherwise restrict a manufacturer's ability to deliver or service vehicles. To sell vehicles to residents of states where we are not licensed as a dealer, we generally conduct the transfer of title out of the state. In such states, we have opened "galleries" that serve an educational purpose and where the title transfer may not occur.

As we expand our retail footprint in the U.S., some automobile dealer trade associations have both challenged the legality of our operations in court and used administrative and legislative processes to attempt to prohibit or limit our ability to operate existing stores or expand to new locations. We expect that the dealer associations will continue to mount challenges to our business model. In addition, we expect the dealer associations to actively lobby state licensing agencies and legislators to interpret existing laws or enact new laws in ways not favorable to Tesla's ownership and operation of its own retail and service locations, and we intend to actively fight any such efforts to limit our ability to sell and service our own vehicles.

### ***Battery Safety and Testing***

Our battery pack conforms to mandatory regulations that govern transport of "dangerous goods," defined to include lithium-ion batteries, which may present a risk in transportation. The regulations vary by mode of shipping transportation, such as by ocean vessel, rail, truck, or air. We have completed the applicable transportation tests for our battery packs, demonstrating our compliance with applicable regulations.

We use lithium-ion cells in our high voltage battery packs in our vehicles and energy storage products. The use, storage, and disposal of our battery packs is regulated under federal law. We have agreements with third party battery recycling companies to recycle our battery packs and we are also developing our own recycling technology.

### ***Solar Energy—General***

We are not a "regulated utility" in the U.S., although we are subject to certain state and federal regulations applicable to solar and battery storage providers. To operate our systems, we obtain interconnection agreements from the utilities. In most cases, interconnection agreements are standard form agreements that have been pre-approved by the public utility commission or other regulatory body.

Sales of electricity and non-sale equipment leases by third parties, such as our leases, PPAs and subscription agreements, face regulatory challenges in some states and jurisdictions.

### ***Solar Energy—Net Metering***

Most states in the U.S. have a regulatory policy known as net energy metering, or net metering, available to solar customers. Net metering typically allows solar customers to interconnect their on-site solar energy systems to the utility grid and offset their utility electricity purchases by receiving a bill credit for excess energy generated by their solar energy system that is exported to the grid. In certain jurisdictions, regulators or utilities have reduced or eliminated the benefit available under net metering, or have proposed to do so.

### ***Solar Energy—Mandated Renewable Capacity***

Many states also have adopted procurement requirements for renewable energy production, such as an enforceable renewable portfolio standard, or RPS, or other policies that require covered entities to procure a specified percentage of total electricity delivered to customers in the state from eligible renewable energy sources, such as solar energy systems. In SREC state markets, the RPS requires electricity suppliers to secure a portion of their electricity from solar generators. The SREC program provides a means for the generation of SRECs, which can then be sold separately from the energy produced to covered entities who surrender the SRECs to the state to prove compliance with the state's renewable energy mandate.

## **Competition**

### **Automotive**

The worldwide automotive market is highly competitive and we expect it will become even more competitive in the future as we introduce additional vehicles in a broader cross-section of the passenger and commercial vehicle market and expand our vehicles' capabilities.

We believe that our vehicles compete in the market both based on their traditional segment classification as well as based on their propulsion technology. For example, Model S and Model X compete primarily with premium sedans and premium SUVs and Model 3 and Model Y compete with small to medium-sized sedans and compact SUVs, which are extremely competitive markets. Competing products typically include internal combustion vehicles from more established automobile manufacturers; however, many established and new automobile manufacturers have entered or have announced plans to enter the alternative fuel vehicle market. Overall, we believe these announcements and vehicle introductions promote the development of the alternative fuel vehicle market by highlighting the attractiveness of alternative fuel vehicles, particularly those fueled by electricity, relative to the internal combustion vehicle. Many major automobile manufacturers have electric vehicles available today in major markets including the U.S., China and Europe, and other current and prospective automobile manufacturers are also developing electric vehicles. In addition, several manufacturers offer hybrid vehicles, including plug-in versions.

Our vehicles also compete in the market based on the compelling user experience that they offer. We believe that a key factor in our success will be our Autopilot and FSD technologies that currently enable the driver-assistance features in our vehicles, and in which we are making significant strides through our proprietary and powerful FSD computer and remotely updateable artificial intelligence software. Ultimately, while we are subject to regulatory constraints over which we have no control, our goal is a fully autonomously-driven future that improves safety and provides our customers with convenience and additional income through participation in an autonomous Tesla ride-hailing network. This network, which will also include our own fleet of vehicles, will also allow us to access a new customer base even as modes of transportation evolve. Finally, our vehicles offer unparalleled in-vehicle entertainment features, currently including Internet search, music services, passenger karaoke, and parked video streaming and gaming.

## **Energy Generation and Storage**

### ***Energy Storage Systems***

The market for energy storage products is also highly competitive. Established companies, such as AES Energy Storage, Siemens, LG Chem and Samsung, as well as various emerging companies, have introduced products that are similar to our product portfolio. There are several companies providing individual components of energy storage systems (such as cells, battery modules, and power electronics) as well as others providing integrated systems. We compete with these companies based on price, energy density and efficiency. We believe that the specifications of our products, our strong brand, and the modular, scalable nature of our Powerpack and Megapack products give us a competitive advantage when marketing our products.

### ***Solar Energy Systems***

The primary competitors to our solar energy business are the traditional local utility companies that supply energy to our potential customers. We compete with these traditional utility companies primarily based on price, predictability of price and the ease by which customers can switch to electricity generated by our solar energy systems. We also compete with solar energy companies that provide products and services similar to ours. Many solar energy companies only install solar energy systems, while others only provide financing for these installations. In the residential solar energy system installation market, our primary competitors include Vivint Solar Inc., Sunrun Inc., Trinity Solar, SunPower Corporation, and many smaller local solar companies.

The electricity produced by solar installations still represents a small fraction of total U.S. electricity generation. With tens of millions of single-family homes and businesses in our primary service territories, and many more in other locations, we have a large opportunity to expand and grow this business as we make our retrofit installations more accessible and ramp our innovative Solar Roof. We also believe that residential solar energy generation is gaining favorable regulatory momentum, as exemplified in part by the state of California recently requiring that new homes be built with solar generation starting in 2020.

## **Intellectual Property**

We place a strong emphasis on our innovative approach and proprietary designs which bring intrinsic value and uniqueness to our product portfolio. As part of our business, we seek to protect the underlying intellectual property rights of these innovations and designs such as with respect to patents, trademarks, copyrights, trade secrets and other measures, including through employee and third party nondisclosure agreements and other contractual arrangements. For example, we place a high priority on obtaining patents to provide the broadest and strongest possible protection to enable our freedom to operate our innovations and designs within our products and technologies in the electric vehicle market as well as to protect and defend our product portfolio. We have also adopted a patent policy in which we irrevocably pledged that we will not initiate a lawsuit against any party for infringing our patents through activity relating to electric vehicles or related equipment for so long as such party is acting in good faith. We made this pledge in order to encourage the advancement of a common, rapidly-evolving platform for electric vehicles, thereby benefiting ourselves, other companies making electric vehicles, and the world.

## **Employees**

As of December 31, 2019, Tesla, Inc. had 48,016 full-time employees. To date, we have not experienced any work stoppages, and we consider our relationship with our employees to be good.

## **Available Information**

We file or furnish periodic reports and amendments thereto, including our Annual Reports on Form 10-K, our Quarterly Reports on Form 10-Q and Current Reports on Form 8-K, proxy statements and other information with the Securities and Exchange Commission ("SEC"). In addition, the SEC maintains a website ([www.sec.gov](http://www.sec.gov)) that contains reports, proxy and information statements, and other information regarding issuers that file electronically. Our website is located at [www.tesla.com](http://www.tesla.com), and our reports, amendments thereto, proxy statements and other information are also made available, free of charge, on our investor relations website at [ir.tesla.com](http://ir.tesla.com) as soon as reasonably practicable after we electronically file or furnish such information with the SEC. The information posted on our website is not incorporated by reference into this Annual Report on Form 10-K.

## ITEM 1A. RISK FACTORS

*You should carefully consider the risks described below together with the other information set forth in this report, which could materially affect our business, financial condition and future results. The risks described below are not the only risks facing our company. Risks and uncertainties not currently known to us or that we currently deem to be immaterial also may materially adversely affect our business, financial condition and operating results.*

### **Risks Related to Our Business and Industry**

***We have experienced in the past, and may experience in the future, delays or other complications in the design, manufacture, launch, and production ramp of our vehicles, energy products, and product features, or may not realize our manufacturing cost targets, which could harm our brand, business, prospects, financial condition and operating results.***

We have previously experienced launch and production ramp delays or other complications in connection with new vehicle models such as Model S, Model X and Model 3, and new vehicle features such as the all-wheel drive dual motor drivetrain on Model S and the second version of our Autopilot hardware. For example, we encountered unanticipated supply chain constraints that led to initial delays in producing Model X and an isolated supplier limitation in the manufacture of Model 3. Similarly, during our initial Model 3 production ramp, we had challenges ramping fully automated processes, such as portions of the battery module assembly line, material flow system and the general assembly line, which we addressed by reducing the levels of automation and introducing semi-automated or manual processes. In addition, we have used a number of new manufacturing technologies, techniques and processes for our vehicles, such as aluminum spot welding systems and high-speed blow forming of certain difficult to stamp vehicle parts, and we may introduce new processes in the future. We have also introduced unique design features in our vehicles with different manufacturing challenges, such as large display screens, dual motor drivetrain, hardware for our Autopilot and FSD features and falcon-wing doors. There is no guarantee that we will be able to successfully and timely introduce and scale any such new processes or features.

In particular, our future business depends in large part on the high-volume production of Model 3 and Model Y, which we believe are our vehicles with the largest markets. We have limited experience to date in manufacturing Model 3 at high volumes and continuously increasing its production rates, particularly across multiple vehicle manufacturing facilities, which we commenced in the fourth quarter of 2019 with Gigafactory Shanghai coming online. In order to be successful, we will need to implement, maintain and/or ramp efficient and cost-effective manufacturing capabilities, processes and supply chains and achieve the design tolerances, high quality and maximum output rates we have planned, including at Gigafactory Shanghai, and for Model Y, which we commenced manufacturing at the Fremont Factory in the first quarter of 2020. Bottlenecks such as those we have experienced in the past with new product ramps and other unexpected challenges may also arise as we ramp production, and it will be important that we address them promptly while continuing to reduce our manufacturing costs. If we are not successful in doing so, or if we experience issues with our ongoing manufacturing process improvements and cost-down efforts, we could face delays in establishing and/or sustaining our Model 3 and Model Y ramps or be unable to meet our related cost and profitability targets.

Moreover, we will need to hire, train and compensate skilled employees to operate high-volume production facilities to support our vehicle ramp at the Fremont Factory and Gigafactory Shanghai, as well as at Gigafactory Nevada to support the manufacture of battery packs and drive units for certain of our vehicles. Finally, because our vehicle models, in particular Model 3 and Model Y, may share certain parts, suppliers or production facilities with each other, the volume or efficiency of production with respect to one model may impact also the production of other models or lead to bottlenecks that impact the production of all models.

We may also experience similar future delays or other complications in launching and/or ramping production of new vehicles, such as Tesla Semi, Cybertruck and the new Tesla Roadster, our energy storage products and the Solar Roof, as well as future features and services such as new Autopilot or FSD features and the autonomous Tesla ride-hailing network. Likewise, we may encounter delays with the design, construction and regulatory or other approvals necessary to build and bring online future manufacturing facilities, including our planned Gigafactory Berlin in Germany.

Any significant delay or other complication in the production ramp of our current products or the development, manufacture, launch and production ramp of our future products, features and services, including complications associated with expanding our production capacity and supply chain or obtaining or maintaining related regulatory approvals, or inability to manage such ramps cost-effectively, could materially damage our brand, business, prospects, financial condition and operating results.

***We may be unable to meet our growing product sales, delivery and installation plans and vehicle servicing and charging network needs, or accurately project and manage this growth internationally, any of which could harm our business and prospects.***

Concurrent with developing, launching and ramping our products, our success will depend on our ability to continue to significantly increase their sales, deliveries, installations and servicing worldwide, while allocating our available resources among multiple products simultaneously. As we expand globally, we will also need to ensure we are in compliance with any regulatory requirements applicable to the sale, installation and service of our products, the sale of electricity generated through our solar energy systems and operation of Superchargers in various jurisdictions, which could take considerable time and expense. These plans require significant cash investments and management resources and there is no guarantee that they will ultimately generate additional sales or installations of our products.

We continuously evaluate, and as appropriate evolve, our retail operations and product offerings in order to maximize our reach and optimize our costs, vehicle line-up and model differentiation, and purchasing experience. However, there is no guarantee that each step in our evolving strategy will be perceived as intended by prospective customers accustomed to more traditional sales models. In particular, we are targeting with Model 3 and Model Y a global mass demographic with a broad range of potential customers, in which we have limited experience projecting demand and pricing our products. Until we ramp local production at Gigafactory Shanghai and in the future at Gigafactory Berlin, we will have to contend with predominantly single-factory vehicle production at the Fremont Factory for numerous international variants. If our specific demand expectations for these variants prove inaccurate, we may not be able to timely generate sales matched to the specific vehicles that we produce in the same timeframe or that are commensurate with our operations in a given region, which may negatively impact our deliveries and operating results in a particular period. Likewise, as we develop and grow our energy storage product and solar business worldwide, our success will depend on our ability to correctly forecast demand for our products in different markets.

Moreover, because we do not have independent dealer networks, we are responsible for delivering all of our vehicles to our customers and meeting their vehicle servicing needs. While we have substantially implemented and improved many aspects of our delivery and service operations, we still have relatively limited experience with, and may face difficulties in, such deliveries and servicing at high volumes, particularly in international markets as we expand. For example, significant transit time may be required to transport vehicles in volume into international markets, and we also saw challenges in initially ramping our logistical channels in China and Europe as we delivered Model 3 there for the first time in the first quarter of 2019. To accommodate growing volumes, we have deployed a number of delivery models, such as deliveries to customers' homes and workplaces, some of which have not been previously tested at scale and in different geographies and may not ultimately be successful. Likewise, because of our unique expertise with our vehicles, we recommend that our vehicles be serviced by our service centers, Mobile Service technicians or certain authorized professionals that we have specifically trained and equipped. If we experience delays in adding such servicing capacity or experience unforeseen issues with the reliability of our vehicles, particular higher-volume and newer additions to our fleet such as Model 3 and Model Y, it could overburden our servicing capabilities and parts inventory. Finally, the increasing number of Tesla vehicles also requires us to continue to rapidly increase the number of our Supercharger stations and connectors throughout the world.

We are also expanding our installation capabilities for the Solar Roof as we continue its manufacturing ramp by training both our own personnel and third party installers. If we are not successful in growing this overall installation capability to keep pace with our increasing production, or if we experience unforeseen delays in the production ramp or inaccurately forecast demand for the Solar Roof, our operating results may be negatively impacted.

There is no assurance that we will be able to ramp our business to meet our sales, delivery, servicing, charging and installation targets globally, that our projections on which such targets are based will prove accurate, or that the pace of growth or coverage of our customer infrastructure network will meet customer expectations. Moreover, we may not be successful in undertaking this global expansion if we are unable to avoid cost overruns and other unexpected operating costs, adapt our products and conduct our operations to meet local requirements and regulations, implement required local infrastructure, systems and processes, and find and hire a significant number of additional sales, service, electrical installation, construction and administrative personnel. If we fail to manage our growth effectively, it could result in negative publicity and damage to our brand and have a material adverse effect on our business, prospects, financial condition and operating results.

***Our future growth and success is dependent upon consumers' willingness to adopt electric vehicles and specifically our vehicles. We operate in the automotive industry, which is generally susceptible to cyclical and volatility.***

Our growth is highly dependent upon the worldwide adoption by consumers of alternative fuel vehicles in general and electric vehicles in particular. Although we have successfully grown demand for our vehicles thus far, there is no guarantee of such future demand, or that our vehicles will not compete with one another in the market. Moreover, the target demographics for our vehicles, in particular the mass market demographic for Model 3 and Model Y, are highly competitive. If the market for electric vehicles in general and Tesla vehicles in particular does not develop as we expect, develops more slowly than we expect, or if demand for our vehicles decreases in our markets, our business, prospects, financial condition and operating results could be harmed.

We have only relatively recently achieved high-volume production of vehicles, and are still at an earlier stage and have limited resources relative to our competitors. Moreover, the market for alternative fuel vehicles is rapidly evolving. As a result, the market for our vehicles could be affected by numerous factors, such as:

- perceptions about electric vehicle features, quality, safety, performance and cost;
- perceptions about the limited range over which electric vehicles may be driven on a single battery charge;
- competition, including from other types of alternative fuel vehicles, plug-in hybrid electric vehicles and high fuel-economy internal combustion engine vehicles;
- volatility in the cost of oil and gasoline;
- government regulations and economic incentives;
- access to charging facilities; and
- concerns about our future viability.

In addition, sales of vehicles in the automotive industry tend to be cyclical in many markets, which may expose us to increased volatility, especially as we expand and adjust our operations and retail strategies. Specifically, it is uncertain as to how such macroeconomic factors will impact us as a company that has been experiencing growth and increasing market share in an industry that has globally been experiencing a recent decline in sales.



***We are dependent on our suppliers, the majority of which are single-source suppliers, and the inability of these suppliers to deliver necessary components of our products according to our schedule and at prices, quality levels and volumes acceptable to us, or our inability to efficiently manage these components, could have a material adverse effect on our financial condition and operating results.***

Our products contain thousands of purchased parts that we source globally from hundreds of direct suppliers. We attempt to mitigate our supply chain risk by entering into long-term agreements where it is practical and beneficial to do so, including agreements we entered into with Panasonic to be our manufacturing partner and supplier; qualifying and obtaining components from multiple sources where sensible, such as the PV panels for our retrofit solar installations that we purchase from a variety of suppliers; and maintaining safety stock for key parts and assemblies and die banks for components with lengthy procurement lead times. However, our limited, and in most cases single-source, supply chain exposes us to multiple potential sources of delivery failure or component shortages for our production, such as those which we experienced in 2012 and 2016 in connection with our slower-than-planned Model S and Model X ramps. Furthermore, unexpected changes in business conditions, materials pricing, labor issues, wars, governmental changes, tariffs, natural disasters such as the March 2011 earthquakes in Japan, health epidemics, and other factors beyond our and our suppliers' control could also affect these suppliers' ability to deliver components to us on a timely basis. The loss of any supplier, particularly a single- or limited-source supplier, or the disruption in the supply of components from our suppliers, could lead to product design changes, production delays of key revenue-generating products, idle manufacturing facilities, and potential loss of access to important technology and parts for producing, servicing and supporting our products, any of which could result in negative publicity, damage to our brand and a material and adverse effect on our business, prospects, financial condition and operating results.

We may also be impacted by changes in our supply chain or production needs. We have experienced in the past, and may experience in the future, cost increases from certain of our suppliers in order to meet our quality targets and development timelines as well as due to our design changes. Likewise, any significant increases in our production, such as for Model 3 and our expectations for Model Y, has required and/or may in the future require us to procure additional components in a short amount of time. Our suppliers may not ultimately be able to sustainably and timely meet our cost, quality and volume needs, requiring us to replace them with other sources. While we believe that we will be able to secure additional or alternate sources of supply for most of our components in a relatively short time frame, there is no assurance that we will be able to do so or develop our own replacements for certain highly customized components. Additionally, we continuously negotiate with existing suppliers to obtain cost reductions and avoid unfavorable changes to terms, seek new and less expensive suppliers for certain parts, and attempt to redesign certain parts to make them less expensive to produce. If we are unsuccessful in our efforts to control and reduce supplier costs, our operating results will suffer.

Outside of the U.S., we have limited manufacturing experience and we may experience issues or delays increasing the level of localized procurement at our Gigafactory Shanghai and in the future at our Gigafactory Berlin. Furthermore, as the scale of our vehicle production increases, we will need to accurately forecast, purchase, warehouse and transport components to our manufacturing facilities and servicing locations internationally and at much higher volumes. If we are unable to accurately match the timing and quantities of component purchases to our actual needs or successfully implement automation, inventory management and other systems to accommodate the increased complexity in our supply chain, we may incur unexpected production disruption, storage, transportation and write-off costs, which could have a material adverse effect on our financial condition and operating results.

***Any problems or delays in expanding Gigafactory Nevada or ramping and maintaining operations there could negatively affect the production and profitability of our products, such as Model 3, Model Y and our energy storage products. In addition, the battery cells produced there store large amounts of energy.***

To lower the cost of cell production and produce cells in high volume, we have vertically integrated the production of lithium-ion cells at Gigafactory Nevada, where we also manufacture battery packs and drive units for certain vehicles and energy storage products and assemble our Megapack product. Production of lithium-ion cells at Gigafactory Nevada began in 2017, and we have no other direct experience in the production of lithium-ion cells. Given the size and complexity of this undertaking, it is possible that future events could result in issues or delays in further ramping our products and expanding production output at Gigafactory Nevada.

In order to achieve our volume and gross margin targets for our vehicles and energy storage products, we must continue to sustain and ramp significant cell production at Gigafactory Nevada, which, among other things, requires Panasonic to successfully operate and further ramp its cell production lines at significant volumes. Although Panasonic has a long track record of producing high-quality cells at significant volume at its factories in Japan, it has relatively limited experience with cell production at Gigafactory Nevada. In addition, we produce several components for Model 3 and Model Y, such as battery modules incorporating the lithium-ion cells produced by Panasonic and drive units (including to support Gigafactory Shanghai production), at Gigafactory Nevada. Some of the manufacturing lines for such components took longer than anticipated to ramp to their full capacity. While we have largely overcome this bottleneck after deploying multiple semi-automated lines and improving our original lines, additional bottlenecks may arise as we continue to increase the production rate and introduce new lines. If we are unable to maintain Gigafactory Nevada production, ramp output additionally over time as needed, and do so cost-effectively, or if we or Panasonic are unable to hire and retain a substantial number of highly skilled personnel, our ability to supply battery packs or other components for Model 3, Model Y and our other products could be negatively impacted, which could negatively affect our brand and harm our business, prospects, financial condition and operating results.

In addition, the high volumes of lithium-ion cells and battery modules and packs manufactured at Gigafactory Nevada are stored and recycled at our various facilities. Any mishandling of battery cells may cause disruption to the operation of such facilities. While we have implemented safety procedures related to the handling of the cells, there can be no assurance that a safety issue or fire related to the cells would not disrupt our operations. Such disruptions or issues could negatively affect our brand and harm our business, prospects, financial condition and operating results.

***Any issues or delays in meeting our projected timelines, costs and production at or funding the ramp of Gigafactory Shanghai, or any difficulties in generating and maintaining local demand for vehicles manufactured there, could adversely impact our business, prospects, operating results and financial condition.***

As part of our continuing work to increase production of our vehicles on a sustained basis, and in order to make them affordable in international markets by accessing local supply chains and workforces, we have established Gigafactory Shanghai in China. Currently, we have installed annual production capacity for 150,000 Model 3 vehicles there that we believe we will eventually be able to push to actual rates of production in excess of such number, and we have commenced construction of the next phase of Gigafactory Shanghai to add Model Y manufacturing capacity at least equivalent to that for Model 3. The ramp and further expansion of Gigafactory Shanghai are subject to a number of uncertainties inherent in all new manufacturing operations, including ongoing compliance with regulatory requirements, maintenance of operational licenses and approvals for additional expansion, potential supply chain constraints, hiring, training and retention of qualified employees, and the pace of bringing production equipment and processes online with the capability to manufacture high-quality units at scale. We have limited experience to date with operating manufacturing facilities abroad, and only recently began to sell Model 3 in China. If we experience any issues or delays in meeting our projected timelines, costs, capital efficiency and production capacity for Gigafactory Shanghai, or in maintaining and complying with the terms of local debt financing that we intend will largely fund it, or in generating and maintaining demand locally for the vehicles we manufacture at Gigafactory Shanghai, our business, prospects, operating results and financial condition could be adversely impacted.

In particular, local manufacturing is critical to our expansion and sales in China, which is the largest market for electric vehicles in the world. Our vehicle sales in China have been negatively impacted in the past by certain tariffs on automobiles manufactured in the U.S., such as our vehicles, and our costs for producing our vehicles in the U.S. have also been affected by import duties on certain components sourced from China. If we are not able to successfully and timely ramp Gigafactory Shanghai, we may continue to be exposed to the impact of such unfavorable tariffs, duties or costs to our detriment compared to locally-based competitors.

***We face risks associated with our international operations, including unfavorable and uncertain regulatory, political, economic, tax and labor conditions, and with establishing ourselves in new markets, all of which could harm our business.***

We have a global footprint with domestic and international operations and subsidiaries. Accordingly, we are subject to a variety of legal, political and regulatory requirements and social, environmental and economic conditions over which we have little control. For example, we may be impacted by trade policies, environmental conditions, political uncertainty and economic cycles involving geographic regions where we have significant operations, which are inherently unpredictable. We are subject to a number of risks associated in particular with international business activities that may increase our costs, impact our ability to sell our products and require significant management attention. These risks include conforming our products to various international regulatory and safety requirements as well as charging and other electric infrastructures, organizing local operating entities, difficulty in establishing, staffing and managing foreign operations, challenges in attracting customers, foreign government taxes, regulations and permit requirements, our ability to enforce our contractual rights, trade restrictions, customs regulations, tariffs and price or exchange controls, and preferences of foreign nations for domestically manufactured products.

***Increases in costs, disruption of supply or shortage of materials, in particular for lithium-ion cells, could harm our business.***

We may experience increases in the cost of or a sustained interruption in the supply or shortage of materials. Any such increase, supply interruption or shortage could materially and negatively impact our business, prospects, financial condition and operating results. We use various materials in our business including aluminum, steel, lithium, nickel, copper and cobalt, as well as lithium-ion cells from suppliers. The prices for these materials fluctuate, and their available supply may be unstable, depending on market conditions and global demand for these materials, including as a result of increased production of electric vehicles and energy storage products by our competitors, and could adversely affect our business and operating results. For instance, we are exposed to multiple risks relating to lithium-ion cells. These risks include:

- an increase in the cost, or decrease in the available supply, of materials used in the cells;
- disruption in the supply of cells due to quality issues or recalls by battery cell manufacturers or any issues that may arise with respect to cells manufactured at our own facilities; and
- fluctuations in the value of any foreign currencies in which battery cell and related raw material purchases are or may be denominated, such as the Japanese yen, against the U.S. dollar.

Our business is dependent on the continued supply of battery cells for the battery packs used in our vehicles and energy storage products. While we believe several sources of the battery cells are available for such battery packs, and expect to eventually rely substantially on battery cells manufactured at our own facilities, we have to date fully qualified only a very limited number of suppliers for the cells used in such battery packs and have very limited flexibility in changing cell suppliers. Any disruption in the supply of battery cells from such suppliers could disrupt production of our vehicles and of the battery packs we produce for energy products until such time as a different supplier is fully qualified. Furthermore, fluctuations or shortages in petroleum and other economic conditions may cause us to experience significant increases in freight charges and material costs. Substantial increases in the prices for our materials or prices charged to us, such as those charged by battery cell suppliers, would increase our operating costs, and could reduce our margins if we cannot recoup the increased costs through increased vehicle prices. Any attempts to increase product prices in response to increased material costs could result in cancellations of orders and reservations and therefore materially and adversely affect our brand, image, business, prospects and operating results.

***If our vehicles or other products that we sell or install fail to perform as expected, our ability to develop, market and sell our products and services could be harmed.***

If our vehicles or our energy products contain defects in design and manufacture that cause them not to perform as expected or that require repair, or certain features of our vehicles such as new Autopilot or FSD features take longer than expected to become enabled, are legally restricted or become subject to onerous regulation, our ability to develop, market and sell our products and services could be harmed. For example, the operation of our vehicles is highly dependent on software, which is inherently complex and may contain latent defects and errors or be subject to external attacks. Issues experienced by vehicle customers have included those related to the software for the 17 inch display screen, as well as the panoramic roof and the 12-volt battery in the Model S and the seats and doors in the Model X. Although we attempt to remedy any issues we observe in our products as effectively and rapidly as possible, such efforts may not be timely, may hamper production or may not be to the satisfaction of our customers. While we have performed extensive internal testing on the products we manufacture, we currently have a limited frame of reference by which to evaluate detailed long-term quality, reliability, durability and performance characteristics of our battery packs, powertrains, vehicles and energy storage products. There can be no assurance that we will be able to detect and fix any defects in our products prior to their sale to or installation for customers.

Any product defects, delays or legal restrictions on product features, or other failure of our products to perform as expected, could harm our reputation and result in delivery delays, product recalls, product liability claims, breach of warranty claims, and significant warranty and other expenses, and could have a material adverse impact on our business, financial condition, operating results and prospects.

***We may become subject to product liability claims, which could harm our financial condition and liquidity if we are not able to successfully defend or insure against such claims.***

Although we design our vehicles to be the safest vehicles on the road, product liability claims, even those without merit, could harm our business, prospects, operating results and financial condition. The automobile industry in particular experiences significant product liability claims and we face inherent risk of exposure to claims in the event our vehicles do not perform or are claimed to not have performed as expected. As is true for other automakers, our vehicles have been involved and we expect in the future will be involved in crashes resulting in death or personal injury, and such crashes where Autopilot or FSD features are engaged are the subject of significant public attention. We have experienced and we expect to continue to face claims arising from or related to misuse or claimed failures of new technologies that we are pioneering, including Autopilot and FSD features in our vehicles. In addition, the battery packs that we produce make use of lithium-ion cells. On rare occasions, lithium-ion cells can rapidly release the energy they contain by venting smoke and flames in a manner that can ignite nearby materials as well as other lithium-ion cells. While we have designed the battery pack to passively contain any single cell's release of energy without spreading to neighboring cells, there can be no assurance that a field or testing failure of our vehicles or other battery packs that we produce will not occur, in particular due to a high-speed crash, which could subject us to lawsuits, product recalls or redesign efforts, all of which would be time consuming and expensive.

Moreover, as our solar energy systems and energy storage products generate and store electricity, they have the potential to cause injury to people or property. A successful product liability claim against us could require us to pay a substantial monetary award. Our risks in this area are particularly pronounced given the relatively limited number of vehicles and energy storage products delivered to date and limited field experience of our products. Moreover, a product liability claim could generate substantial negative publicity about our products and business and could have a material adverse effect on our brand, business, prospects and operating results. In most jurisdictions, we generally self-insure against the risk of product liability claims for vehicle exposure, meaning that any product liability claims will likely have to be paid from company funds, not by insurance.

***The markets in which we operate are highly competitive, and we may not be successful in competing in these industries. We currently face competition from new and established domestic and international competitors and expect to face competition from others in the future, including competition from companies with new technology.***

The worldwide automotive market, particularly for alternative fuel vehicles, is highly competitive today and we expect it will become even more so in the future. There is no assurance that our vehicles will be successful in the respective markets in which they compete. A significant and growing number of established and new automobile manufacturers, as well as other companies, have entered or are reported to have plans to enter the alternative fuel vehicle market, including hybrid, plug-in hybrid and fully electric vehicles, as well as the market for self-driving technology and applications. In some cases, such competitors have announced an intention to produce electric vehicles exclusively at some point in the future. Most of our current and potential competitors have significantly greater financial, technical, manufacturing, marketing, vehicle sales resources and networks than we do and may be able to devote greater resources to the design, development, manufacturing, distribution, promotion, sale and support of their products. In particular, some competitors have also announced plans to compete with us in important and large markets for electric vehicles, such as China and in Europe. Increased competition could result in lower vehicle unit sales, price reductions, revenue shortfalls, loss of customers and loss of market share, which could harm our business, prospects, financial condition and operating results. In addition, Model 3 and Model Y face competition from existing and future automobile manufacturers in the extremely competitive entry-level premium sedan and compact SUV market, including BMW, Ford, Lexus, Mercedes and Volkswagen Group.

The solar and energy storage industries are highly competitive. We face competition from other manufacturers, developers and installers of solar and energy storage systems, as well as from large utilities. Decreases in the retail prices of electricity from utilities or other renewable energy sources could make our products less attractive to customers and lead to an increased rate of customer defaults under our existing long-term leases and PPAs. Moreover, prices for solar product components and prices per kWh for lithium-ion battery cells have declined and may continue to decline, which may adversely impact our ability to cost-effectively manufacture such components ourselves.

***If we are unable to establish and maintain confidence in our long-term business prospects among consumers, analysts and within our industries, or are subject to negative publicity, then our financial condition, operating results, business prospects and access to capital may suffer materially.***

Consumers may be less likely to purchase our products if they are not convinced that our business will succeed or that our service and support and other operations will continue in the long term. Similarly, suppliers and other third parties will be less likely to invest time and resources in developing business relationships with us if they are not convinced that our business will succeed. Accordingly, in order to build and maintain our business, we must maintain confidence among customers, suppliers, analysts, ratings agencies and other parties in our long-term financial viability and business prospects. Maintaining such confidence may be particularly complicated by certain factors including those that are largely outside of our control, such as our limited operating history, customer unfamiliarity with our products, any delays in scaling manufacturing, delivery and service operations to meet demand, competition and uncertainty regarding the future of electric vehicles or our other products and services, and our quarterly production and sales performance compared with market expectations.

In particular, Tesla's products, business, results of operations, statements and actions are well-publicized by a range of third parties. Such attention includes frequent criticism, which is often exaggerated or unfounded, such as speculation regarding the sufficiency or stability of our management team. Any such negative perceptions, whether caused by us or not, could harm our business and make it more difficult to raise additional funds if needed.

***If we fail to effectively grow and manage the residual, financing and credit risks related to our vehicle financing programs, our business may suffer.***

We offer financing arrangements for our vehicles in North America, Europe and Asia primarily through various financial institutions. We also currently offer leasing directly through our local subsidiaries for Model S, Model X and Model 3 in the U.S. and for Model S and Model X in Canada. Under a lease held directly by us, we typically receive only a very small portion of the total vehicle purchase price at the time of lease, followed by a stream of payments over the term of the lease. The profitability of any vehicles returned to us at the end of their leases depends on our ability to accurately project our vehicles' residual values at the outset of the leases, and such values may fluctuate prior to the end of their terms depending on various factors such as supply and demand of our used vehicles, economic cycles and the pricing of new vehicles. For example, we made certain adjustments to our vehicle prices during 2019 to reflect anticipated changes to our cost structure from periodically optimizing our retail strategy, and as a limited accommodation to customers in consideration of a reduction in the electric vehicle federal tax credit. Such pricing changes may impact the residual values of our vehicles. The leasing program also relies on our ability to secure adequate financing and/or business partners to fund and grow this program, and screen for and manage customer credit risk. We expect the availability of leasing and other financing options will be important for our vehicle customers. If we are unable to adequately fund our leasing program with internal funds, or partners or other external financing sources, and compelling alternative financing programs are not available for our customers, we may be unable to grow our deliveries. Furthermore, if our leasing business grows substantially, our business may suffer if we cannot effectively manage the greater levels of residual and credit risks resulting from growth. Finally, if we do not successfully monitor and comply with applicable national, state and/or local financial regulations and consumer protection laws governing lease transactions, we may become subject to enforcement actions or penalties, either of which may harm our business.

Moreover, we have provided resale value guarantees to customers and partners for certain financing programs, under which such counterparties may sell their vehicles back to us at certain points in time at pre-determined amounts. However, actual resale values, as with residual values for leased vehicles, are subject to similar fluctuations over the term of the financing arrangements, such as from the vehicle pricing changes discussed above. If the actual resale values of any vehicles resold or returned to us pursuant to these programs are materially lower than the pre-determined amounts we have offered, our operating results, profitability and/or liquidity could be negatively impacted.

***The unavailability, reduction or elimination of, or unfavorable determinations with respect to, government and economic incentives in the U.S. and abroad supporting the development and adoption of electric vehicles, energy storage products or solar energy could have some impact on demand for our products and services.***

We and our customers currently benefit from certain government and economic incentives supporting the development and adoption of electric vehicles. In the U.S. and abroad, such incentives include tax credits or rebates that encourage the purchase of electric vehicles. Specific policies in place around the world include exempting the purchase of electric vehicles from import taxes, value added taxes, or carbon dioxide and weight-based purchase taxes. Such programs could be reduced, eliminated or exhausted. For example, under current regulations, a \$7,500 federal tax credit that was available in the U.S. for the purchase of our vehicles was reduced in phases during 2019 and ended on December 31, 2019. We believe that this sequential phase-out likely pulled forward some vehicle demand into the periods preceding each reduction. Moreover, in July 2018, a previously available incentive for purchases of Model 3 in Ontario, Canada was cancelled and Tesla buyers in Germany lost access to electric vehicle incentives for a short period of time beginning late 2017. In April 2017 and January 2016, respectively, previously available incentives in Hong Kong and Denmark that favored the purchase of electric vehicles expired, negatively impacting sales. Effective March 2016, California implemented regulations phasing out a \$2,500 cash rebate on qualified electric vehicles for high-income consumers. Such developments could have some negative impact on demand for our vehicles, and we and our customers may have to adjust to them.

In addition, certain governmental rebates, tax credits and other financial incentives that are currently available with respect to our solar and energy storage product businesses allow us to lower our costs and encourage customers to buy our products and investors to invest in our solar financing funds. However, these incentives may expire on a particular date when the allocated funding is exhausted, reduced or terminated as renewable energy adoption rates increase, sometimes without warning. For example, the U.S. federal government currently offers an investment tax credit (ITC) for the installation of solar power facilities and energy storage systems that are charged from a co-sited solar power facility; however, the ITC is currently scheduled to decline in phases, from 26% for qualifying solar systems for which construction began by December 31, 2020, to 10% for commercial and utility systems and to 0% for customer-owned residential systems for which construction begins after December 31, 2021. Likewise, in jurisdictions where net energy metering is currently available, our customers receive bill credits from utilities for energy that their solar energy systems generate and export to the grid in excess of the electric load they use. Several jurisdictions have reduced, altered or eliminated the benefit available under net energy metering, or have proposed to do so. Such reductions in or termination of governmental incentives could adversely impact our results by making our products less competitive for potential customers, increasing our cost of capital and adversely impacting our ability to attract investment partners and to form new financing funds for our solar and energy storage assets.

Moreover, we and our fund investors claim the ITC and certain state incentives in amounts based on the fair market value of our solar and energy storage systems. Although we obtain independent appraisals to support the claimed fair market values, the relevant governmental authorities have audited such values and in certain cases have determined that they should be lower, and they may do so again in the future. Such determinations may result in adverse tax consequences and/or our obligation to make indemnification or other payments to our funds or fund investors.

***Any failure by us to comply with the terms of our agreement with the Research Foundation for the State University of New York relating to our Gigafactory New York, could result in negative consequences for our business.***

We are party to an operating lease and a research and development agreement through the SUNY Foundation. These agreements provide for the construction and use of our Gigafactory in Buffalo, New York, which we have primarily used for the development and production of our Solar Roof and other solar products and components, energy storage components, and Supercharger components, and for other lessor-approved functions. Under this agreement, we are obligated to, among other things, directly employ specified minimum numbers of personnel in the State of New York and spend or incur \$5.0 billion in combined capital, operational expenses, costs of goods sold and other costs in the State of New York during the 10-year period beginning April 30, 2018. While we expect significant operations at Gigafactory New York and the surrounding Buffalo area to continue, including with our ramp and manufacture of the Solar Roof, if we fail in any year over the course of the term of the agreement to meet these obligations, we would be obligated to pay a “program payment” of \$41.2 million to the SUNY Foundation for such year. Any inability on our part to comply with the requirements of this agreement may result in the payment of significant amounts to the SUNY Foundation, the termination of our lease at Gigafactory New York, and/or the need to adjust certain of our operations, in particular our production ramp of the Solar Roof or Supercharger components. Any of the foregoing events could have a material adverse effect on our business, prospects, financial condition and operating results.

***If we are unable to attract and/or retain key employees and hire qualified personnel, our ability to compete could be harmed.***

The loss of the services of any of our key employees could disrupt our operations, delay the development and introduction of our vehicles and services, and negatively impact our business, prospects and operating results. In particular, we are highly dependent on the services of Elon Musk, our Chief Executive Officer.

None of our key employees is bound by an employment agreement for any specific term and we may not be able to successfully attract and retain senior leadership necessary to grow our business. Our future success depends upon our ability to attract and retain executive officers and other key technology, sales, marketing, engineering, manufacturing and support personnel, especially to support our high-volume manufacture of vehicles, expansion plans and technological innovation, and any failure or delay in doing so could adversely impact our business, prospects, financial condition and operating results.

Key talent may leave Tesla due to various factors, such as a very competitive labor market for talented individuals with automotive or technology experience, or any negative publicity related to us. In California, Nevada and other regions where we have operations, including outside of the U.S., there is increasing competition for individuals with skillsets needed for our business, including specialized knowledge of electric vehicles, software engineering, manufacturing engineering, and other skills such as electrical and building construction expertise. This competition affects our ability to retain and hire key employees. Moreover, we have in the past conducted reductions in force in order to optimize our organizational structure and reduce costs, and certain senior personnel have also departed for various reasons. Our continued success depends upon our continued ability to hire new employees in a timely manner, especially to support our expansion plans, and to retain current employees or replace departed senior employees with qualified and experienced individuals, which is typically a time-consuming process. Additionally, we compete with both mature and prosperous companies that have far greater financial resources than we do and start-ups and emerging companies that promise short-term growth opportunities. Difficulties in retaining or recruiting employees could have an adverse effect on our performance and results.

Finally, our compensation philosophy for all of our personnel reflects our startup origins, with an emphasis on equity-based awards and benefits in order to closely align their incentives with the long-term interests of our stockholders. We have to periodically seek and obtain approval from our stockholders for future increases to the number of awards that may be granted and shares that may be purchased under our equity incentive and employee stock purchase plans. If we are unable to obtain the requisite stockholder approvals to obtain future increases to the number of awards that may be granted and shares that may be purchased under such plans, and compensate our personnel in accordance with our compensation philosophy, our ability to retain and hire qualified personnel would be negatively impacted.

***We are highly dependent on the services of Elon Musk, our Chief Executive Officer.***

We are highly dependent on the services of Elon Musk, our Chief Executive Officer and largest stockholder. Although Mr. Musk spends significant time with Tesla and is highly active in our management, he does not devote his full time and attention to Tesla. Mr. Musk also currently serves as Chief Executive Officer and Chief Technical Officer of Space Exploration Technologies Corp., a developer and manufacturer of space launch vehicles, and is involved in other emerging technology ventures.

***We are continuously expanding and improving our information technology systems and use security measures designed to protect our systems against breaches and cyber-attacks. If these efforts are not successful, our business and operations could be disrupted or our intellectual property could be compromised, as a result of which our operating results and reputation could be harmed.***

We are continuously expanding and improving our information technology systems, including implementing new internally developed systems and deploying such systems globally, to assist us in the management of our business. In particular, our volume production of multiple vehicles necessitates continued development, maintenance and improvement of our information technology systems in the U.S. and abroad, including at Gigafactory Shanghai, such as systems for product data management, procurement, inventory management, production planning and execution, sales, service and logistics, dealer management, financial, tax and regulatory compliance systems. We also maintain information technology measures designed to protect us against intellectual property theft, data breaches and other cyber-attacks. The implementation, maintenance, segregation and improvement of these systems require significant management time, support and cost. Moreover, there are inherent risks associated with developing, improving and expanding our core systems as well as implementing new systems and updating current systems, including the disruption of our data management, procurement, manufacturing execution, finance, supply chain and sales and service processes. These risks may affect our ability to manage our data and inventory, procure parts or supplies or manufacture, sell, deliver and service vehicles, adequately protect our intellectual property or achieve and maintain compliance with, or realize available benefits under, tax laws and other applicable regulations.



We cannot be sure that these systems or their required functionality will be effectively implemented, maintained or expanded as planned. If we do not successfully implement, maintain or expand these systems as planned, our operations may be disrupted, our ability to accurately and/or timely report our financial results could be impaired, and deficiencies may arise in our internal control over financial reporting, which may impact our ability to certify our financial results. Moreover, our proprietary information or intellectual property could be compromised or misappropriated and our reputation may be adversely affected. If these systems or their functionality do not operate as we expect them to, we may be required to expend significant resources to make corrections or find alternative sources for performing these functions.

***Any unauthorized control or manipulation of our products' systems could result in loss of confidence in us and our products and harm our business.***

Our products contain complex information technology systems. For example, our vehicles and energy storage products are designed with built-in data connectivity to accept and install periodic remote updates from us to improve or update their functionality. We have designed, implemented and tested security measures intended to prevent unauthorized access to our information technology networks, our products and their systems. However, hackers have reportedly attempted, and may attempt in the future, to gain unauthorized access to modify, alter and use such networks, products and systems to gain control of, or to change, our products' functionality, user interface and performance characteristics, or to gain access to data stored in or generated by our products. We encourage reporting of potential vulnerabilities in the security of our products via our security vulnerability reporting policy, and we aim to remedy any reported and verified vulnerability. Accordingly, we have received reports of potential vulnerabilities in the past and have attempted to remedy them. However, there can be no assurance that vulnerabilities will not be exploited in the future before they can be identified, or that our remediation efforts are or will be successful.

Any unauthorized access to or control of our products or their systems or any loss of data could result in legal claims or proceedings. In addition, regardless of their veracity, reports of unauthorized access to our products, their systems or data, as well as other factors that may result in the perception that our products, their systems or data are capable of being "hacked," could negatively affect our brand and harm our business, prospects, financial condition and operating results. We have been the subject of such reports in the past.

***We are subject to substantial laws and regulations that could impose substantial costs, legal prohibitions or unfavorable changes upon our operations or products, and any failure to comply with these laws and regulations, including as they evolve, could negatively impact our ability to operate our manufacturing facilities and substantially harm our business and operating results.***

As a manufacturing company, including with respect to our current facilities such as the Fremont Factory, Gigafactory Nevada, Gigafactory New York and Gigafactory Shanghai and our future facility at Gigafactory Berlin, we are or will be subject to complex environmental, manufacturing, health and safety laws and regulations at numerous jurisdictional levels in the U.S., China, Germany and other locations abroad, including laws relating to the use, handling, storage, recycling, disposal and human exposure to hazardous materials and with respect to constructing, expanding and maintaining our facilities. The costs of compliance, including remediating contamination if any is found on our properties and any changes to our operations mandated by new or amended laws, may be significant. We may also face unexpected delays in obtaining permits and approvals required by such laws in connection with our manufacturing facilities, which would hinder our operation of these facilities. Such costs and delays may adversely impact our business prospects and operating results. Furthermore, any violations of these laws may result in substantial fines and penalties, remediation costs, third party damages, or a suspension or cessation of our operations.

In addition, motor vehicles are subject to substantial regulation under international, federal, state and local laws. We incur significant costs in complying with these regulations and may be required to incur additional costs to comply with any changes to such regulations, and any failures to comply could result in significant expenses, delays or fines. We are subject to laws and regulations applicable to the supply, manufacture, import, sale and service of automobiles internationally. For example, in countries outside of the U.S., we are required to meet standards relating to vehicle safety, fuel economy and emissions, among other things, that are often materially different from requirements in the U.S., thus resulting in additional investment into the vehicles and systems to ensure regulatory compliance in those countries. This process may include official review and certification of our vehicles by foreign regulatory agencies prior to market entry, as well as compliance with foreign reporting and recall management systems requirements.

In particular, we offer in our vehicles Autopilot and FSD features that today assist drivers with certain tedious and potentially dangerous aspects of road travel, but which currently require drivers to remain engaged. We are continuing to develop our FSD technology with the goal of achieving full self-driving capability in the future. There is a variety of international, federal and state regulations that may apply to self-driving vehicles, which include many existing vehicle standards that were not originally intended to apply to vehicles that may not have a driver. Such regulations continue to rapidly change, which increases the likelihood of a patchwork of complex or conflicting regulations, or may delay products or restrict self-driving features and availability, any of which could adversely affect our business.

Finally, as a manufacturer and installer of solar generation and energy storage systems and a supplier of electricity generated and stored by the solar energy and energy storage systems we install for customers, we are impacted by federal, state and local regulations and policies concerning electricity pricing, the interconnection of electricity generation and storage equipment with the electric grid, and the sale of electricity generated by third-party owned systems. For example, existing or proposed regulations and policies would permit utilities to limit the amount of electricity generated by our customers with their solar energy systems, charge fees and penalties to our customers relating to the purchase of energy other than from the grid, adjust electricity rate designs such that the price of our solar products may not be competitive with that of electricity from the grid, restrict us and our customers from transacting under our PPAs or qualifying for government incentives and benefits that apply to solar power, and limit or eliminate net energy metering. If such regulations and policies are adopted, or if other regulations and policies that adversely impact the interconnection or use of our solar and energy storage systems are introduced, they could deter potential customers from purchasing our solar and energy storage products, threaten the economics of our existing contracts and cause us to cease solar and energy storage system sales and operations in the relevant jurisdictions, which could harm our business, prospects, financial condition and results of operations.

***Failure to comply with a variety of U.S. and international privacy and consumer protection laws to which we are subject could harm the Company.***

Our privacy policy is posted on our website, and any failure by us or our vendor or other business partners to comply with it or with federal, state or international privacy, data protection or security laws or regulations relating to the collection, use, retention, security and transfer of personally identifiable information could result in regulatory or litigation-related actions against us, legal liability, fines, damages, ongoing audit requirements and other significant costs. Substantial expenses and operational changes may be required in connection with maintaining compliance with such laws, and in particular certain emerging privacy laws are still subject to a high degree of uncertainty as to their interpretation and application. For example, in May 2018, the General Data Protection Regulation began to fully apply to the processing of personal information collected from individuals located in the European Union, and has created new compliance obligations and has significantly increased fines for noncompliance. Similarly, beginning in January 2020, the California Consumer Privacy Act imposes certain legal obligations on our use and processing of personal information related to California residents. Although we take steps to protect the security and integrity of our customers' personal information, we may be required to expend significant resources to comply with data breach requirements if third parties improperly obtain and use the personal information of our customers or we otherwise experience a data loss with respect to customers' personal information. A major breach of our network security and systems could have negative consequences for our business and future prospects, including possible fines, penalties and damages, reduced customer demand for our vehicles and harm to our reputation and brand.

***Our business may be adversely affected by any disruptions caused by union activities.***

It is not uncommon for employees of certain trades at companies such as us to belong to a union, which can result in higher employee costs and increased risk of work stoppages. Moreover, regulations in some jurisdictions outside of the U.S. mandate employee participation in industrial collective bargaining agreements and work councils with certain consultation rights with respect to the relevant companies' operations. Although we work diligently to provide the best possible work environment for our employees, they may still decide to join or seek recognition to form a labor union, or we may be required to become a union signatory. From time to time, labor unions have engaged in campaigns to organize certain of our operations, as part of which such unions have filed unfair labor practice charges against us with the National Labor Relations Board, and they may do so in the future. In September 2019, an administrative law judge issued a recommended decision for Tesla on certain issues and against us on certain others. The National Labor Relations Board has not yet adopted the recommendation and we have appealed certain aspects of the recommended decision. Any unfavorable ultimate outcome for Tesla may have a negative impact on the perception of Tesla's treatment of our employees. Furthermore, we are directly or indirectly dependent upon companies with unionized work forces, such as parts suppliers and trucking and freight companies, and work stoppages or strikes organized by such unions could have a material adverse impact on our business, financial condition or operating results. If a work stoppage occurs, it could delay the manufacture and sale of our products and have a material adverse effect on our business, prospects, operating results or financial condition.

***We may choose to or be compelled to undertake product recalls or take other similar actions, which could adversely affect our brand image and financial performance.***

Any product recall with respect to our products may result in adverse publicity, damage our brand and adversely affect our business, prospects, operating results and financial condition. For example, certain vehicle recalls that we initiated have resulted from various causes, including a component that could prevent the parking brake from releasing once engaged, a concern with the firmware in the restraints control module in certain right-hand-drive vehicles, industry-wide issues with airbags from a particular supplier, Model X seat components that could cause unintended seat movement during a collision, and concerns of corrosion in Model S and Model X power steering assist motor bolts. Furthermore, testing of our products by government regulators or industry groups may require us to initiate product recalls or may result in negative public perceptions about the safety of our products. In the future, we may at various times, voluntarily or involuntarily, initiate a recall if any of our products or our electric vehicle powertrain components that we have provided to other vehicle OEMs, including any systems or parts sourced from our suppliers, prove to be defective or noncompliant with applicable laws and regulations, such as federal motor vehicle safety standards. Such recalls, whether voluntary or involuntary or caused by systems or components engineered or manufactured by us or our suppliers, could involve significant expense and could adversely affect our brand image in our target markets, as well as our business, prospects, financial condition and results of operations.

***Our current and future warranty reserves may be insufficient to cover future warranty claims which could adversely affect our financial performance.***

We provide a manufacturer's warranty on all new and used Tesla vehicles and production powertrain components and systems we sell. In addition, we also provide a warranty on the installation and components of the energy generation and storage systems we sell, and we pass through to our customers the inverter and panel manufacturers' warranties. Finally, we offer a performance guarantee with our leased solar energy systems that compensates a customer on an annual basis if their system does not meet the electricity production guarantees set forth in their PPA or lease. Under these performance guarantees, we bear the risk of electricity production shortfalls resulting from an inverter or panel failure. These risks are exacerbated in the event the panel or inverter manufacturers cease operations or fail to honor their warranties.

If our warranty reserves are inadequate to cover future warranty claims on our products, our business, prospects, financial condition and operating results could be materially and adversely affected. Warranty reserves include our management's best estimate of the projected costs to repair or to replace items under warranty. These estimates are based on actual claims incurred to date and an estimate of the nature, frequency and costs of future claims. Such estimates are inherently uncertain and changes to our historical or projected experience, especially with respect to products such as Model 3, Model Y and the Solar Roof that we have recently introduced and/or that we expect to produce at significantly greater volumes than our past products, may cause material changes to our warranty reserves in the future.

***Our insurance coverage strategy may not be adequate to protect us from all business risks.***

We may be subject, in the ordinary course of business, to losses resulting from products liability, accidents, acts of God and other claims against us, for which we may have no insurance coverage. As a general matter, we do not maintain as much insurance coverage as many other companies do, and in some cases, we do not maintain any at all. Additionally, the policies that we do have may include significant deductibles or self-insured retentions, and we cannot be certain that our insurance coverage will be sufficient to cover all future losses or claims against us. A loss that is uninsured or which exceeds policy limits may require us to pay substantial amounts, which could adversely affect our financial condition and operating results.

***Our financial results may vary significantly from period to period due to fluctuations in our operating costs and other factors.***

We expect our period-to-period financial results to vary based on our operating costs, which we anticipate will fluctuate as the pace at which we continue to design, develop and manufacture new products and increase production capacity by expanding our current manufacturing facilities and adding future facilities, may not be consistent or linear between periods. Additionally, our revenues from period to period may fluctuate as we introduce existing products to new markets for the first time and as we develop and introduce new products. As a result of these factors, we believe that quarter-to-quarter comparisons of our financial results, especially in the short term, are not necessarily meaningful and that these comparisons cannot be relied upon as indicators of future performance. Moreover, our financial results may not meet expectations of equity research analysts, ratings agencies or investors, who may be focused only on quarterly financial results. If any of this occurs, the trading price of our stock could fall substantially, either suddenly or over time.

***Servicing our indebtedness requires a significant amount of cash, and there is no guarantee that we will have sufficient cash flow from our business to pay our substantial indebtedness.***

As of December 31, 2019, we and our subsidiaries had outstanding \$12.49 billion in aggregate principal amount of indebtedness (see Note 12, *Debt*, to the consolidated financial statements included elsewhere in this Annual Report on Form 10-K). Our substantial consolidated indebtedness may increase our vulnerability to any generally adverse economic and industry conditions. We and our subsidiaries may, subject to the limitations in the terms of our existing and future indebtedness, incur additional debt, secure existing or future debt or recapitalize our debt.

Pursuant to their terms, holders of our 1.25% Convertible Senior Notes due 2021, 2.375% Convertible Senior Notes due 2022 and 2.00% Convertible Senior Notes due 2024 (together, the “Tesla Convertible Notes”) may convert their respective Tesla Convertible Notes at their option prior to the scheduled maturities of the respective Tesla Convertible Notes under certain circumstances. Upon conversion of the applicable Tesla Convertible Notes, we will be obligated to deliver cash and/or shares in respect of the principal amounts thereof and the conversion value in excess of such principal amounts on such Tesla Convertible Notes. Moreover, our subsidiary’s Zero-Coupon Convertible Senior Notes due 2020 (the “Subsidiary Convertible Notes”) are convertible into shares of our common stock at a conversion price of \$300.00 per share. Finally, holders of the Tesla Convertible Notes and the Subsidiary Convertible Notes will have the right to require us to repurchase their notes upon the occurrence of a fundamental change at a purchase price equal to 100% of the principal amount of the notes, plus accrued and unpaid interest, if any, to, but not including, the fundamental change purchase date.

Our ability to make scheduled payments of the principal and interest on our indebtedness when due or to make payments upon conversion or repurchase demands with respect to our convertible notes, or to refinance our indebtedness as we may need or desire, depends on our future performance, which is subject to economic, financial, competitive and other factors beyond our control. Our business may not continue to generate cash flow from operations in the future sufficient to satisfy our obligations under our existing indebtedness, and any future indebtedness we may incur, and to make necessary capital expenditures. If we are unable to generate such cash flow, we may be required to adopt one or more alternatives, such as reducing or delaying investments or capital expenditures, selling assets, refinancing or obtaining additional equity capital on terms that may be onerous or highly dilutive. Our ability to refinance existing or future indebtedness will depend on the capital markets and our financial condition at such time. In addition, our ability to make payments may be limited by law, by regulatory authority or by agreements governing our future indebtedness. We may not be able to engage in any of these activities or engage in these activities on desirable terms or at all, which could result in a default on our existing or future indebtedness and have a material adverse effect on our business, results of operations and financial condition.

***Our debt agreements contain covenant restrictions that may limit our ability to operate our business.***

The terms of certain of our credit facilities, including the Credit Agreement, contain, and any of our other future debt agreements may contain, covenant restrictions that limit our ability to operate our business, including restrictions on our ability to, among other things, incur additional debt or issue guarantees, create liens, repurchase stock or make other restricted payments, and make certain voluntary prepayments of specified debt. In addition, under certain circumstances we are required to comply with a fixed charge coverage ratio. As a result of these covenants, our ability to respond to changes in business and economic conditions and engage in beneficial transactions, including to obtain additional financing as needed, may be restricted. Furthermore, our failure to comply with our debt covenants could result in a default under our debt agreements, which could permit the holders to accelerate our obligation to repay the debt. If any of our debt is accelerated, we may not have sufficient funds available to repay it.

***We may need or want to raise additional funds and these funds may not be available to us when we need them. If we cannot raise additional funds when we need or want them, our operations and prospects could be negatively affected.***

The design, manufacture, sale, installation and/or servicing of automobiles, energy storage products and solar products is a capital-intensive business, and the specific timing of cash inflows and outflows may fluctuate substantially from period to period. Until we are consistently generating positive free cash flows, we may need or want to raise additional funds through the issuance of equity, equity-related or debt securities or through obtaining credit from financial institutions to fund, together with our principal sources of liquidity, the costs of developing and manufacturing our current or future vehicles, energy storage products and/or solar products, to pay any significant unplanned or accelerated expenses or for new significant strategic investments, or to refinance our significant consolidated indebtedness, even if not required to do so by the terms of such indebtedness. We need sufficient capital to fund ongoing operations, research and development projects for new products, establishment and/or increases of Model 3 and Model Y production capacity at the Fremont Factory and at Gigafactory Shanghai, the continued expansion of Gigafactory Nevada, the construction of Gigafactory Berlin, the manufacturing ramp of the Solar Roof at Gigafactory New York, and the continued expansion of our retail and service locations, body shops, Mobile Service fleet and Supercharger network. We cannot be certain that additional funds will be available to us on favorable terms when required, or at all. If we cannot raise additional funds when we need them, our financial condition, results of operations, business and prospects could be materially and adversely affected.

***We could be subject to liability, penalties and other restrictive sanctions and adverse consequences arising out of certain governmental investigations and proceedings.***

We are cooperating with certain government investigations as discussed in Note 16, *Commitments and Contingencies*, to the consolidated financial statements included elsewhere in this Annual Report on Form 10-K. To our knowledge, no government agency in any such ongoing investigation has concluded that any wrongdoing occurred. However, we cannot predict the outcome or impact of any such ongoing matters, and there exists the possibility that we could be subject to liability, penalties and other restrictive sanctions and adverse consequences if the SEC, the DOJ, or any other government agency were to pursue legal action in the future. Moreover, we expect to incur costs in responding to related requests for information and subpoenas, and if instituted, in defending against any governmental proceedings.

For example, on October 16, 2018, the U.S. District Court for the Southern District of New York entered a final judgment approving the terms of a settlement filed with the Court on September 29, 2018, in connection with the actions taken by the SEC relating to Mr. Musk's statement on August 7, 2018 that he was considering taking Tesla private. Pursuant to the settlement, we, among other things, paid a civil penalty of \$20 million, appointed an independent director as the Chair of the Board, appointed two additional independent directors to our board of directors, and made further enhancements to our disclosure controls and other corporate governance-related matters. On April 26, 2019, this settlement was amended to clarify certain of the previously-agreed disclosure procedures, which was subsequently approved by the Court. All other terms of the prior settlement were reaffirmed without modification. Although we intend to continue to comply with the terms and requirements of the settlement, if there is a lack of compliance or an alleged lack of compliance, additional enforcement actions or other legal proceedings may be instituted against us.

***If we update or discontinue the use of our manufacturing equipment more quickly than expected, we may have to shorten the useful lives of any equipment to be retired as a result of any such update, and the resulting acceleration in our depreciation could negatively affect our financial results.***

We have invested and expect to continue to invest significantly in what we believe is state of the art tooling, machinery and other manufacturing equipment for our various product lines, and we depreciate the cost of such equipment over their expected useful lives. However, manufacturing technology may evolve rapidly, and we may decide to update our manufacturing process with cutting-edge equipment more quickly than expected. Moreover, we are continually implementing learnings as our engineering and manufacturing expertise and efficiency increase, which may result in our ability to manufacture our products using less of our currently installed equipment. Alternatively, as we ramp and mature the production of our products to higher levels, our learnings may cause us to discontinue the use of already installed equipment in favor of different or additional equipment. The useful life of any equipment that would be retired early as a result would be shortened, causing the depreciation on such equipment to be accelerated, and our results of operations could be negatively impacted.

***We are exposed to fluctuations in currency exchange rates, which could negatively affect our financial results.***

We transact business globally in multiple currencies and have foreign currency risks related to our revenue, costs of revenue and operating expenses denominated in currencies other than the U.S. dollar, primarily the euro, Japanese yen, Canadian dollar, Chinese yuan and Norwegian krone. To the extent we have significant revenues denominated in such foreign currencies, any strengthening of the U.S. dollar would tend to reduce our revenues as measured in U.S. dollars, as we have historically experienced. In addition, a portion of our costs and expenses have been, and we anticipate will continue to be, denominated in foreign currencies, including the Japanese yen. If we do not have fully offsetting revenues in these currencies and if the value of the U.S. dollar depreciates significantly against these currencies, our costs as measured in U.S. dollars as a percent of our revenues will correspondingly increase and our margins will suffer. Moreover, while we undertake limited hedging activities intended to offset the impact of currency translation exposure, it is impossible to predict or eliminate such impact. As a result, our operating results could be adversely affected.

***We may face regulatory limitations on our ability to sell vehicles directly which could materially and adversely affect our ability to sell our electric vehicles.***

We sell our vehicles directly to consumers using means that we believe will maximize our reach, currently including through our website and our own stores. While we intend to continue to leverage our most effective sales strategies, we may not be able to sell our vehicles through our own stores in each state in the U.S., as some states have laws that may be interpreted to impose limitations on this direct-to-consumer sales model. In some states, we have also opened galleries to educate and inform customers about our products, but such locations do not actually transact in the sale of vehicles. The application of these state laws to our operations continues to be difficult to predict. Laws in some states have limited our ability to obtain dealer licenses from state motor vehicle regulators and may continue to do so.

In addition, decisions by regulators permitting us to sell vehicles may be challenged by dealer associations and others as to whether such decisions comply with applicable state motor vehicle industry laws. We have prevailed in many of these lawsuits and such results have reinforced our continuing belief that state laws were not designed to prevent our distribution model. In some states, there have also been regulatory and legislative efforts by dealer associations to propose laws that, if enacted, would prevent us from obtaining dealer licenses in their states given our current sales model. A few states have passed legislation that clarifies our ability to operate, but at the same time limits the number of dealer licenses we can obtain or stores that we can operate.

Internationally, there may be laws in jurisdictions we have not yet entered or laws we are unaware of in jurisdictions we have entered that may restrict our sales or other business practices. Even for those jurisdictions we have analyzed, the laws in this area can be complex, difficult to interpret and may change over time. Continued regulatory limitations and other obstacles interfering with our ability to sell vehicles directly to consumers could have a negative and material impact our business, prospects, financial condition and results of operations.

***We may need to defend ourselves against intellectual property infringement claims, which may be time-consuming and could cause us to incur substantial costs.***

Others, including our competitors, may hold or obtain patents, copyrights, trademarks or other proprietary rights that could prevent, limit or interfere with our ability to make, use, develop, sell or market our products and services, which could make it more difficult for us to operate our business. From time to time, the holders of such intellectual property rights may assert their rights and urge us to take licenses, and/or may bring suits alleging infringement or misappropriation of such rights. While we endeavor to obtain and protect the intellectual property rights that we expect will allow us to retain or advance our strategic initiatives, there can be no assurance that we will be able to adequately identify and protect the portions of intellectual property that are strategic to our business, or mitigate the risk of potential suits or other legal demands by our competitors. Accordingly, we may consider the entering into licensing agreements with respect to such rights, although no assurance can be given that such licenses can be obtained on acceptable terms or that litigation will not occur, and such licenses and associated litigation could significantly increase our operating expenses. In addition, if we are determined to have or believe there is a high likelihood that we have infringed upon a third party's intellectual property rights, we may be required to cease making, selling or incorporating certain components or intellectual property into the goods and services we offer, to pay substantial damages and/or license royalties, to redesign our products and services, and/or to establish and maintain alternative branding for our products and services. In the event that we were required to take one or more such actions, our business, prospects, operating results and financial condition could be materially adversely affected. In addition, any litigation or claims, whether or not valid, could result in substantial costs, negative publicity and diversion of resources and management attention.

***Our facilities or operations could be adversely affected by events outside of our control, such as natural disasters, wars or health epidemics.***

We may be impacted by natural disasters, wars, health epidemics or other events outside of our control. For example, our corporate headquarters, the Fremont Factory and Gigafactory Nevada are located in seismically active regions in Northern California and Nevada, and our Gigafactory Shanghai is located in a flood-prone area. If major disasters such as earthquakes, floods or other events occur, or our information system or communications network breaks down or operates improperly, our headquarters and production facilities may be seriously damaged, or we may have to stop or delay production and shipment of our products. In addition, beginning in late 2019, the media has reported a public health epidemic originating in China, prompting precautionary government-imposed closures of certain travel and business. Gigafactory Shanghai was closed for a brief time as a result, before it reopened in February 2020 and rejoined our U.S. factories, which had continued to operate. It is unknown whether and how global supply chains, particularly for automotive parts, may be affected if such an epidemic persists for an extended period of time. We may incur expenses or delays relating to such events outside of our control, which could have a material adverse impact on our business, operating results and financial condition.

**Risks Related to the Ownership of Our Common Stock**

***The trading price of our common stock is likely to continue to be volatile.***

The trading price of our common stock has been highly volatile and could continue to be subject to wide fluctuations in response to various factors, some of which are beyond our control. Our common stock has experienced an intra-day trading high of \$968.99 per share and a low of \$176.99 per share over the last 52 weeks. The stock market in general, and the market for technology companies in particular, has experienced extreme price and volume fluctuations that have often been unrelated or disproportionate to the operating performance of those companies. In particular, a large proportion of our common stock has been and may continue to be traded by short sellers which may put pressure on the supply and demand for our common stock, further influencing volatility in its market price. Public perception and other factors outside of our control may additionally impact the stock price of companies like us that garner a disproportionate degree of public attention, regardless of actual operating performance. In addition, in the past, following periods of volatility in the overall market and the market price of a particular company's securities, securities class action litigation has often been instituted against these companies. Moreover, stockholder litigation like this has been filed against us in the past. While we defend such actions vigorously, any judgment against us or any future stockholder litigation could result in substantial costs and a diversion of our management's attention and resources.

***We may fail to meet our publicly announced guidance or other expectations about our business, which could cause our stock price to decline.***

We may provide from time to time guidance regarding our expected financial and business performance, which may include projections regarding sales and production, as well as anticipated future revenues, gross margins, profitability and cash flows. Correctly identifying key factors affecting business conditions and predicting future events is inherently an uncertain process, and our guidance may not ultimately be accurate and has in the past been inaccurate in certain respects, such as the timing of new product manufacturing ramps. Our guidance is based on certain assumptions such as those relating to anticipated production and sales volumes (which generally are not linear throughout a given period), average sales prices, supplier and commodity costs, and planned cost reductions. If our guidance is not accurate or varies from actual results due to our inability to meet our assumptions or the impact on our financial performance that could occur as a result of various risks and uncertainties, the market value of our common stock could decline significantly.



***Transactions relating to our convertible notes may dilute the ownership interest of existing stockholders, or may otherwise depress the price of our common stock.***

The conversion of some or all of the Tesla Convertible Notes or the Subsidiary Convertible Notes would dilute the ownership interests of existing stockholders to the extent we deliver shares upon conversion of any of such notes. Our Subsidiary Convertible Notes have been historically, and the other Tesla Convertible Notes may become in the future, convertible at the option of their holders prior to their scheduled terms under certain circumstances. If holders elect to convert their convertible notes, we could be required to deliver to them a significant number of shares of our common stock. Any sales in the public market of the common stock issuable upon such conversion could adversely affect prevailing market prices of our common stock. In addition, the existence of the convertible notes may encourage short selling by market participants because the conversion of such notes could be used to satisfy short positions, or anticipated conversion of such notes into shares of our common stock could depress the price of our common stock.

Moreover, in connection with each issuance of the Tesla Convertible Notes, we entered into convertible note hedge transactions, which are expected to reduce the potential dilution and/or offset potential cash payments we are required to make in excess of the principal amount upon conversion of the applicable Tesla Convertible Notes. We also entered into warrant transactions with the hedge counterparties, which could separately have a dilutive effect on our common stock to the extent that the market price per share of our common stock exceeds the applicable strike price of the warrants on the applicable expiration dates. In addition, the hedge counterparties or their affiliates may enter into various transactions with respect to their hedge positions, which could also cause or prevent an increase or a decrease in the market price of our common stock or the convertible notes.

***Elon Musk has pledged shares of our common stock to secure certain bank borrowings. If Mr. Musk were forced to sell these shares in order to satisfy his loan obligations, such sales could cause our stock price to decline.***

Certain banking institutions have made extensions of credit to Elon Musk, our Chief Executive Officer, a portion of which was used to purchase shares of common stock in certain of our public offerings and private placements at the same prices offered to third party participants in such offerings and placements. We are not a party to these loans, which are partially secured by pledges of a portion of the Tesla common stock currently owned by Mr. Musk. If the price of our common stock were to decline substantially, Mr. Musk may be forced by one or more of the banking institutions to sell shares of Tesla common stock to satisfy his loan obligations if he could not do so through other means. Any such sales could cause the price of our common stock to decline further.

***Anti-takeover provisions contained in our governing documents, applicable laws and our convertible notes could impair a takeover attempt.***

Our certificate of incorporation and bylaws afford certain rights and powers to our board of directors that could contribute to the delay or prevention of an acquisition that it deems undesirable. We are also subject to Section 203 of the Delaware General Corporation Law and other provisions of Delaware law that limit the ability of stockholders in certain situations to effect certain business combinations. In addition, the terms of our convertible notes require us to repurchase such notes in the event of a fundamental change, including a takeover of our company. Any of the foregoing provisions and terms that has the effect of delaying or deterring a change in control could limit the opportunity for our stockholders to receive a premium for their shares of our common stock, and could also affect the price that some investors are willing to pay for our common stock.

#### **ITEM 1B. UNRESOLVED STAFF COMMENTS**

None.

## ITEM 2. PROPERTIES

We are headquartered in Palo Alto, California. Our principal facilities include a large number of properties in North America, Europe and Asia utilized for manufacturing and assembly, warehousing, engineering, retail and service locations, Supercharger sites, and administrative and sales offices. Our facilities are used to support both of our reporting segments, and are suitable and adequate for the conduct of our business. We primarily lease such facilities with the exception of some manufacturing facilities. The following table sets forth the location of our primary owned and leased manufacturing facilities.

Primary Manufacturing Facilities	Location	Owned or Leased
Fremont Factory	Fremont, California	Owned
Gigafactory Nevada	Sparks, Nevada	Owned
Gigafactory New York	Buffalo, New York	Leased
Gigafactory Shanghai	Shanghai, China	*

\* We own the building and the land use rights with an initial term of 50 years. The land use rights are treated as operating lease right-of-use assets.

## ITEM 3. LEGAL PROCEEDINGS

For a description of our material pending legal proceedings, please see Note 16, *Commitments and Contingencies*, to the consolidated financial statements included elsewhere in this Annual Report on Form 10-K.

In addition, the following matters are being disclosed pursuant to Item 103 of Regulation S-K because they relate to environmental regulations and aggregate civil penalties could potentially exceed \$100,000.

The Bay Area Air Quality Management District (the “BAAQMD”) has issued notices of violation to us relating to air permitting for the Fremont Factory, but has not initiated formal proceedings. We dispute certain of these allegations and are working to resolve them with the BAAQMD. Further, we assert that there has been no related adverse community or environmental impact. While we cannot predict the outcome of this matter, including the final amount of any penalties, it is not expected to have a material adverse impact on our business.

We have also received an information request from the U.S. Environmental Protection Agency (the “EPA”) under Section 114(a) of the Clean Air Act of 1963, as amended (the “Clean Air Act”). The EPA is reviewing the compliance of our Fremont Factory operations with applicable requirements under the Clean Air Act, and we are working with the EPA in responding to this request. While the outcome of this matter cannot be determined at this time, it is not currently expected to have a material adverse impact on our business.

## ITEM 4. MINE SAFETY DISCLOSURES

Not applicable.

## **PART II**

### **ITEM 5. MARKET FOR REGISTRANT'S COMMON EQUITY, RELATED STOCKHOLDER MATTERS AND ISSUER PURCHASES OF EQUITY SECURITIES**

#### **Market Information**

Our common stock has traded on The NASDAQ Global Select Market under the symbol "TSLA" since it began trading on June 29, 2010. Our initial public offering was priced at \$17.00 per share on June 28, 2010.

#### **Holders**

As of February 7, 2020, there were 1,685 holders of record of our common stock. A substantially greater number of holders of our common stock are "street name" or beneficial holders, whose shares are held by banks, brokers and other financial institutions.

#### **Dividend Policy**

We have never declared or paid cash dividends on our common stock. We currently do not anticipate paying any cash dividends in the foreseeable future. Any future determination to declare cash dividends will be made at the discretion of our board of directors, subject to applicable laws, and will depend on our financial condition, results of operations, capital requirements, general business conditions and other factors that our board of directors may deem relevant.

#### **Stock Performance Graph**

*This performance graph shall not be deemed "filed" for purposes of Section 18 of the Securities Exchange Act of 1934, as amended (the "Exchange Act"), or incorporated by reference into any filing of Tesla, Inc. under the Securities Act of 1933, as amended (the "Securities Act"), or the Exchange Act, except as shall be expressly set forth by specific reference in such filing.*

The following graph shows a comparison, from January 1, 2015 through December 31, 2019, of the cumulative total return on our common stock, The NASDAQ Composite Index and a group of all public companies sharing the same SIC code as us, which is SIC code 3711, “Motor Vehicles and Passenger Car Bodies” (Motor Vehicles and Passenger Car Bodies Public Company Group). Such returns are based on historical results and are not intended to suggest future performance. Data for The NASDAQ Composite Index and the Motor Vehicles and Passenger Car Bodies Public Company Group assumes an investment of \$100 on January 1, 2015 and reinvestment of dividends. We have never declared or paid cash dividends on our common stock nor do we anticipate paying any such cash dividends in the foreseeable future.

**Unregistered Sales of Equity Securities**

None.

**Purchases of Equity Securities by the Issuer and Affiliated Purchasers**

None.

## ITEM 6. SELECTED CONSOLIDATED FINANCIAL DATA

The following selected consolidated financial data should be read in conjunction with “Management’s Discussion and Analysis of Financial Condition and Results of Operations” and the consolidated financial statements and the related notes included elsewhere in this Annual Report on Form 10-K and from the historical consolidated financial statements not included herein to fully understand factors that may affect the comparability of the information presented below (in millions, except per share data).

	Year Ended December 31,				
	2019 (3)	2018 (2)	2017	2016 (1)	2015
<b>Consolidated Statements of Operations Data:</b>					
Total revenues	\$ 24,578	\$ 21,461	\$ 11,759	\$ 7,000	\$ 4,046
Gross profit	\$ 4,069	\$ 4,042	\$ 2,223	\$ 1,599	\$ 924
Loss from operations	\$ (69)	\$ (388)	\$ (1,632)	\$ (667)	\$ (717)
Net loss attributable to common stockholders	\$ (862)	\$ (976)	\$ (1,962)	\$ (675)	\$ (889)
Net loss per share of common stock attributable to common stockholders, basic and diluted	\$ (4.92)	\$ (5.72)	\$ (11.83)	\$ (4.68)	\$ (6.93)
Weighted average shares used in computing net loss per share of common stock, basic and diluted	177	171	166	144	128

	As of December 31,				
	2019 (3)	2018 (2)	2017	2016 (1)	2015
<b>Consolidated Balance Sheet Data:</b>					
Working (deficit) capital	\$ 1,436	\$ (1,686)	\$ (1,104)	\$ 433	\$ (29)
Total assets	34,309	29,740	28,655	22,664	8,068
Total long-term obligations	15,532	13,434	15,348	10,923	4,126

- (1) We acquired SolarCity Corporation (“SolarCity”) on November 21, 2016. SolarCity’s financial results have been included in our financial results from the acquisition date as previously reported in our Annual Report on Form 10-K for the year ended December 31, 2016.

- (2) We adopted ASC 606 in 2018. Prior periods have not been revised. See Note 2, *Summary of Significant Accounting Policies*, of the notes to the consolidated financial statements included elsewhere in this Annual Report on Form 10-K for further details.

- (3) Includes the impact of the adoption of the new lease accounting standard in 2019. Prior periods have not been revised. See Note 2, *Summary of Significant Accounting Policies*, of the notes to the consolidated financial statements included elsewhere in this Annual Report on Form 10-K for further details.

## **ITEM 7. MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS**

*The following discussion and analysis should be read in conjunction with the consolidated financial statements and the related notes included elsewhere in this Annual Report on Form 10-K. For discussion related to changes in financial condition and the results of operations for fiscal year 2017-related items, refer to Part II, Item 7.*

*Management's Discussion and Analysis of Financial Condition and Results of Operations in our Annual Report on Form 10-K for fiscal year 2018, which was filed with the Securities and Exchange Commission on February 19, 2019.*

### **Overview and 2019 Highlights**

Our mission is to accelerate the world's transition to sustainable energy. We design, develop, manufacture, lease and sell high-performance fully electric vehicles, solar energy generation systems and energy storage products. We also offer maintenance, installation, operation and other services related to our products.

#### *Automotive*

During 2019, we achieved annual vehicle delivery and production records of 367,656 and 365,232 total vehicles, respectively. We also laid the groundwork for our next phase of growth with the commencement of Model 3 production at Gigafactory Shanghai; preparations at the Fremont Factory for Model Y production, which commenced in the first quarter of 2020; the selection of Berlin, Germany as the site for our next factory for the European market; and the unveiling of Cybertruck. We also continued to enhance our user experience through improved Autopilot and FSD features, including the introduction of a new powerful on-board FSD computer and a new Smart Summon feature, and the expansion of a unique set of in-car entertainment options.

#### *Energy Generation and Storage*

We revamped key aspects of our solar operations in 2019 by streamlining traditionally complex ordering, permitting, installation and back-end service processes to enhance the customer experience, especially for retrofit solar installations. Our solar deployments grew approximately 48% and 26%, quarter-over-quarter, in the second half of the year. We also deployed 1.65 GWh of energy storage in 2019, more than the aggregate of all prior years. Finally, we further evolved our product offerings by launching the third generation of the Solar Roof, for which we are expanding both our manufacturing and installation capabilities, and Megapack, our largest utility-scale energy storage product to date.

### **Management Opportunities, Challenges and Risks and 2020 Outlook**

#### *Automotive—Production*

A key focus in 2020 will be our efforts towards establishing and expanding capacity for vehicle production at volume across three continents. At the Fremont Factory, we commenced Model Y production earlier than anticipated, and combined with Model 3, we have installed annual production capacity for 400,000 vehicles. We expect to further increase this capacity to 500,000 vehicles through the installation of additional equipment.

At Gigafactory Shanghai, we have installed annual production capacity for 150,000 Model 3 vehicles that we believe we will eventually be able to push to actual rates of production in excess of such number, subject to local production of battery packs, which we began ramping there later than other processes. We have commenced construction of the next phase of Gigafactory Shanghai to add Model Y manufacturing capacity at least equivalent to that for Model 3. To finance our construction and expansion, in December 2019 our local subsidiary entered into a RMB 9.0 billion (or the equivalent amount in U.S. dollars) fixed asset term facility and a RMB 2.25 billion (or the equivalent amount in U.S. dollars) working capital revolving facility, part of which was used to repay a RMB 3.5 billion bridge loan entered into in March 2019. We are supplementing such financing with limited direct capital expenditures.

Finally, we have selected Germany as the site of our next factory for manufacturing vehicles for the European market, due to its strong manufacturing and engineering presence. However, the construction of and ramp at Gigafactory Berlin, as well as at Gigafactory Shanghai, are subject to a number of uncertainties inherent in all new manufacturing operations, including ongoing compliance with regulatory requirements, maintenance of operational licenses and approvals for additional expansion, potential supply chain constraints, hiring, training and retention of qualified employees, and the pace of bringing production equipment and processes online with the capability to manufacture high-quality units at scale. Ultimately, achieving increased total vehicle production cost-effectively across all of our manufacturing operations will require that we timely address any bottlenecks that may arise as we ramp, establish and maintain sustained supplier capacity, and successfully utilize manufacturing processes at the maximum output rates that we have planned for them.

#### *Automotive—Demand and Sales*

As the automotive industry continues to validate and grow the market for electric vehicles, we are generating demand and new customers even without traditional marketing and with relatively low marketing costs, and in 2019 our orders shifted to originating mostly from new customers without prior reservations. Production at Gigafactory Shanghai allows us to offer Model 3 in China at competitive local pricing and more quickly, which should drive further demand and opportunity in the world's largest market for mid-sized premium sedans, and we expect a similar impact in China for Model Y when we commence production there of this offering in the popular compact SUV segment.

Moreover, the significant interest generated by our unveiling of Cybertruck demonstrated our brand visibility, innovation and viability across an increasing range of vehicle segments. Meanwhile, we are making our existing vehicles incrementally more compelling, including through a planned software update for FSD-enabled vehicles to react to traffic lights and stop signs and navigate city intersections, and additional functionality of both in-vehicle software and the Tesla mobile app.

On the other hand, we may be impacted by trade and environmental policies, political uncertainty and economic cycles involving geographic regions where we have significant operations, which are inherently unpredictable. Sales of vehicles in the automotive industry also tend to be cyclical in many markets, which may expose us to increased volatility. Specifically, it is uncertain as to how such macroeconomic factors will impact us as a company that has been experiencing growth and increasing market share in an industry that has globally been experiencing a recent decline in sales. Finally, we make certain adjustments to our prices from time to time in the ordinary course of business, including as we introduce new vehicles and variants and optimize the pricing among them. Such pricing changes may impact our vehicles' resale values, and in turn our operating results. For example, if price reductions result in an increase to our estimates of the volume of vehicles that may potentially be returned to us under pre-existing resale value guarantees provided to customers and partners for certain financing programs, our gross profits may be reduced.

#### *Automotive—Deliveries and Customer Infrastructure*

We continue to optimize our manufacturing and global delivery patterns to address higher volumes of our predominantly single-factory production at the Fremont Factory. We expect to alleviate any related issues through local production at Gigafactory Shanghai and eventually at Gigafactory Berlin.

We also continue to expand and invest in our servicing and charging locations and capabilities to keep pace with our customer vehicle fleet and ensure a convenient and efficient customer experience. However, if our customer vehicles, particularly in the rapidly growing Model 3 fleet, experience unexpected reliability issues, it could outpace and overburden our servicing capabilities and parts inventory.

#### *Energy Generation and Storage Demand, Production and Deployment*

We expect to continue to grow our retrofit solar system deployments as we execute our new strategy, including through compelling financing options such as a subscription-based offering, which is currently available in California.

We are focused on training our personnel and third party partners to ramp installations of our Solar Roof, and are also hiring rapidly for its ongoing manufacturing ramp at Gigafactory New York. We expect such ramp will support our significant operations and our compliance with minimum hiring and cumulative investment targets under our agreement with the SUNY Foundation related to the construction and use of Gigafactory New York. However, if our expectations as to the costs and timelines of our investment and operations at Buffalo or our production ramp of the Solar Roof prove incorrect, we may incur additional expenses or substantial payments to the SUNY Foundation.

Finally, with the introduction of our 3 MWh Megapack, we now offer an even greater variety of scalable energy storage products with a wide range of markets and applications, and expect this product to drive additional interest from global project developers and utilities.

#### *Trends in Cash Flow, Capital Expenditures and Operating Expenses*

Our capital expenditures are difficult to project beyond the short term, given the number and breadth of our core projects at any given time. For example, the curve of any new product ramp, such as for Model Y and the Solar Roof, is inherently subject to uncertainty of timing, and if we are able to meet various milestones along such ramp more quickly than expected, our capital expenditures may be accelerated. We also continuously evaluate, and as appropriate adjust, our capital expenditures based on, among other things: our manufacturing plans for our various products, which we may rebalance from time to time based on the mix of demand among them and other contingent factors; the pace and prioritization of current projects under development; and the addition of any new projects. Moreover, we are generally increasing the capital efficiency of our projects with experience, and we may find that our actual capital expenditures on new projects are different than previously expected.

Subject to the above, considering the expected pace of the manufacturing ramps for our products, construction and expansion of our factories, and pipeline of announced projects under development, and consistent with our current strategy of using partners to manufacture battery cells, as well as considering all other infrastructure growth, we currently expect our average annual capital expenditures in 2020 and the two succeeding fiscal years to be \$2.5 billion to \$3.5 billion.

We expect operating expenses as a percentage of revenue to continue to decrease in the future as we focus on increasing operational efficiency and process automation, as well as from increases in expected overall revenues from our expanding sales. In particular, our efforts to scale down and optimize our cost structure relative to the size of our business have already manifested in total operating expenses decreasing from \$4.4 billion to \$4.1 billion from fiscal year 2018 to fiscal year 2019, including restructuring and other charges. Meanwhile, our total revenues increased from \$21.5 billion to \$24.6 billion in the same period.

In March 2018, our stockholders approved the 2018 CEO Performance Award, with vesting contingent on achieving market capitalization and operational milestones. We will incur significant non-cash stock-based compensation expense for each tranche under this award after the related operational milestone initially becomes probable of being met, and if later than the grant date, we will also have to record a cumulative catch-up expense at such time. Such catch-up expense may be material depending on the length of time elapsed from the grant date. For example, in the fourth quarter of 2019, as the result of an additional operational milestone becoming probable of achievement, we recorded a cumulative catch-up expense of \$72 million for service provided from the grant date. Moreover, as the expense for a tranche is recorded over the longer of (i) the expected achievement period of the relevant operational milestone and (ii) only if the related market capitalization milestone has not been achieved, its expected achievement period, the achievement of a market capitalization milestone earlier than expected may accelerate the rate at which such expense is recognized. Upon vesting of a tranche, all remaining associated expense will be recognized immediately. See Note 14, *Equity Incentive Plans—2018 CEO Performance Award*, to the consolidated financial statements included elsewhere in this Annual Report on Form 10-K for further details regarding the stock-based compensation relating to the 2018 CEO Performance Award.



## Critical Accounting Policies and Estimates

The consolidated financial statements are prepared in accordance with accounting principles generally accepted in the U.S. (“GAAP”). The preparation of the consolidated financial statements requires us to make estimates and assumptions that affect the reported amounts of assets, liabilities, revenues, costs and expenses and related disclosures. We base our estimates on historical experience, as appropriate, and on various other assumptions that we believe to be reasonable under the circumstances. Changes in the accounting estimates are reasonably likely to occur from period to period. Accordingly, actual results could differ significantly from the estimates made by our management. We evaluate our estimates and assumptions on an ongoing basis. To the extent that there are material differences between these estimates and actual results, our future financial statement presentation, financial condition, results of operations and cash flows will be affected. We believe that the following critical accounting policies involve a greater degree of judgment and complexity than our other accounting policies. Accordingly, these are the policies we believe are the most critical to understanding and evaluating the consolidated financial condition and results of operations.

### *Revenue Recognition*

#### *Adoption of new revenue standard*

On January 1, 2018, we adopted ASC 606, *Revenue from Contracts with Customers*, (“new revenue standard”) using the modified retrospective method. The new revenue standard had a material impact in our consolidated financial statements. For further discussion, refer to Note 2, *Summary of Significant Accounting Policies*, to the consolidated financial statements included elsewhere in this Annual Report on Form 10-K.

#### *Automotive Segment*

##### *Automotive Sales Revenue*

##### *Automotive Sales without Resale Value Guarantee*

Automotive sales revenue includes revenues related to deliveries of new vehicles and pay-per-use charges, and specific other features and services that meet the definition of a performance obligation under the new revenue standard, including access to our Supercharger network, internet connectivity, Autopilot, FSD features and over-the-air software updates. We recognize revenue on automotive sales upon delivery to the customer, which is when the control of a vehicle transfers. Payments are typically received at the point control transfers or in accordance with payment terms customary to the business. Other features and services such as access to our Supercharger network, internet connectivity and over-the-air software updates are provisioned upon control transfer of a vehicle and recognized over time on a straight-line basis as we have a stand-ready obligation to deliver such services to the customer. We recognize revenue related to these other features and services over the performance period, which is generally the expected ownership life of the vehicle or the eight-year life of the vehicle. Revenue related to Autopilot and FSD features is recognized when functionality is delivered to the customer. For our obligations related to automotive sales, we estimate standalone selling price by considering costs used to develop and deliver the service, third-party pricing of similar options and other information that may be available.

At the time of revenue recognition, we reduce the transaction price and record a sales return reserve against revenue for estimated variable consideration related to future product returns based on historical experience. In addition, any fees that are paid or payable by us to a customer’s lender when we arrange the financing are recognized as an offset against automotive sales revenue.

Costs to obtain a contract mainly relate to commissions paid to our sales personnel for the sale of vehicles. Commissions are not paid on other obligations such as access to our Supercharger network, internet connectivity, Autopilot, FSD features and over-the-air software updates. As our contract costs related to automotive sales are typically fulfilled within one year, the costs to obtain a contract are expensed as incurred. Amounts billed to customers related to shipping and handling are classified as automotive revenue, and we have elected to recognize the cost for freight and shipping when control over vehicles, parts, or accessories have transferred to the customer as an expense in cost of revenues. Our policy is to exclude taxes collected from a customer from the transaction price of automotive contracts.

#### Automotive Sales with Resale Value Guarantee or a Buyback Option

We offer resale value guarantees or similar buy-back terms to certain international customers who purchase vehicles and who finance their vehicles through one of our specified commercial banking partners. We also offer resale value guarantees in connection with automotive sales to certain leasing partners. Under these programs, we receive full payment for the vehicle sales price at the time of delivery and our counterparty has the option of selling their vehicle back to us during the guarantee period, which currently is generally at the end of the term of the applicable loan or financing program, for a pre-determined resale value.

With the exception of two programs which are discussed within the *Automotive Leasing* section, we recognize revenue when control transfers upon delivery to customers in accordance with the new revenue standard as a sale with a right of return as we do not believe the customer has a significant economic incentive to exercise the resale value guarantee provided to them. The process to determine whether there is a significant economic incentive includes a comparison of a vehicle's estimated market value at the time the option is exercisable with the guaranteed resale value to determine the customer's economic incentive to exercise. The performance obligations and the pattern of recognizing automotive sales with resale value guarantees are consistent with automotive sales without resale value guarantees with the exception of our estimate for sales return reserve. Sales return reserves for automotive sales with resale value guarantees are estimated based on historical experience plus consideration for expected future market values. On a quarterly basis, we assess the estimated market values of vehicles under our buyback options program to determine whether there have been changes to the likelihood of future product returns. As we accumulate more data related to the buyback values of our vehicles or as market conditions change, there may be material changes to their estimated values. The two programs that are still being recorded as operating leases are discussed in further detail below in *Vehicle Sales to Leasing Partners with a Resale Value Guarantee and a Buyback Option* and *Vehicle Sales to Customers with a Resale Value Guarantee where Exercise is Probable*.

Prior to the adoption of the new revenue standard, all transactions with resale value guarantees were recorded as operating leases. The amount of sale proceeds equal to the resale value guarantee was deferred until the guarantee expired or was exercised. For certain transactions that were considered interest bearing collateralized borrowings as required under ASC 840, *Leases* prior to January 1, 2019, we also accrued interest expense based on our borrowing rate. The remaining sale proceeds were deferred and recognized on a straight-line basis over the stated guarantee period to automotive leasing revenue. The guarantee period expired at the earlier of the end of the guarantee period or the pay-off of the initial loan. We capitalized the cost of these vehicles on the consolidated balance sheet as operating lease vehicles, net, and depreciated their value, less estimated residual value, to cost of automotive leasing revenue over the same period.

In cases where our counterparty retained ownership of the vehicle at the end of the guarantee period, the resale value guarantee liability and any remaining deferred revenue balances related to the vehicle were settled to automotive leasing revenue, and the net book value of the leased vehicle was expensed to cost of automotive leasing revenue. If our counterparty returned the vehicle to us during the guarantee period, we purchased the vehicle from our counterparty in an amount equal to the resale value guarantee and settled any remaining deferred balances to automotive leasing revenue, and we reclassified the net book value of the vehicle on the consolidated balance sheet to used vehicle inventory.

#### Automotive Regulatory Credits

In connection with the production and delivery of our zero emission vehicles in global markets, we have earned and will continue to earn various tradable automotive regulatory credits. We have sold these credits, and will continue to sell future credits, to automotive companies and other regulated entities who can use the credits to comply with emission standards and other regulatory requirements. For example, under California's Zero Emission Vehicle Regulation and those of states that have adopted California's standard, vehicle manufacturers are required to earn or purchase credits, referred to as ZEV credits, for compliance with their annual regulatory requirements. These laws provide that automakers may bank or sell to other regulated parties their excess credits if they earn more credits than the minimum quantity required by those laws. We also earn other types of saleable regulatory credits in the United States and abroad, including greenhouse gas, fuel economy and clean fuels credits. Payments for regulatory credits are typically received at the point control transfers to the customer, or in accordance with payment terms customary to the business. We recognize revenue on the sale of automotive regulatory credits at the time control of the regulatory credits is transferred to the purchasing party as automotive revenue in the consolidated statement of operations.

### Automotive Leasing Revenue

Automotive leasing revenue includes revenue recognized under lease accounting guidance for our direct leasing programs as well as the two programs with resale value guarantees which continue to qualify for operating lease treatment. Prior to the adoption of the new revenue standard, all programs with resale value guarantees were accounted for as operating leases.

### Direct Vehicle Leasing Program

We have outstanding leases under our direct vehicle leasing programs in the U.S., Canada and in certain countries in Europe. As of December 31, 2019, the direct vehicle leasing program is offered for all new Model S, Model X and Model 3 vehicles in the U.S. and new Model S and Model X vehicles in Canada. Qualifying customers are permitted to lease a vehicle directly from Tesla for up to 48 months. At the end of the lease term, customers are required to return the vehicles to us or for Model S and Model X leases, may opt to purchase the vehicles for a pre-determined residual value. We account for these leasing transactions as operating leases. We record leasing revenues to automotive leasing revenue on a straight-line basis over the contractual term, and we record the depreciation of these vehicles to cost of automotive leasing revenue.

We capitalize shipping costs and initial direct costs such as the incremental cost of referral fees and sales commissions from the origination of automotive lease agreements as an element of operating lease vehicles, net, and subsequently amortize these costs over the term of the related lease agreement. Our policy is to exclude taxes collected from a customer from the transaction price of automotive contracts.

### Vehicle Sales to Leasing Partners with a Resale Value Guarantee and a Buyback Option

We offer buyback options in connection with automotive sales with resale value guarantees with certain leasing partner sales in the United States. These transactions entail a transfer of leases, which we have originated with an end-customer, to our leasing partner. As control of the vehicles has not been transferred in accordance with the new revenue standard, these transactions were accounted for as interest bearing collateralized borrowings in accordance with ASC 840, *Leases*, prior to January 1, 2019. Under this program, cash is received for the full price of the vehicle and the collateralized borrowing value is generally recorded within resale value guarantees and the customer upfront down payment is recorded within deferred revenue. We amortize the deferred revenue amount to automotive leasing revenue on a straight-line basis over the option period and accrue interest expense based on our borrowing rate. We capitalize vehicles under this program to operating lease vehicles, net, on the consolidated balance sheets, and we record depreciation from these vehicles to cost of automotive leasing revenue during the period the vehicle is under a lease arrangement. Cash received for these vehicles, net of revenue recognized during the period, is classified as collateralized lease (repayments) borrowings within cash flows from financing activities in the consolidated statements of cash flows. With the adoption of ASC 842 on January 1, 2019, all new agreements under this program are accounted for as operating leases under ASC 842 and there was no material change in the timing and amount of revenue recognized over the term. Consequently, any cash flows for new agreements are classified as operating cash activities on the consolidated statements of cash flows.

At the end of the lease term, we settle our liability in cash by either purchasing the vehicle from the leasing partner for the buyback option amount or paying a shortfall to the option amount the leasing partner may realize on the sale of the vehicle. Any remaining balances within deferred revenue and resale value guarantee will be settled to automotive leasing revenue. The end customers can extend the lease for a period of up to 6 months. In cases where the leasing partner retains ownership of the vehicle after the end of our option period, we expense the net value of the leased vehicle to cost of automotive leasing revenue.

#### Vehicle Sales to Customers with a Resale Value Guarantee where Exercise is Probable

For certain international programs where we have offered resale value guarantees to certain customers who purchased vehicles and where we expect the customer has a significant economic incentive to exercise the resale value guarantee provided to them, we continue to recognize these transactions as operating leases. The process to determine whether there is a significant economic incentive includes a comparison of a vehicle's estimated market value at the time the option is exercisable with the guaranteed resale value to determine the customer's economic incentive to exercise. We have not sold any vehicles under this program since the first half of 2017 and all current period activity relates to the exercise or cancellation of active transactions. The amount of sale proceeds equal to the resale value guarantee is deferred until the guarantee expires or is exercised. The remaining sale proceeds are deferred and recognized on a straight-line basis over the stated guarantee period to automotive leasing revenue. The guarantee period expires at the earlier of the end of the guarantee period or the pay-off of the initial loan. We capitalize the cost of these vehicles on the consolidated balance sheet as operating lease vehicles, net, and depreciate their value, less salvage value, to cost of automotive leasing revenue over the same period.

In cases where a customer retains ownership of a vehicle at the end of the guarantee period, the resale value guarantee liability and any remaining deferred revenue balances related to the vehicle are settled to automotive leasing revenue, and the net book value of the leased vehicle is expensed to cost of automotive leasing revenue. If a customer returns the vehicle to us during the guarantee period, we purchase the vehicle from the customer in an amount equal to the resale value guarantee and settle any remaining deferred balances to automotive leasing revenue, and we reclassify the net book value of the vehicle on the consolidated balance sheets to used vehicle inventory.

#### *Energy Generation and Storage Segment*

##### Energy Generation and Storage Sales

Energy generation and storage sales revenue consists of the sale of solar energy systems and energy storage systems to residential, small commercial, and large commercial and utility grade customers, including solar subscription-based arrangements. Upon adoption of ASC 842, energy generation and storage sales revenue includes agreements for solar energy systems and PPAs that commence after January 1, 2019, as these are now accounted for under the new revenue standard. Sales of solar energy systems to residential and small scale commercial customers consist of the engineering, design, and installation of the system. Post-installation, residential and small scale commercial customers receive a proprietary monitoring system that captures and displays historical energy generation data. Residential and small scale commercial customers pay the full purchase price of the solar energy system upfront. Revenue for the design and installation obligation is recognized when control transfers, which is when we install a solar energy system and the system passes inspection by the utility or the authority having jurisdiction. Revenue for the monitoring service is recognized ratably as a stand-ready obligation over the warranty period of the solar energy system. Sales of energy storage systems to residential and small scale commercial customers consist of the installation of the energy storage system and revenue is recognized when control transfers, which is when the product has been delivered or, if we are performing installation, when installed and commissioned. Payment for such storage systems is made upon invoice or in accordance with payment terms customary to the business.

For large commercial and utility grade solar energy system and energy storage system sales which consist of the engineering, design, and installation of the system, customers make milestone payments that are consistent with contract-specific phases of a project. Revenue from such contracts is recognized over time using the percentage of completion method based on cost incurred as a percentage of total estimated contract costs for energy storage system sales and as a percentage of total estimated labor hours for solar energy system sales. Certain large-scale commercial and utility grade solar energy system and energy storage system sales also include operations and maintenance service which are negotiated with the design and installation contracts and are thus considered to be a combined contract with the design and installation service. For certain large commercial and utility grade solar energy systems and energy storage systems where the percentage of completion method does not apply, revenue is recognized when control transfers, which is when the product has been delivered to the customer and commissioned for energy storage systems and when the project has received permission to operate from the utility for solar energy systems. Operations and maintenance service revenue is recognized ratably over the respective contract term for solar energy system sales and upon delivery of the service for energy storage system sales. Customer payments for such services are usually paid annually or quarterly in advance.

In instances where there are multiple performance obligations in a single contract, we allocate the consideration to the various obligations in the contract based on the relative standalone selling price method. Standalone selling prices are estimated based on estimated costs plus margin or using market data for comparable products. Costs incurred on the sale of residential installations before the solar energy systems are completed are included as work in process within inventory in the consolidated balance sheets. However, any fees that are paid or payable by us to a solar loan lender would be recognized as an offset against revenue. Costs to obtain a contract relate mainly to commissions paid to our sales personnel related to the sale of solar energy systems and energy storage systems. As our contract costs related to solar energy system and energy storage system sales are typically fulfilled within one year, the costs to obtain a contract are expensed as incurred.

As part of our solar energy system and energy storage system contracts, we may provide the customer with performance guarantees that warrant that the underlying system will meet or exceed the minimum energy generation or retention requirements specified in the contract. In certain instances, we may receive a bonus payment if the system performs above a specified level. Conversely, if a solar energy system or energy storage system does not meet the performance guarantee requirements, we may be required to pay liquidated damages. Other forms of variable consideration related to our large commercial and utility grade solar energy system and energy storage system contracts include variable customer payments that will be made based on our energy market participation activities. Such guarantees and variable customer payments represent a form of variable consideration and are estimated at contract inception at their most likely amount and updated at the end of each reporting period as additional performance data becomes available. Such estimates are included in the transaction price only to the extent that it is probable a significant reversal of revenue will not occur.

We record as deferred revenue any non-refundable amounts that are collected from customers related to fees charged for prepayments and remote monitoring service and operations and maintenance service, which is recognized as revenue ratably over the respective customer contract term.

#### Energy Generation and Storage Leasing

For revenue arrangements where we are the lessor under operating lease agreements for energy generation and storage products, we record lease revenue from minimum lease payments, including upfront rebates and incentives earned from such systems, on a straight-line basis over the life of the lease term, assuming all other revenue recognition criteria have been met. The difference between the payments received and the revenue recognized is recorded as deferred revenue on the consolidated balance sheet.

For solar energy systems where customers purchase electricity from us under PPAs prior to January 1, 2019, we have determined that these agreements should be accounted for as operating leases pursuant to ASC 840. Revenue is recognized based on the amount of electricity delivered at rates specified under the contracts, assuming all other revenue recognition criteria are met.

We record as deferred revenue any amounts that are collected from customers, including lease prepayments, in excess of revenue recognized and operations and maintenance service, which is recognized as revenue ratably over the respective customer contract term. Deferred revenue also includes the portion of rebates and incentives received from utility companies and various local and state government agencies, which is recognized as revenue over the lease term.

We capitalize initial direct costs from the execution of agreements for solar energy systems and PPAs, which include the referral fees and sales commissions, as an element of solar energy systems, net, and subsequently amortize these costs over the term of the related agreements.

#### *Inventory Valuation*

Inventories are stated at the lower of cost or net realizable value. Cost is computed using standard cost for vehicles and energy storage products, which approximates actual cost on a first-in, first-out basis. In addition, cost for solar energy systems is recorded using actual cost. We record inventory write-downs for excess or obsolete inventories based upon assumptions about current and future demand forecasts. If our inventory on-hand is in excess of our future demand forecast, the excess amounts are written-off.

We also review our inventory to determine whether its carrying value exceeds the net amount realizable upon the ultimate sale of the inventory. This requires us to determine the estimated selling price of our vehicles less the estimated cost to convert the inventory on-hand into a finished product. Once inventory is written-down, a new, lower cost basis for that inventory is established and subsequent changes in facts and circumstances do not result in the restoration or increase in that newly established cost basis.

Should our estimates of future selling prices or production costs change, additional and potentially material increases to this reserve may be required. A small change in our estimates may result in a material charge to our reported financial results.

#### *Warranties*

We provide a manufacturer's warranty on all new and used vehicles and production powertrain components and systems we sell. In addition, we also provide a warranty on the installation and components of the energy generation and storage systems we sell for periods typically between 10 to 25 years. We accrue a warranty reserve for the products sold by us, which includes our best estimate of the projected costs to repair or replace items under warranties and recalls when identified. These estimates are based on actual claims incurred to date and an estimate of the nature, frequency and costs of future claims. These estimates are inherently uncertain given our relatively short history of sales, and changes to our historical or projected warranty experience may cause material changes to the warranty reserve in the future. The warranty reserve does not include projected warranty costs associated with our vehicles subject to lease accounting and our solar energy systems under lease contracts or PPAs, as the costs to repair these warranty claims are expensed as incurred. The portion of the warranty reserve expected to be incurred within the next 12 months is included within accrued liabilities and other, while the remaining balance is included within other long-term liabilities on the consolidated balance sheets. Warranty expense is recorded as a component of cost of revenues in the consolidated statements of operations.

#### *Stock-Based Compensation*

We use the fair value method of accounting for our stock options and restricted stock units ("RSUs") granted to employees and our employee stock purchase plan (the "ESPP") to measure the cost of employee services received in exchange for the stock-based awards. The fair value of stock option awards with only service and/or performance conditions and ESPP is estimated on the grant or offering date using the Black-Scholes option-pricing model. The Black-Scholes option-pricing model requires inputs such as the risk-free interest rate, expected term and expected volatility. These inputs are subjective and generally require significant judgment. The fair value of RSUs is measured on the grant date based on the closing fair market value of our common stock. The resulting cost is recognized over the period during which an employee is required to provide service in exchange for the awards, usually the vesting period, which is generally four years for stock options and RSUs and six months for the ESPP. Stock-based compensation expense is recognized on a straight-line basis, net of actual forfeitures in the period.

For performance-based awards, stock-based compensation expense is recognized over the expected performance achievement period of individual performance milestones when the achievement of each individual performance milestone becomes probable. For performance-based awards with a vesting schedule based entirely on the attainment of both performance and market conditions, stock-based compensation expense associated with each tranche is recognized over the longer of (i) the expected achievement period for the operational milestone for such tranche and (ii) the expected achievement period for the related market capitalization milestone determined on the grant date, beginning at the point in time when the relevant operational milestone is considered probable of being met. If such operational milestone becomes probable any time after the grant date, we will recognize a cumulative catch-up expense from the grant date to that point in time. If the related market capitalization milestone is achieved earlier than its expected achievement period and the achievement of the related operational milestone, then the stock-based compensation expense will be recognized over the expected achievement period for the operational milestone, which may accelerate the rate at which such expense is recognized. If additional operational milestones become probable, stock-based compensation expense will be recorded in the period it becomes probable including cumulative catch-up expense for the service provided since the grant date. The fair value of such awards is estimated on the grant date using Monte Carlo simulations.

As we accumulate additional employee stock-based awards data over time and as we incorporate market data related to our common stock, we may calculate significantly different volatilities and expected lives, which could materially impact the valuation of our stock-based awards and the stock-based compensation expense that we will recognize in future periods. Stock-based compensation expense is recorded in cost of revenues, research and development expense and selling, general and administrative expense in the consolidated statements of operations.

#### *Income Taxes*

We are subject to federal and state taxes in the U.S. and in many foreign jurisdictions. Significant judgment is required in determining our provision for income taxes, our deferred tax assets and liabilities and any valuation allowance recorded against our net deferred tax assets. We make these estimates and judgments about our future taxable income that are based on assumptions that are consistent with our future plans. Tax laws, regulations, and administrative practices may be subject to change due to economic or political conditions including fundamental changes to the tax laws applicable to corporate multinationals. The U.S., many countries in the European Union and a number of other countries are actively considering changes in this regard. As of December 31, 2019, we had recorded a full valuation allowance on our net U.S. deferred tax assets because we expect that it is more likely than not that our U.S. deferred tax assets will not be realized in the foreseeable future. Should the actual amounts differ from our estimates, the amount of our valuation allowance could be materially impacted.

Furthermore, significant judgment is required in evaluating our tax positions. In the ordinary course of business, there are many transactions and calculations for which the ultimate tax settlement is uncertain. As a result, we recognize the effect of this uncertainty on our tax attributes based on our estimates of the eventual outcome. These effects are recognized when, despite our belief that our tax return positions are supportable, we believe that it is more likely than not that those positions may not be fully sustained upon review by tax authorities. We are required to file income tax returns in the U.S. and various foreign jurisdictions, which requires us to interpret the applicable tax laws and regulations in effect in such jurisdictions. Such returns are subject to audit by the various federal, state and foreign taxing authorities, who may disagree with respect to our tax positions. We believe that our consideration is adequate for all open audit years based on our assessment of many factors, including past experience and interpretations of tax law. We review and update our estimates in light of changing facts and circumstances, such as the closing of a tax audit, the lapse of a statute of limitations or a change in estimate. To the extent that the final tax outcome of these matters differs from our expectations, such differences may impact income tax expense in the period in which such determination is made. The eventual impact on our income tax expense depends in part if we still have a valuation allowance recorded against our deferred tax assets in the period that such determination is made.

#### *Principles of Consolidation*

The consolidated financial statements reflect our accounts and operations and those of our subsidiaries in which we have a controlling financial interest. In accordance with the provisions of ASC 810, *Consolidation*, we consolidate any variable interest entity (“VIE”) of which we are the primary beneficiary. We form VIEs with our financing fund investors in the ordinary course of business in order to facilitate the funding and monetization of certain attributes associated with our solar energy systems and leases under our direct vehicle leasing programs. The typical condition for a controlling financial interest ownership is holding a majority of the voting interests of an entity; however, a controlling financial interest may also exist in entities, such as VIEs, through arrangements that do not involve controlling voting interests. ASC 810 requires a variable interest holder to consolidate a VIE if that party has the power to direct the activities of the VIE that most significantly impact the VIE’s economic performance and the obligation to absorb losses of the VIE that could potentially be significant to the VIE or the right to receive benefits from the VIE that could potentially be significant to the VIE. We do not consolidate a VIE in which we have a majority ownership interest when we are not considered the primary beneficiary. We have determined that we are the primary beneficiary of all the VIEs. We evaluate our relationships with all the VIEs on an ongoing basis to ensure that we continue to be the primary beneficiary. All intercompany transactions and balances have been eliminated upon consolidation.

### *Noncontrolling Interests and Redeemable Noncontrolling Interests*

Noncontrolling interests and redeemable noncontrolling interests represent third-party interests in the net assets under certain funding arrangements, or funds, that we enter into to finance the costs of solar energy systems and vehicles under operating leases. We have determined that the contractual provisions of the funds represent substantive profit sharing arrangements. We have further determined that the appropriate methodology for calculating the noncontrolling interest and redeemable noncontrolling interest balances that reflects the substantive profit sharing arrangements is a balance sheet approach using the hypothetical liquidation at book value (“HLBV”) method. We, therefore, determine the amount of the noncontrolling interests and redeemable noncontrolling interests in the net assets of the funds at each balance sheet date using the HLBV method, which is presented on the consolidated balance sheet as noncontrolling interests in subsidiaries and redeemable noncontrolling interests in subsidiaries. Under the HLBV method, the amounts reported as noncontrolling interests and redeemable noncontrolling interests in the consolidated balance sheet represent the amounts the third-parties would hypothetically receive at each balance sheet date under the liquidation provisions of the funds, assuming the net assets of the funds were liquidated at their recorded amounts determined in accordance with GAAP and with tax laws effective at the balance sheet date and distributed to the third-parties. The third-parties’ interests in the results of operations of the funds are determined as the difference in the noncontrolling interest and redeemable noncontrolling interest balances in the consolidated balance sheets between the start and end of each reporting period, after taking into account any capital transactions between the funds and the third-parties. However, the redeemable noncontrolling interest balance is at least equal to the redemption amount. The redeemable noncontrolling interest balance is presented as temporary equity in the mezzanine section of the consolidated balance sheet since these third-parties have the right to redeem their interests in the funds for cash or other assets.

## **Results of Operations**

### **Revenues**

(Dollars in millions)	Year Ended December 31,			2019 vs. 2018 Change		2018 vs. 2017 Change	
	2019	2018	2017	\$	%	\$	%
Automotive sales	\$ 19,952	\$ 17,632	\$ 8,535	\$ 2,320	13%	\$ 9,097	107%
Automotive leasing	869	883	1,107	(14)	-2%	(224)	-20%
Total automotive revenues	20,821	18,515	9,642	2,306	12%	8,873	92%
Services and other	2,226	1,391	1,001	835	60%	390	39%
Total automotive & services and other segment revenue	23,047	19,906	10,643	3,141	16%	9,263	87%
Energy generation and storage segment revenue	1,531	1,555	1,116	(24)	-2%	439	39%
Total revenues	<u>\$ 24,578</u>	<u>\$ 21,461</u>	<u>\$ 11,759</u>	<u>\$ 3,117</u>	15%	<u>\$ 9,702</u>	83%

### *Automotive & Services and Other Segment*

Automotive sales revenue includes revenues related to cash sales of new Model S, Model X and Model 3 vehicles, including access to our Supercharger network, internet connectivity, Autopilot and FSD features and over-the-air software updates, as well as sales of regulatory credits to other automotive manufacturers. Cash deliveries are vehicles that are not subject to lease accounting.

Automotive leasing revenue includes the amortization of revenue for Model S, Model X and Model 3 vehicles under direct lease agreements as well as those sold with resale value guarantees accounted for as operating leases under lease accounting. We began offering direct leasing for Model 3 vehicles in the second quarter of 2019.

Services and other revenue consists of non-warranty after-sales vehicle services, sales of used vehicles, retail merchandise, sales by our acquired subsidiaries to third party customers, and vehicle insurance revenue.



## 2019 Compared to 2018

Automotive sales revenue increased \$2.32 billion, or 13%, in the year ended December 31, 2019 as compared to the year ended December 31, 2018, primarily due to an increase of 137,969 Model 3 cash deliveries from production scaling and an increase of \$175 million in sales of regulatory credits to \$594 million. The increase was partially offset by a decrease of 30,487 Model S and Model X cash deliveries. The deliveries in the year ended December 31, 2019 were at lower average selling prices than the prior year due to price adjustments we made to our vehicle offerings and the introduction of lower end Model 3 trims in 2019. Due to the price adjustments, we estimated that there is a greater likelihood that customers will exercise their buyback options that were provided prior to such adjustments. As a result, along with the estimated variable consideration related to normal future product returns for vehicles sold under the buyback options program, we adjusted our sales return reserve on vehicles previously sold under our buyback options program resulting in a reduction of automotive sales revenues of \$555 million. Refer to Note 2, *Summary of Significant Accounting Policies*, to the consolidated statements included elsewhere in this Annual Report on Form 10-K.

Automotive leasing revenue decreased \$14 million, or 2%, in the year ended December 31, 2019 as compared to the year ended December 31, 2018. The decrease was primarily due to a decrease in cumulative vehicles under our resale value guarantee leasing programs which are accounted for as operating leases. The decrease was partially offset by an increase in cumulative vehicles under our direct vehicle leasing program, partially due to the introduction of Model 3 direct leasing in the second quarter of 2019.

Services and other revenue increased \$835 million, or 60%, in the year ended December 31, 2019 as compared to the year ended December 31, 2018. The increase was primarily due to an increase in used vehicle sales from an increased volume of trade-in vehicles, partially offset by lower average selling prices for traded-in Tesla vehicles due to price adjustments we made to our vehicle offerings in 2019. Additionally, there was an increase in non-warranty maintenance services revenue as our fleet continues to grow.

## *Energy Generation and Storage Segment*

Energy generation and storage revenue includes sales and leasing of solar energy generation and energy storage products, services related to such products, and sales of solar energy systems incentives.

## 2019 Compared to 2018

Energy generation and storage revenue decreased by \$24 million, or 2%, in the year ended December 31, 2019 as compared to the year ended December 31, 2018, primarily due to decreases in deployments of solar cash and loan jobs partially offset increases in deployments of Powerwall, Powerpack, and Megapack.

### Cost of Revenues and Gross Margin

(Dollars in millions)	Year Ended December 31,			2019 vs. 2018 Change		2018 vs. 2017 Change	
	2019	2018	2017	\$	%	\$	%
<b>Cost of revenues</b>							
Automotive sales	\$ 15,939	\$ 13,686	\$ 6,725	\$ 2,253	16%	\$ 6,961	104%
Automotive leasing	459	488	708	(29)	-6%	(220)	-31%
Total automotive cost of revenues	16,398	14,174	7,433	2,224	16%	6,741	91%
Services and other	2,770	1,880	1,229	890	47%	651	53%
Total automotive & services and other segment cost of revenues	19,168	16,054	8,662	3,114	19%	7,392	85%
Energy generation and storage segment	1,341	1,365	874	(24)	-2%	491	56%
Total cost of revenues	<u>\$ 20,509</u>	<u>\$ 17,419</u>	<u>\$ 9,536</u>	<u>\$ 3,090</u>	18%	<u>\$ 7,883</u>	83%
Gross profit total automotive	\$ 4,423	\$ 4,341	\$ 2,209				
Gross margin total automotive	21%	23%	23%				
Gross profit total automotive & services and other segment	\$ 3,879	\$ 3,852	\$ 1,981				
Gross margin total automotive & services and other segment	17%	19%	19%				
Gross profit energy generation and storage segment	\$ 190	\$ 190	\$ 242				
Gross margin energy generation and storage segment	12%	12%	22%				
Total gross profit	\$ 4,069	\$ 4,042	\$ 2,223				
Total gross margin	17%	19%	19%				

### Automotive & Services and Other Segment

Cost of automotive sales revenue includes direct parts, material and labor costs, manufacturing overhead, including depreciation costs of tooling and machinery, shipping and logistic costs, vehicle connectivity costs, allocations of electricity and infrastructure costs related to our Supercharger network, and reserves for estimated warranty expenses. Cost of automotive sales revenues also includes adjustments to warranty expense and charges to write down the carrying value of our inventory when it exceeds its estimated net realizable value and to provide for obsolete and on-hand inventory in excess of forecasted demand.

Cost of automotive leasing revenue includes primarily the amortization of operating lease vehicles over the lease term, as well as warranty expenses recognized as incurred. Cost of automotive leasing revenue also includes vehicle connectivity costs and allocations of electricity and infrastructure costs related to our Supercharger network for vehicles under our leasing programs.

Costs of services and other revenue includes costs associated with providing non-warranty after-sales services, costs to acquire and certify used vehicles, costs for retail merchandise, and costs to provide vehicle insurance. Cost of services and other revenue also includes direct parts, material and labor costs, manufacturing overhead associated with the sales by our acquired subsidiaries to third party customers.

## 2019 Compared to 2018

Cost of automotive sales revenue increased \$2.25 billion, or 16%, in the year ended December 31, 2019 as compared to the year ended December 31, 2018, primarily due to an increase of 137,969 Model 3 cash deliveries and higher average Model S and Model X costs per unit compared to the prior year due to the discontinuation of lower end trims in 2019. The increases were partially offset by a decrease of 30,487 Model S and Model X cash deliveries and a decrease in average Model 3 costs per unit compared to the prior year primarily due to lower end trims introduced in 2019 and temporary under-utilization of manufacturing capacity at lower production volumes in the first half of 2018. Additionally, due to price adjustments we made to our vehicle offerings in 2019, we estimated that there is a greater likelihood that customers will exercise their buyback options that were provided prior to such adjustments. If customers elect to exercise the buyback options, we expect to be able to subsequently resell the returned vehicles, which resulted in a reduction of automotive cost of sales of \$451 million for the year ended December 31, 2019. Refer to Note 2, *Summary of Significant Accounting Policies*, to the consolidated statements included elsewhere in this Annual Report on Form 10-K.

Cost of automotive leasing revenue decreased \$29 million, or 6%, in the year ended December 31, 2019 compared to the year ended December 31, 2018. The decrease was primarily due to a decrease in cumulative vehicles under our resale value guarantee leasing programs which are accounted for as operating leases. The decrease was partially offset by an increase in cumulative vehicles under our direct vehicle leasing program, partially due to the introduction of Model 3 leasing in the second quarter of 2019.

Cost of services and other revenue increased \$890 million, or 47%, in the year ended December 31, 2019 as compared to the year ended December 31, 2018. The increase was primarily due to the costs of used vehicle sales from the increased volumes of trade-in vehicles. Additionally, there were increases in the costs of our new service centers, additional service personnel in existing and new service centers, Mobile Service capabilities, parts distribution centers and investment in new body shops to provide maintenance services to our rapidly growing fleet of vehicles.

Gross margin for total automotive decreased from 23% to 21% in the year ended December 31, 2019 as compared to the year ended December 31, 2018, primarily due to lower Model S and Model X margins from lower selling prices due to price adjustments we made to our vehicle offerings in 2019, a higher proportion of Model 3 as a percentage of our total automotive sales compared to the prior period. Additionally, the price adjustments also resulted in a reduction in gross automotive sales profit of \$104 million from the adjustment of our sales return reserve on vehicles previously sold under our buyback options program. The decrease was partially offset by improvement of Model 3 margins compared to the prior year as we achieved additional manufacturing efficiencies in the production of Model 3 and an increase of \$175 million in sales of regulatory credits.

Gross margin for total automotive & services and other segment decreased from 19% to 17% in the year ended December 31, 2019 as compared to the year ended December 31, 2018, primarily due to the automotive gross margin impacts discussed above and a higher proportion of services and other within the segment, which operates at lower gross margins than our automotive business.

## *Energy Generation and Storage Segment*

Cost of energy generation and storage revenue includes direct and indirect material and labor costs, warehouse rent, freight, warranty expense, other overhead costs and amortization of certain acquired intangible assets. In addition, where arrangements are accounted for as operating leases, the cost of revenue is primarily comprised of depreciation of the cost of leased solar energy systems, maintenance costs associated with those systems and amortization of any initial direct costs.

## 2019 Compared to 2018

Cost of energy generation and storage revenue decreased by \$24 million, or 2%, in the year ended December 31, 2019 as compared to the year ended December 31, 2018. The decrease was primarily due to a decrease in deployments of solar cash and loan jobs, partially offset by increases in deployments of Powerwall, Powerpack, and Megapack.

Gross margin for energy generation and storage remained relatively consistent at 12% in the year ended December 31, 2019 as compared to the year ended December 31, 2018. Energy storage gross margins improved in the current year as a result of lower materials costs, partially offset by lower gross margins in our cash and loan solar business driven by higher costs from temporary manufacturing under-utilization of our Solar Roof ramp.

### ***Research and Development Expense***

(Dollars in millions)	Year Ended December 31,			2019 vs. 2018 Change		2018 vs. 2017 Change	
	2019	2018	2017	\$	%	\$	%
Research and development	\$ 1,343	\$ 1,460	\$ 1,378	\$ (117)	-8%	\$ 82	6%
As a percentage of revenues	5%	7%	12%				

Research and development (“R&D”) expenses consist primarily of personnel costs for our teams in engineering and research, manufacturing engineering and manufacturing test organizations, prototyping expense, contract and professional services and amortized equipment expense.

R&D expenses as a percentage of revenue decreased from 7% to 5% in the year ended December 31, 2019 as compared to the year ended December 31, 2018. The decrease was primarily from an increase in overall revenues from our expanding sales, as well as from our focus on increasing operational efficiency and process automation, our efforts to scale down and optimize our cost structure relative to the size of our business.

R&D expenses decreased \$117 million, or 8%, in the year ended December 31, 2019 compared to the year ended December 31, 2018. The decrease was primarily due to a \$95 million decrease in employee and labor related expenses from cost efficiency initiatives and a \$26 million decrease in professional and outside service expenses.

### ***Selling, General and Administrative Expense***

(Dollars in millions)	Year Ended December 31,			2019 vs. 2018 Change		2018 vs. 2017 Change	
	2019	2018	2017	\$	%	\$	%
Selling, general and administrative	\$ 2,646	\$ 2,835	\$ 2,477	\$ (189)	-7%	\$ 358	14%
As a percentage of revenues	11%	13%	21%				

Selling, general and administrative (“SG&A”) expenses generally consist of personnel and facilities costs related to our stores, marketing, sales, executive, finance, human resources, information technology and legal organizations, as well as fees for professional and contract services and litigation settlements.

SG&A expenses as a percentage of revenue decreased from 13% to 11% in year ended December 31, 2019 as compared to the year ended December 31, 2018. The decrease was primarily from an increase in overall revenues from our expanding sales, as well as from our focus on increasing operational efficiency and process automation, our efforts to scale down and optimize our cost structure relative to the size of our business.

SG&A expenses decreased \$189 million, or 7%, in the year ended December 31, 2019 as compared to the year ended December 31, 2018. The decrease was primarily due to a \$302 million decrease in employee and labor related expenses from decreased headcount and cost efficiency initiatives, partially offset by a \$112 million increase in stock-based compensation expense. The increase in stock-based compensation expense was primarily related to the 2018 CEO Performance Award as we recorded a \$72 million cumulative catch-up expense for the service provided from the grant date when an additional operational milestone was considered probable of being met in the fourth quarter of 2019. Additionally, the expense period was shorter in the prior year as it commenced upon the grant approval date of March 21, 2018.

## Restructuring and other

(Dollars in millions)	Year Ended December 31,			2019 vs. 2018 Change		2018 vs. 2017 Change	
	2019	2018	2017	\$	%	\$	%
Restructuring and other	\$ 149	\$ 135	\$ —	\$ 14	10%	\$ 135	N/A
As a percentage of revenues	1%	1%	0%				

During the year ended December 31, 2019, we carried out certain restructuring actions in order to reduce costs and improve efficiency. As a result, we recognized \$50 million of costs primarily related to employee termination expenses and losses from closing certain stores impacting both segments. We recognized \$47 million in impairment related to the IPR&D intangible asset as we abandoned further development efforts (refer to Note 4, *Goodwill and Intangible Assets* for details) and \$15 million for the related equipment within the energy generation and storage segment. We also incurred a loss of \$37 million for closing operations in certain facilities. On the statement of cash flows, the amounts were presented in the captions in which such amounts would have been recorded absent the impairment charges. The employee termination expenses were substantially paid by December 31, 2019, while the remaining amounts were non-cash.

During the year ended December 31, 2018, we carried-out certain restructuring actions in order to reduce costs and improve efficiency and recognized \$37 million of employee termination expenses and estimated losses from sub-leasing a certain facility. The employee termination cash expenses of \$27 million were substantially paid by the end of 2018, while the remaining amounts were non-cash. Also included within restructuring and other activities was \$55 million of expenses (materially all of which were non-cash) from restructuring the energy generation and storage segment, which comprised of disposals of certain tangible assets, the shortening of the useful life of a trade name intangible asset and a contract termination penalty. In addition, we concluded that a small portion of the IPR&D asset is not commercially feasible. Consequently, we recognized an impairment loss of \$13 million. We recognized settlement and legal expenses of \$30 million in the year ended December 31, 2018 for the settlement with the SEC relating to a take-private proposal for Tesla. These expenses were substantially paid by the end of 2018.

## Interest Expense

(Dollars in millions)	Year Ended December 31,			2019 vs. 2018 Change		2018 vs. 2017 Change	
	2019	2018	2017	\$	%	\$	%
Interest expense	\$ 685	\$ 663	\$ 471	\$ 22	3%	\$ 192	41%
As a percentage of revenues	3%	3%	4%				

Interest expense increased by \$22 million, or 3%, in the year ended December 31, 2019 as compared to the year ended December 31, 2018. The increase was primarily due to an increase in our average outstanding indebtedness at relatively consistent weighted average interest rates as compared to the year ended December 31, 2018.

## Other Income (Expense), Net

(Dollars in millions)	Year Ended December 31,			2019 vs. 2018 Change		2018 vs. 2017 Change	
	2019	2018	2017	\$	%	\$	%
Other income (expense), net	\$ 45	\$ 22	\$ (125)	\$ 23	105%	\$ 147	Not meaningful
As a percentage of revenues	0%	0%	-1%				

Other income (expense), net, consists primarily of foreign exchange gains and losses related to our foreign currency-denominated monetary assets and liabilities and changes in the fair values of our fixed-for-floating interest rate swaps. We expect our foreign exchange gains and losses will vary depending upon movements in the underlying exchange rates.

Other income (expense), net, increased by \$23 million, or 105%, in the year ended December 31, 2019 as compared to the year ended December 31, 2018. The change was primarily due to favorable fluctuations in foreign currency exchange rates, offset by losses from interest rate swaps related to our debt facilities year-over-year.

### ***Provision for Income Taxes***

(Dollars in millions)	Year Ended December 31,			2019 vs. 2018 Change		2018 vs. 2017 Change	
	2019	2018	2017	\$	%	\$	%
Provision for income taxes	\$ 110	\$ 58	\$ 32	\$ 52	90%	\$ 26	81%
Effective tax rate	-17%	-6%	-1%				

Our provision for income taxes increased by \$52 million, or 90%, in the year ended December 31, 2019 as compared to the year ended December 31, 2018, primarily due to the increase in taxable profits in certain foreign jurisdictions year-over-year.

### ***Net Income (Loss) Attributable to Noncontrolling Interests and Redeemable Noncontrolling Interests***

(Dollars in millions)	Year Ended December 31,			2019 vs. 2018 Change		2018 vs. 2017 Change	
	2019	2018	2017	\$	%	\$	%
Net income (loss) attributable to noncontrolling interests and redeemable noncontrolling interests in subsidiaries	\$ 87	\$ (87)	\$ (279)	\$ 174	Not meaningful	\$ 192	-69%

Our net income (loss) attributable to noncontrolling interests and redeemable noncontrolling interests was related to financing fund arrangements.

Net income (loss) attributable to noncontrolling interests and redeemable noncontrolling interests changed unfavorably by \$174 million in the year ended December 31, 2019 as compared to the year ended December 31, 2018. The change was primarily due to lower activities in our financing fund arrangements.

### ***Liquidity and Capital Resources***

As of December 31, 2019, we had \$6.27 billion of cash and cash equivalents. Balances held in foreign currencies had a U.S. dollar equivalent of \$1.26 billion and consisted primarily of Chinese yuan, euros and Canadian dollars. Our sources of cash are predominantly from our deliveries of vehicles, sales and installations of our energy storage products and solar energy systems, proceeds from debt facilities, proceeds from financing funds and proceeds from equity offerings.

Our sources of liquidity and cash flows enable us to fund ongoing operations, research and development projects for new products, establishment and/or increases of Model 3 and Model Y production capacity at the Fremont Factory and at Gigafactory Shanghai, the continued expansion of Gigafactory Nevada, the construction of Gigafactory Berlin, the manufacturing ramp of the Solar Roof at Gigafactory New York, and the continued expansion of our retail and service locations, body shops, Mobile Service fleet and Supercharger network.

As discussed in and subject to the considerations referenced in Part II, Item 7, *Management's Discussion and Analysis of Financial Condition and Results of Operations—Management Opportunities, Challenges and Risks and 2020 Outlook—Trends in Cash Flow, Capital Expenditures and Operating Expenses* in this Annual Report on Form 10-K, considering the expected pace of the manufacturing ramps for our products, construction and expansion of our factories, and pipeline of projects under development, and consistent with our current strategy of using a partner to manufacture battery cells, as well as considering all other infrastructure growth, we currently expect our average annual capital expenditures in 2020 and the two succeeding fiscal years to be \$2.5 billion to \$3.5 billion.

We expect that the cash we generate from our core operations will generally be sufficient to cover our future capital expenditures and to pay down our near-term debt obligations, although we may choose to seek alternative financing sources. For example, we expect that much of our investment in Gigafactory Shanghai will continue to be funded through indebtedness arranged through local financial institutions in China, such as the RMB 9.0 billion (or the equivalent amount in U.S. dollars) fixed asset term facility and RMB 2.25 billion (or the equivalent amount in U.S. dollars) working capital revolving facility that our local subsidiary entered into in December 2019, and we expect the same with respect to Gigafactory Berlin. As always, we continually evaluate our capital expenditure needs and may decide it is best to raise additional capital to fund the rapid growth of our business, to further strengthen our balance sheet, or for general corporate purposes.

We have an agreement to spend or incur \$5.0 billion in combined capital, operational expenses, costs of goods sold and other costs in the State of New York during the 10-year period following full production at Gigafactory New York. We anticipate meeting these obligations through our operations at this facility and other operations within the State of New York, and we do not believe that we face a significant risk of default.

We expect that our current sources of liquidity together with our projection of cash flows from operating activities will provide us with adequate liquidity over at least the next 12 months. A large portion of our future expenditures is to fund our growth, and we can adjust our capital and operating expenditures by operating segment, including future expansion of our product offerings, retail and service locations, body shops, Mobile Service fleet, and Supercharger network. We may need or want to raise additional funds in the future, and these funds may not be available to us when we need or want them, or at all. If we cannot raise additional funds when we need or want them, our operations and prospects could be negatively affected.

In addition, we had \$3.03 billion of unused committed amounts under our credit facilities and financing funds as of December 31, 2019, some of which are subject to satisfying specified conditions prior to draw-down (such as pledging to our lenders sufficient amounts of qualified receivables, inventories, leased vehicles and our interests in those leases, solar energy systems and the associated customer contracts, our interests in financing funds or various other assets; and contributing or selling qualified solar energy systems and the associated customer contracts or qualified leased vehicles and our interests in those leases into the financing funds). Upon the draw-down of any unused committed amounts, there are no restrictions on use of available funds for general corporate purposes. For details regarding our indebtedness and financing funds, refer to Note 12, *Debt*, and Note 17, *Variable Interest Entity Arrangements*, to the consolidated financial statements included elsewhere in this Annual Report on Form 10-K.

### ***Summary of Cash Flows***

(Dollars in millions)	Year Ended December 31,		
	2019	2018	2017
Net cash provided by (used in) operating activities	\$ 2,405	\$ 2,098	\$ (61)
Net cash used in investing activities	\$ (1,436)	\$ (2,337)	\$ (4,196)
Net cash provided by financing activities	\$ 1,529	\$ 574	\$ 4,415

### ***Cash Flows from Operating Activities***

Our cash flows from operating activities are significantly affected by our cash investments to support the growth of our business in areas such as research and development and selling, general and administrative and working capital, especially inventory, which includes vehicles in transit. Our operating cash inflows include cash from vehicle sales, customer lease payments, customer deposits, cash from sales of regulatory credits and energy generation and storage products. These cash inflows are offset by our payments to suppliers for production materials and parts used in our manufacturing process, operating expenses, operating lease payments and interest payments on our financings.



Net cash provided by operating activities increased by \$307 million to \$2.41 billion during the year ended December 31, 2019 from \$2.10 billion during the year ended December 31, 2018. This favorable change was primarily due to the increase in net income, excluding non-cash expenses and gains, of \$902 million, partially offset by the increase in net operating assets and liabilities of \$407 million and \$188 million of the repayment of our 0.25% Convertible Senior Notes due in 2019 which was classified as an operating activity, as this represented an interest payment on the discounted convertible notes. The increase in net operating assets and liabilities was mainly driven by a smaller increase in accounts payable and accrued liabilities in 2019 as compared to 2018, as we were ramping for Model 3 production in 2018 and a larger increase in operating lease vehicles in 2019 as compared to 2018 as we began offering Model 3 leasing in 2019. The increase in net operating assets and liabilities was partially offset by a smaller increase in inventory and a larger increase in deferred revenue in 2019 as compared to 2018.

#### *Cash Flows from Investing Activities*

Cash flows from investing activities and their variability across each period related primarily to capital expenditures, which were \$1.33 billion during 2019, mainly for Gigafactory Shanghai construction, Model 3 production, and Model Y preparations, and \$2.10 billion during 2018, mainly for Model 3 production. Design, acquisition and installation of solar energy systems amounted to \$105 million and \$218 million for the years ended December 31, 2019 and 2018, respectively.

#### *Cash Flows from Financing Activities*

Cash flows from financing activities during the year ended December 31, 2019 consisted primarily of \$1.82 billion from the issuance of the 2.00% Convertible Senior Notes due in 2024 (“2024 Notes”), net of transaction costs, and \$848 million from the issuance of common stock, net of underwriting discounts, in registered public offerings, \$736 million of net borrowings under loan agreements entered into by certain Chinese subsidiaries, \$394 million of net borrowings for automotive asset-backed notes, and \$174 million from the issuance of warrants in connection with the offering of the 2024 Notes. These cash inflows were partially offset by a \$732 million portion of the repayment of our 0.25% Convertible Senior Notes due in 2019 that was classified as financing activity, a \$566 million repayment of our 1.625% Convertible Senior Notes due in 2019, a purchase of convertible note hedges of \$476 million in connection with the offering of the 2024 Notes, and collateralized lease repayments of \$389 million. See Note 12, *Debt*, and Note 2, *Summary of Significant Accounting Policies*, to the consolidated financial statements included elsewhere in this Annual Report on Form 10-K for further details regarding our debt obligations and collateralized borrowings, respectively.

Cash flows from financing activities during the year ended December 31, 2018 consisted primarily of \$1.18 billion of net borrowings under automobile asset-backed notes, \$431 million of net borrowings under the senior secured asset-based revolving credit agreement (the “Credit Agreement”), \$334 million from the issuance of solar asset-backed notes and \$296 million of proceeds from exercises of stock options and other stock issuances. These cash inflows were partially offset by net repayments of \$582 million under our vehicle lease-backed loan and security agreements (the “Warehouse Agreements”), collateralized lease repayments of \$559 million, repayments of \$230 million of the 2.75% Convertible Senior Notes due on November 1, 2018, and repayments of \$210 million under the revolving aggregation credit facility.



### Contractual Obligations

We are party to contractual obligations involving commitments to make payments to third parties, including certain debt financing arrangements and leases, primarily for stores, service centers, certain manufacturing and corporate offices. These also include, as part of our normal business practices, contracts with suppliers for purchases of certain raw materials, components and services to facilitate adequate supply of these materials and services and capacity reservation contracts. The following table sets forth, as of December 31, 2019, certain significant obligations that will affect our future liquidity (in millions):

	Total	Year Ended December 31,					Thereafter
		2020	2021	2022	2023	2024	
Operating lease obligations, including imputed interest	\$ 1,459	\$ 296	\$ 262	\$ 210	\$ 173	\$ 146	\$ 372
Finance lease obligations, including imputed interest	1,795	474	478	600	225	5	13
Purchase obligations (1)	16,292	5,729	2,946	3,645	3,948	24	—
Debt, including scheduled interest (2)	14,031	1,774	2,594	2,287	1,993	2,575	2,808
Total	<u>\$ 33,577</u>	<u>\$ 8,273</u>	<u>\$ 6,280</u>	<u>\$ 6,742</u>	<u>\$ 6,339</u>	<u>\$ 2,750</u>	<u>\$ 3,193</u>

These amounts represent (i) purchase orders of \$2.50 billion issued under binding and enforceable agreements with all vendors as of December 31, 2019 and (ii) \$13.79 billion in other estimable purchase obligations pursuant to such agreements, primarily relating to the purchase of lithium-ion cells produced by Panasonic at Gigafactory Nevada, including any additional amounts we may have to pay vendors if we do not meet certain minimum purchase obligations. In cases where no purchase orders were outstanding under binding and

- (1) enforceable agreements as of December 31, 2019, we have included estimated amounts based on our best estimates and assumptions or discussions with the relevant vendors as of such date or, where applicable, on amounts or assumptions included in such agreements for purposes of discussion or reference. In certain cases, such estimated amounts were subject to contingent events. Furthermore, these amounts do not include future payments for purchase obligations that were recorded in accounts payable or accrued liabilities as of December 31, 2019.

- (2) Debt, including scheduled interest, includes our non-recourse indebtedness of \$5.29 billion. Non-recourse debt refers to debt that is recourse to only assets of our subsidiaries. Short-term scheduled interest payments and amortization of convertible senior note conversion features, debt discounts and deferred financing costs for the year ended December 31, 2020 is \$375 million. Long-term scheduled interest payments and amortization of convertible senior note conversion features, debt discounts and deferred financing costs for the years thereafter is \$1.86 billion.

The table above excludes unrecognized tax benefits of \$247 million because if recognized, they would be an adjustment to our deferred tax assets.

We offer resale value guarantees or similar buyback terms to certain customers who purchase and finance their vehicles through one of our specified commercial banking partners and certain leasing partners (refer to *Automotive Sales with Resale Value Guarantee or a Buyback Option* in Note 2, *Significant Accounting Policies*, to the consolidated financial statements included elsewhere in this Annual Report on Form 10-K). The maximum amount we could be required to pay under these programs, should customers exercise their resale value guarantees or buyback options, would be \$1.70 billion over the next five years, of which \$226 million is within a 12-month period from December 31, 2019. We have not included this in the table above as it is unknown how many customers will exercise their options. Additionally, we plan to resell any vehicles which are returned to us and therefore, the actual exposure to us is deemed to be limited.

**Off-Balance Sheet Arrangements**

During the periods presented, we did not have relationships with unconsolidated entities or financial partnerships, such as entities often referred to as structured finance or special purpose entities, which were established for the purpose of facilitating off-balance sheet arrangements or other contractually narrow or limited purposes.

**Recent Accounting Pronouncements**

See Note 2, *Summary of Significant Accounting Policies*, to the consolidated financial statements included elsewhere in this Annual Report on Form 10-K.

## **ITEM 7A. QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISK**

### **Foreign Currency Risk**

We transact business globally in multiple currencies and hence have foreign currency risks related to our revenue, costs of revenue and operating expenses denominated in currencies other than the U.S. dollar (primarily the euro, Japanese yen, Canadian dollar, Chinese yuan and Norwegian krone). In general, we are a net receiver of currencies other than the U.S. dollar for our foreign subsidiaries. Accordingly, changes in exchange rates and, in particular, a strengthening of the U.S. dollar have in the past, and may in the future, negatively affect our revenue and other operating results as expressed in U.S. dollars as we do not typically hedge foreign currency.

We have also experienced, and will continue to experience, fluctuations in our net income (loss) as a result of gains (losses) on the settlement and the re-measurement of monetary assets and liabilities denominated in currencies that are not the local currency (primarily consisting of our intercompany and cash and cash equivalents balances). For the year ended December 31, 2019, we recognized a net foreign currency gain of \$48 million in other (expense) income, net, with our largest re-measurement exposures from the U.S. dollar, British pound and Canadian dollar as our subsidiaries are denominated in various local currencies. For the year ended December 31, 2018, we recognized a net foreign currency gain of \$2 million in other (expense) income, net, with our largest re-measurement exposures from the euro, New Taiwan dollar and Canadian dollar.

We considered the historical trends in foreign currency exchange rates and determined that it is reasonably possible that adverse changes in foreign currency exchange rates of 10% for all currencies could be experienced in the near-term. These changes were applied to our total monetary assets and liabilities denominated in currencies other than our local currencies at the balance sheet date to compute the impact these changes would have had on our net income (loss) before income taxes. These changes would have resulted in an adverse impact of \$362 million at December 31, 2019 and \$176 million at December 31, 2018 assuming no foreign currency hedging.

### **Interest Rate Risk**

We are exposed to interest rate risk on our borrowings that bear interest at floating rates. Pursuant to our risk management policies, in certain cases, we utilize derivative instruments to manage some of this risk. We do not enter into derivative instruments for trading or speculative purposes. A hypothetical 10% change in our interest rates would have increased or decreased our interest expense for the years ended December 31, 2019 and 2018 by \$8 million and \$9 million, respectively.

## ITEM 8. FINANCIAL STATEMENTS AND SUPPLEMENTARY DATA

### Index to Consolidated Financial Statements

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## **Report of Independent Registered Public Accounting Firm**

To the Board of Directors and Stockholders of Tesla, Inc.

### ***Opinions on the Financial Statements and Internal Control over Financial Reporting***

We have audited the accompanying consolidated balance sheets of Tesla, Inc. and its subsidiaries (the “Company”) as of December 31, 2019 and 2018, and the related consolidated statements of operations, of comprehensive loss, of redeemable noncontrolling interests and equity and of cash flows for each of the three years in the period ended December 31, 2019, including the related notes (collectively referred to as the “consolidated financial statements”). We also have audited the Company's internal control over financial reporting as of December 31, 2019, based on criteria established in *Internal Control—Integrated Framework* (2013) issued by the Committee of Sponsoring Organizations of the Treadway Commission (COSO).

In our opinion, the consolidated financial statements referred to above present fairly, in all material respects, the financial position of the Company as of December 31, 2019 and 2018, and the results of its operations and its cash flows for each of the three years in the period ended December 31, 2019 in conformity with accounting principles generally accepted in the United States of America. Also in our opinion, the Company maintained, in all material respects, effective internal control over financial reporting as of December 31, 2019, based on criteria established in *Internal Control—Integrated Framework* (2013) issued by the COSO.

### ***Changes in Accounting Principles***

As discussed in Note 2 to the consolidated financial statements, the Company changed the manner in which it accounts for leases in 2019 and the manner in which it accounts for revenue from contracts with customers in 2018.

### ***Basis for Opinions***

The Company's management is responsible for these consolidated financial statements, for maintaining effective internal control over financial reporting, and for its assessment of the effectiveness of internal control over financial reporting, included in Management's Report on Internal Control over Financial Reporting appearing under Item 9A. Our responsibility is to express opinions on the Company's consolidated financial statements and on the Company's internal control over financial reporting based on our audits. We are a public accounting firm registered with the Public Company Accounting Oversight Board (United States) (PCAOB) and are required to be independent with respect to the Company in accordance with the U.S. federal securities laws and the applicable rules and regulations of the Securities and Exchange Commission and the PCAOB.

We conducted our audits in accordance with the standards of the PCAOB. Those standards require that we plan and perform the audits to obtain reasonable assurance about whether the consolidated financial statements are free of material misstatement, whether due to error or fraud, and whether effective internal control over financial reporting was maintained in all material respects.

Our audits of the consolidated financial statements included performing procedures to assess the risks of material misstatement of the consolidated financial statements, whether due to error or fraud, and performing procedures that respond to those risks. Such procedures included examining, on a test basis, evidence regarding the amounts and disclosures in the consolidated financial statements. Our audits also included evaluating the accounting principles used and significant estimates made by management, as well as evaluating the overall presentation of the consolidated financial statements. Our audit of internal control over financial reporting included obtaining an understanding of internal control over financial reporting, assessing the risk that a material weakness exists, and testing and evaluating the design and operating effectiveness of internal control based on the assessed risk. Our audits also included performing such other procedures as we considered necessary in the circumstances. We believe that our audits provide a reasonable basis for our opinions.

### ***Definition and Limitations of Internal Control over Financial Reporting***

A company's internal control over financial reporting is a process designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles. A company's internal control over financial reporting includes those policies and procedures that (i) pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of the assets of the company; (ii) provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with generally accepted accounting principles, and that receipts and expenditures of the company are being made only in accordance with authorizations of management and directors of the company; and (iii) provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use, or disposition of the company's assets that could have a material effect on the financial statements.

Because of its inherent limitations, internal control over financial reporting may not prevent or detect misstatements. Also, projections of any evaluation of effectiveness to future periods are subject to the risk that controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate.

### ***Critical Audit Matters***

The critical audit matters communicated below are matters arising from the current period audit of the consolidated financial statements that were communicated or required to be communicated to the audit committee and that (i) relate to accounts or disclosures that are material to the consolidated financial statements and (ii) involved our especially challenging, subjective, or complex judgments. The communication of critical audit matters does not alter in any way our opinion on the consolidated financial statements, taken as a whole, and we are not, by communicating the critical audit matters below, providing separate opinions on the critical audit matters or on the accounts or disclosures to which they relate.

#### ***Automotive Sales To Customers With a Resale Value Guarantee or Buyback Option***

As described in Note 2 to the consolidated financial statements, the sales return reserve related to resale value guarantees or buyback options was \$639 million as of December 31, 2019, of which \$93 million was short-term. The Company offers some customers resale value guarantees or buyback options. Under these programs, the Company receives full payment for the vehicle sales price at the time of delivery and the customer has the option of selling their vehicle back to the Company during the guarantee period for a pre-determined resale value. In circumstances where management does not believe the customer has a significant economic incentive to exercise the resale value guarantee or buyback option provided to them, the Company recognizes revenue when control transfers upon delivery to a customer as a sale with a right of return. In circumstances where management believes the customer has a significant economic incentive to exercise the resale value guarantee or buyback option, the Company recognizes the transaction as an operating lease. Management's determination of whether there is a significant economic incentive includes comparing and considering a vehicle's estimated market value at the time the option is exercisable with the guaranteed resale value. Sales return reserves are estimated based on historical experience plus estimates of expected future market values. On a quarterly basis, management reassesses the estimated future market values of vehicles under these programs, taking into account price adjustments on new vehicles and other changes in market value subsequent to the initial sale to determine the need for changes to the reserve.

The principal considerations for our determination that performing procedures relating to automotive sales to customers with a resale value guarantee or buyback option is a critical audit matter are there was significant judgment by management in determining the sales return reserve when customers do not have a significant economic incentive to exercise their option. This in turn led to high degree of auditor judgment, subjectivity, and effort in performing procedures and evaluating evidence in the sales return reserve when customers do not have a significant economic incentive.

Addressing the matter involved performing procedures and evaluating audit evidence in connection with forming our overall opinion on the consolidated financial statements. These procedures included testing the effectiveness of controls relating to automotive revenue recognition for sales to customers with a resale value guarantee or buyback option as well as the related sales return reserve, including controls over management's estimate of expected future market values and historical experience. These procedures also included, among others, testing management's process for determining whether customers have a significant economic incentive to exercise their put rights under the resale value guarantee and buyback option programs and, if not, the related sales return reserve. This included evaluating the appropriateness of the model applied and the reasonableness of significant assumptions, including historical experience and the estimated expected future market values used in the comparison to guaranteed resale amounts. Evaluating assumptions related to historical experience and estimated expected future market values involved evaluating whether the assumptions used were reasonable considering current and past performance and consistency with evidence obtained in other areas of the audit. Procedures were performed to evaluate the reliability, completeness and relevance of management's data used in the development of the historical experience assumption.

#### *Automotive Warranty Reserve*

As described in Note 2 to the consolidated financial statements, total accrued warranty, which primarily relates to the automotive segment, was \$1,089 million as of December 31, 2019. The Company provides a manufacturer's warranty on all new and used Tesla vehicles. As described in Note 2, a warranty reserve is accrued for these products sold, which includes management's best estimate of the projected costs to repair or replace items under warranty, including recalls when identified. These estimates are based on actual claims incurred to date and an estimate of the nature, frequency and costs of future claims.

The principal considerations for our determination that performing procedures relating to the automotive warranty reserve is a critical audit matter are there was significant judgment by management in determining the warranty reserve. This in turn led to significant auditor judgment, subjectivity, and effort in performing procedures to evaluate the estimate of the nature, frequency and costs of future claims, and the audit effort involved the use of professionals with specialized skill and knowledge.

Addressing the matter involved performing procedures and evaluating audit evidence in connection with forming our overall opinion on the consolidated financial statements. These procedures included testing the effectiveness of controls relating to management's estimate of the automotive warranty reserve, including controls over management's estimate of the nature, frequency and costs of future claims as well as the completeness and accuracy of actual claims incurred to date. These procedures also included, among others, testing management's process for determining the automotive warranty reserve. This included evaluating the appropriateness of the model applied and the reasonableness of significant assumptions, including the nature and frequency of future claims and the related costs to repair or replace items under warranty. Evaluating the assumptions related to the nature and frequency of future claims and the related costs to repair or replace items under warranty involved evaluating whether the assumptions used were reasonable considering current and past performance, including a lookback analysis comparing prior period forecasted claims to actual claims incurred. These procedures also included developing an independent estimate of a portion of the warranty accrual, comparing the independent estimate to management's estimate to evaluate the reasonableness of the estimate, and testing the completeness and accuracy of historical vehicle claims. Procedures were performed to test the reliability, completeness, and relevance of management's data related to the historical claims processed and that such claims were appropriately used by management in the estimation of future claims. Professionals with specialized skill and knowledge were used to assist in evaluating the appropriateness of aspects of management's model for estimating the nature and frequency of future claims, and testing management's warranty reserve for a portion of future warranty claims.

/s/PricewaterhouseCoopers LLP

San Jose, California  
February 13, 2020

We have served as the Company's auditor since 2005.

**Tesla, Inc.**  
**Consolidated Balance Sheets**  
(in millions, except per share data)

	December 31, 2019	December 31, 2018
<b>Assets</b>		
Current assets		
Cash and cash equivalents	\$ 6,268	\$ 3,686
Restricted cash	246	193
Accounts receivable, net	1,324	949
Inventory	3,552	3,113
Prepaid expenses and other current assets	713	366
Total current assets	12,103	8,307
Operating lease vehicles, net	2,447	2,090
Solar energy systems, net	6,138	6,271
Property, plant and equipment, net	10,396	11,330
Operating lease right-of-use assets	1,218	—
Intangible assets, net	339	282
Goodwill	198	68
MyPower customer notes receivable, net of current portion	393	422
Restricted cash, net of current portion	269	398
Other assets	808	572
<b>Total assets</b>	<b>\$ 34,309</b>	<b>\$ 29,740</b>
<b>Liabilities</b>		
Current liabilities		
Accounts payable	\$ 3,771	\$ 3,405
Accrued liabilities and other	2,905	2,094
Deferred revenue	1,163	630
Resale value guarantees	317	503
Customer deposits	726	793
Current portion of debt and finance leases	1,785	2,568
Total current liabilities	10,667	9,993
Debt and finance leases, net of current portion	11,634	9,404
Deferred revenue, net of current portion	1,207	991
Resale value guarantees, net of current portion	36	329
Other long-term liabilities	2,655	2,710
<b>Total liabilities</b>	<b>26,199</b>	<b>23,427</b>
Commitments and contingencies (Note 16)		
Redeemable noncontrolling interests in subsidiaries	643	556
<b>Equity</b>		
Stockholders' equity		
Preferred stock; \$0.001 par value; 100 shares authorized; no shares issued and outstanding	—	—
Common stock; \$0.001 par value; 2,000 shares authorized; 181 and 173 shares issued and outstanding as of December 31, 2019 and 2018, respectively	0	0
Additional paid-in capital	12,737	10,249
Accumulated other comprehensive loss	(36)	(8)
Accumulated deficit	(6,083)	(5,318)
Total stockholders' equity	6,618	4,923
Noncontrolling interests in subsidiaries	849	834
<b>Total liabilities and equity</b>	<b>\$ 34,309</b>	<b>\$ 29,740</b>

The accompanying notes are an integral part of these consolidated financial statements.



**Tesla, Inc.**  
**Consolidated Statements of Operations**  
(in millions, except per share data)

	Year Ended December 31,		
	2019	2018	2017
<b>Revenues</b>			
Automotive sales	\$ 19,952	\$ 17,632	\$ 8,535
Automotive leasing	869	883	1,107
Total automotive revenues	20,821	18,515	9,642
Energy generation and storage	1,531	1,555	1,116
Services and other	2,226	1,391	1,001
Total revenues	24,578	21,461	11,759
<b>Cost of revenues</b>			
Automotive sales	15,939	13,686	6,725
Automotive leasing	459	488	708
Total automotive cost of revenues	16,398	14,174	7,433
Energy generation and storage	1,341	1,365	874
Services and other	2,770	1,880	1,229
Total cost of revenues	20,509	17,419	9,536
<b>Gross profit</b>	4,069	4,042	2,223
<b>Operating expenses</b>			
Research and development	1,343	1,460	1,378
Selling, general and administrative	2,646	2,835	2,477
Restructuring and other	149	135	—
Total operating expenses	4,138	4,430	3,855
<b>Loss from operations</b>	(69)	(388)	(1,632)
Interest income	44	24	19
Interest expense	(685)	(663)	(471)
Other income (expense), net	45	22	(125)
<b>Loss before income taxes</b>	(665)	(1,005)	(2,209)
Provision for income taxes	110	58	32
<b>Net loss</b>	(775)	(1,063)	(2,241)
Net income (loss) attributable to noncontrolling interests and redeemable noncontrolling interests in subsidiaries	87	(87)	(279)
<b>Net loss attributable to common stockholders</b>	<u>\$ (862)</u>	<u>\$ (976)</u>	<u>\$ (1,962)</u>
Net loss per share of common stock attributable to common stockholders			
Basic	<u>(4.92)</u>	<u>\$ (5.72)</u>	<u>\$ (11.83)</u>
Diluted	<u>(4.92)</u>	<u>\$ (5.72)</u>	<u>\$ (11.83)</u>
Weighted average shares used in computing net loss per share of common stock			
Basic	<u>177</u>	<u>171</u>	<u>166</u>
Diluted	<u>177</u>	<u>171</u>	<u>166</u>

The accompanying notes are an integral part of these consolidated financial statements.

**Tesla, Inc.**  
**Consolidated Statements of Comprehensive Loss**  
(in millions)

	Year Ended December 31,		
	2019	2018	2017
Net loss	\$ (775)	\$ (1,063)	\$ (2,241)
Other comprehensive loss:			
Reclassification adjustment for net gains on derivatives into net loss	—	—	(6)
Foreign currency translation adjustment	(28)	(42)	63
Comprehensive loss	(803)	(1,105)	(2,184)
Less: Comprehensive income (loss) attributable to noncontrolling interests and redeemable noncontrolling interests in subsidiaries	87	(87)	(279)
Comprehensive loss attributable to common stockholders	<u>\$ (890)</u>	<u>\$ (1,018)</u>	<u>\$ (1,905)</u>

The accompanying notes are an integral part of these consolidated financial statements.

**Tesla, Inc.**

**Consolidated Statements of Redeemable Noncontrolling Interests and Equity**  
(in millions, except per share data)

	Redeemable Noncontrolling Interests	Common Stock		Additional Paid-In Capital	Accumulated Deficit	Accumulated Other Comprehensive Loss	Total Stockholders' Equity	Noncontrolling Interests in Subsidiaries	Total Equity
		Shares	Amount						
<b>Balance as of December 31, 2016</b>	\$ 367	162	\$ 0	\$ 7,774	\$ (2,997)	\$ (24)	\$ 4,753	\$ 785	\$ 5,538
Adjustment of prior periods due to adoption of Accounting Standards Update No. 2016-09	—	—	—	15	(15)	—	—	—	—
Conversion feature of Convertible Senior Notes due in 2022	—	—	—	146	—	—	146	—	146
Purchases of convertible note hedges	—	—	—	(204)	—	—	(204)	—	(204)
Sales of warrants	—	—	—	53	—	—	53	—	53
Exercises of conversion feature of convertible senior notes	—	1	0	230	—	—	230	—	230
Issuance of common stock for equity incentive awards and acquisitions, net of transaction costs	—	4	0	269	—	—	269	—	269
Issuance of common stock in March 2017 public offering at \$262.00 per share, net of issuance costs of \$3	—	2	0	400	—	—	400	—	400
Stock-based compensation	—	—	—	485	—	—	485	—	485
Contributions from noncontrolling interests	193	—	—	—	—	—	—	597	597
Distributions to noncontrolling interests	(101)	—	—	—	—	—	—	(164)	(164)
Other	(3)	—	—	10	—	—	10	—	10
Net loss	(58)	—	—	—	(1,962)	—	(1,962)	(221)	(2,183)
Other comprehensive income	—	—	—	—	—	57	57	—	57
<b>Balance as of December 31, 2017</b>	\$ 398	169	\$ 0	\$ 9,178	\$ (4,974)	\$ 33	\$ 4,237	\$ 997	\$ 5,234
Adjustments for prior periods from adopting ASC 606	8	—	—	—	623	—	623	(89)	534
Adjustments for prior periods from adopting Accounting Standards Update No. 2017-05	—	—	—	—	9	—	9	—	9
Issuance of common stock for equity incentive awards	—	4	0	296	—	—	296	—	296
Stock-based compensation	—	—	—	775	—	—	775	—	775
Contributions from noncontrolling interests	276	—	—	—	—	—	—	161	161
Distributions to noncontrolling interests	(61)	—	—	—	—	—	—	(210)	(210)
Other	(3)	—	—	—	—	—	—	—	—
Net loss	(62)	—	—	—	(976)	—	(976)	(25)	(1,001)
Other comprehensive loss	—	—	—	—	—	(41)	(41)	—	(41)
<b>Balance as of December 31, 2018</b>	\$ 556	173	\$ 0	\$ 10,249	\$ (5,318)	\$ (8)	\$ 4,923	\$ 834	\$ 5,757
Adjustments for prior periods from adopting ASC 842	—	—	—	—	97	—	97	—	97
Conversion feature of Convertible Senior Notes due in 2024	—	—	—	491	—	—	491	—	491
Purchase of convertible note hedges	—	—	—	(476)	—	—	(476)	—	(476)
Sales of warrants	—	—	—	174	—	—	174	—	174
Issuance of common stock for equity incentive awards and acquisitions, net of transaction costs	—	5	0	482	—	—	482	—	482
Issuance of common stock in May 2019 public offering at \$243.00 per share, net of issuance costs of \$15	—	3	0	848	—	—	848	—	848
Stock-based compensation	—	—	—	973	—	—	973	—	973
Contributions from noncontrolling interests	105	—	—	—	—	—	—	174	174
Distributions to noncontrolling interests	(65)	—	—	—	—	—	—	(198)	(198)
Other	(1)	—	—	(4)	—	—	(4)	—	(4)
Net income (loss)	48	—	—	—	(862)	—	(862)	39	(823)
Other comprehensive loss	—	—	—	—	—	(28)	(28)	—	(28)
<b>Balance as of December 31, 2019</b>	\$ 643	181	\$ 0	\$ 12,737	\$ (6,083)	\$ (36)	\$ 6,618	\$ 849	\$ 7,467

The accompanying notes are an integral part of these consolidated financial statements.

**Tesla, Inc.**  
**Consolidated Statements of Cash Flows**  
(in millions)

	Year Ended December 31,		
	2019	2018	2017
<b>Cash Flows from Operating Activities</b>			
Net loss	\$ (775)	\$ (1,063)	\$ (2,241)
Adjustments to reconcile net loss to net cash provided by (used in) operating activities:			
Depreciation, amortization and impairment	2,154	1,901	1,636
Stock-based compensation	898	749	467
Amortization of debt discounts and issuance costs	188	159	91
Inventory and purchase commitments write-downs	193	85	132
Loss on disposals of fixed assets	146	162	106
Foreign currency transaction (gains) loss	(48)	(2)	52
Loss related to SolarCity acquisition	—	—	58
Non-cash interest and other operating activities	186	49	135
Operating cash flow related to repayment of discounted convertible notes	(188)	—	—
Changes in operating assets and liabilities, net of effect of business combinations:			
Accounts receivable	(367)	(497)	(25)
Inventory	(429)	(1,023)	(179)
Operating lease vehicles	(764)	(215)	(1,523)
Prepaid expenses and other current assets	(288)	(82)	(72)
Other non-current assets	115	(207)	(15)
Accounts payable and accrued liabilities	682	1,723	388
Deferred revenue	801	406	469
Customer deposits	(58)	(96)	170
Resale value guarantee	(150)	(111)	209
Other long-term liabilities	109	160	81
Net cash provided by (used in) operating activities	2,405	2,098	(61)

<b>Cash Flows from Investing Activities</b>			
Purchases of property and equipment excluding finance leases, net of sales	(1,327)	(2,101)	(3,415)
Purchases of solar energy systems	(105)	(218)	(666)
Purchase of intangible assets	(5)	—	—
Receipt of government grants	46	—	—
Business combinations, net of cash acquired	(45)	(18)	(115)
Net cash used in investing activities	(1,436)	(2,337)	(4,196)
<b>Cash Flows from Financing Activities</b>			
Proceeds from issuances of common stock in public offerings, net of underwriting discounts	848	—	400
Proceeds from issuances of convertible and other debt	10,669	6,176	7,138
Repayments of convertible and other debt	(9,161)	(5,247)	(3,996)
Repayments of borrowings issued to related parties	—	(100)	(165)
Collateralized lease repayments	(389)	(559)	511
Proceeds from exercises of stock options and other stock issuances	263	296	259
Principal payments on finance leases	(321)	(181)	(103)
Common stock and debt issuance costs	(37)	(15)	(63)
Purchase of convertible note hedges	(476)	—	(204)
Proceeds from settlement of convertible note hedges	—	—	287
Proceeds from issuance of warrants	174	—	53
Payments for settlements of warrants	—	—	(230)
Proceeds from investments by noncontrolling interests in subsidiaries	279	437	790
Distributions paid to noncontrolling interests in subsidiaries	(311)	(227)	(262)
Payments for buy-outs of noncontrolling interests in subsidiaries	(9)	(6)	—
Net cash provided by financing activities	1,529	574	4,415
Effect of exchange rate changes on cash and cash equivalents and restricted cash	8	(23)	40
Net increase in cash and cash equivalents and restricted cash	2,506	312	198
Cash and cash equivalents and	4,277	3,965	3,767

restricted cash, beginning of period						
Cash and cash equivalents and restricted cash, end of period	\$	6,783	\$	4,277	\$	3,965
<b>Supplemental Non- Cash Investing and Financing Activities</b>						
Equity issued in connection with business combination	\$	207	\$	—	\$	—
Acquisitions of property and equipment included in liabilities	\$	562	\$	249	\$	914
Estimated fair value of facilities under build-to-suit leases	\$	—	\$	94	\$	313
<b>Supplemental Disclosures</b>						
Cash paid during the period for interest, net of amounts capitalized	\$	455	\$	381	\$	183
Cash paid during the period for taxes, net of refunds	\$	54	\$	35	\$	66

The accompanying notes are an integral part of these consolidated financial statements.

**Tesla, Inc.**  
**Notes to Consolidated Financial Statements**

**Note 1 – Overview**

Tesla, Inc. (“Tesla”, the “Company”, “we”, “us” or “our”) was incorporated in the State of Delaware on July 1, 2003. We design, develop, manufacture and sell high-performance fully electric vehicles and design, manufacture, install and sell solar energy generation and energy storage products. Our Chief Executive Officer, as the chief operating decision maker (“CODM”), organizes the Company, manages resource allocations and measures performance among two operating and reportable segments: (i) automotive and (ii) energy generation and storage.

**Note 2 – Summary of Significant Accounting Policies**

*Principles of Consolidation*

The accompanying consolidated financial statements have been prepared in conformity with U.S. generally accepted accounting principles (“GAAP”) and reflect our accounts and operations and those of our subsidiaries in which we have a controlling financial interest. In accordance with the provisions of Accounting Standards Codification (“ASC”) 810, *Consolidation*, we consolidate any variable interest entity (“VIE”) of which we are the primary beneficiary. We form VIEs with financing fund investors in the ordinary course of business in order to facilitate the funding and monetization of certain attributes associated with solar energy systems and leases under our direct vehicle leasing programs. The typical condition for a controlling financial interest ownership is holding a majority of the voting interests of an entity; however, a controlling financial interest may also exist in entities, such as VIEs, through arrangements that do not involve controlling voting interests. ASC 810 requires a variable interest holder to consolidate a VIE if that party has the power to direct the activities of the VIE that most significantly impact the VIE’s economic performance and the obligation to absorb losses of the VIE that could potentially be significant to the VIE or the right to receive benefits from the VIE that could potentially be significant to the VIE. We do not consolidate a VIE in which we have a majority ownership interest when we are not considered the primary beneficiary. We have determined that we are the primary beneficiary of all the VIEs (see Note 17, *Variable Interest Entity Arrangements*). We evaluate our relationships with all the VIEs on an ongoing basis to ensure that we continue to be the primary beneficiary. All intercompany transactions and balances have been eliminated upon consolidation.

*Use of Estimates*

The preparation of financial statements in conformity with GAAP requires management to make estimates and assumptions that affect the reported amounts of assets, liabilities and disclosures in the accompanying notes. Estimates are used for, but not limited to, determining the transaction price of products and services in arrangements with multiple performance obligations and determining the amortization period of these obligations, significant economic incentive for residual value guarantee arrangements, sales return reserves, the collectability of accounts receivable, inventory valuation, fair value of long-lived assets, goodwill, fair value of financial instruments, residual value of operating lease vehicles, depreciable lives of property and equipment and solar energy systems, fair value and residual value of solar energy systems subject to leases, warranty liabilities, income taxes, contingencies, determining lease pass-through financing obligations, the valuation of build-to-suit lease assets, fair value of interest rate swaps and inputs used to value stock-based compensation. In addition, estimates and assumptions are used for the accounting for business combinations, including the fair values and useful lives of acquired assets, assumed liabilities and noncontrolling interests. Management bases its estimates on historical experience and on various other assumptions believed to be reasonable, the results of which form the basis for making judgments about the carrying values of assets and liabilities. Actual results could differ from those estimates.

## *Revenue Recognition*

### *Adoption of new accounting standards*

ASU 2014-09, *Revenue - Revenue from Contracts with Customers*. On January 1, 2018, we adopted the new accounting standard ASC 606, *Revenue from Contracts with Customers* and all the related amendments (“new revenue standard”) using the modified retrospective method. As a policy election, the new revenue standard was applied only to contracts that were not substantially completed as of the date of adoption. We recognized the cumulative effect of initially applying the new revenue standard as an adjustment to the January 1, 2018 opening balance of accumulated deficit. The prior period consolidated financial statements have not been retrospectively adjusted and continue to be reported under the accounting standards in effect for those periods.

A majority of our automotive sales revenue is recognized when control transfers upon delivery to customers. For certain vehicle sales where revenue was previously deferred as an in-substance operating lease, such as certain vehicle sales to customers or leasing partners with a resale value guarantee, we recognize revenue when the vehicles are delivered as a sale with a right of return. As a result, the corresponding operating lease asset, deferred revenue, and resale value guarantee balances as of December 31, 2017, were reclassified to accumulated deficit as part of our adoption entry. Furthermore, the warranty liability related to such vehicles has been accrued as a result of the change from in-substance operating leases to vehicle sales. Prepayments on contracts that can be cancelled without significant penalties, such as vehicle maintenance plans, have been reclassified from deferred revenue to customer deposits. Refer to the *Automotive Sales Revenue* and *Automotive Leasing Revenue* sections below for further discussion of the impact on various categories of vehicle sales.

### *Automotive Segment*

#### *Automotive Sales Revenue*

##### *Automotive Sales without Resale Value Guarantee*

Automotive sales revenue includes revenues related to deliveries of new vehicles and pay-per-use charges, and specific other features and services that meet the definition of a performance obligation under the new revenue standard, including access to our Supercharger network, internet connectivity, Autopilot, Full Self-Driving (“FSD”) features and over-the-air software updates. We recognize revenue on automotive sales upon delivery to the customer, which is when the control of a vehicle transfers. Payments are typically received at the point control transfers or in accordance with payment terms customary to the business. Other features and services such as access to our Supercharger network, internet connectivity and over-the-air software updates are provisioned upon control transfer of a vehicle and recognized over time on a straight-line basis as we have a stand-ready obligation to deliver such services to the customer. We recognize revenue related to these other features and services over the performance period, which is generally the expected ownership life of the vehicle or the eight-year life of the vehicle. Revenue related to Autopilot and FSD features is recognized when functionality is delivered to the customer. For our obligations related to automotive sales, we estimate standalone selling price by considering costs used to develop and deliver the service, third-party pricing of similar options and other information that may be available.

At the time of revenue recognition, we reduce the transaction price and record a sales return reserve against revenue for estimated variable consideration related to future product returns. Such estimates are based on historical experience and are immaterial in all periods presented. In addition, any fees that are paid or payable by us to a customer’s lender when we arrange the financing are recognized as an offset against automotive sales revenue.

Costs to obtain a contract mainly relate to commissions paid to our sales personnel for the sale of vehicles. Commissions are not paid on other obligations such as access to our Supercharger network, internet connectivity, Autopilot, FSD features and over-the-air software updates. As our contract costs related to automotive sales are typically fulfilled within one year, the costs to obtain a contract are expensed as incurred. Amounts billed to customers related to shipping and handling are classified as automotive revenue, and we have elected to recognize the cost for freight and shipping when control over vehicles, parts, or accessories have transferred to the customer as an expense in cost of revenues. Our policy is to exclude taxes collected from a customer from the transaction price of automotive contracts.



#### Automotive Sales with Resale Value Guarantee or a Buyback Option

We offer resale value guarantees or similar buy-back terms to certain international customers who purchase vehicles and who finance their vehicles through one of our specified commercial banking partners. We also offer resale value guarantees in connection with automotive sales to certain leasing partners. Under these programs, we receive full payment for the vehicle sales price at the time of delivery and our counterparty has the option of selling their vehicle back to us during the guarantee period, which currently is generally at the end of the term of the applicable loan or financing program, for a pre-determined resale value.

With the exception of two programs which are discussed within the *Automotive Leasing* section, we recognize revenue when control transfers upon delivery to customers in accordance with the new revenue standard as a sale with a right of return as we do not believe the customer has a significant economic incentive to exercise the resale value guarantee provided to them. The process to determine whether there is a significant economic incentive includes a comparison of a vehicle's estimated market value at the time the option is exercisable with the guaranteed resale value to determine the customer's economic incentive to exercise. The performance obligations and the pattern of recognizing automotive sales with resale value guarantees are consistent with automotive sales without resale value guarantees with the exception of our estimate for sales return reserve. Sales return reserves for automotive sales with resale value guarantees are estimated based on historical experience plus consideration for expected future market values. On a quarterly basis, we assess the estimated market values of vehicles under our buyback options program to determine whether there have been changes to the likelihood of future product returns. As we accumulate more data related to the buyback values of our vehicles or as market conditions change, there may be material changes to their estimated values. Due to price adjustments we made to our vehicle offerings during 2019, we estimated that there is a greater likelihood that customers will exercise their buyback options that were provided prior to such adjustments. As a result, along with the estimated variable consideration related to normal future product returns for vehicles sold under the buyback options program, we adjusted our sales return reserve on vehicles previously sold under our buyback options program resulting in a reduction of automotive sales revenues of \$555 million for the year ended December 31, 2019. If customers elect to exercise the buyback option, we expect to be able to subsequently resell the returned vehicles, which resulted in a corresponding reduction in cost of automotive sales of \$451 million for the year ended December 31, 2019. The net impact was \$104 million reduction in gross profit for the year ended December 31, 2019. The total sales return reserve on vehicles previously sold under our buyback options program was \$639 million as of December 31, 2019, of which \$93 million was short term. The two programs that are still being recorded as operating leases are discussed in further detail below in *Vehicle Sales to Leasing Partners with a Resale Value Guarantee and a Buyback Option* and *Vehicle Sales to Customers with a Resale Value Guarantee where Exercise is Probable*.

Prior to the adoption of the new revenue standard, all transactions with resale value guarantees were recorded as operating leases. The amount of sale proceeds equal to the resale value guarantee was deferred until the guarantee expired or was exercised. For certain transactions that were considered interest bearing collateralized borrowings as required under ASC 840, *Leases* prior to January 1, 2019, we also accrued interest expense based on our borrowing rate. The remaining sale proceeds were deferred and recognized on a straight-line basis over the stated guarantee period to automotive leasing revenue. The guarantee period expired at the earlier of the end of the guarantee period or the pay-off of the initial loan. We capitalized the cost of these vehicles on the consolidated balance sheet as operating lease vehicles, net, and depreciated their value, less estimated residual value, to cost of automotive leasing revenue over the same period.

In cases where our counterparty retained ownership of the vehicle at the end of the guarantee period, the resale value guarantee liability and any remaining deferred revenue balances related to the vehicle were settled to automotive leasing revenue, and the net book value of the leased vehicle was expensed to cost of automotive leasing revenue. If our counterparty returned the vehicle to us during the guarantee period, we purchased the vehicle from our counterparty in an amount equal to the resale value guarantee and settled any remaining deferred balances to automotive leasing revenue, and we reclassified the net book value of the vehicle on the consolidated balance sheet to used vehicle inventory.

Deferred revenue activity related to the access to our Supercharger network, internet connectivity, Autopilot, FSD features and over-the-air software updates on automotive sales with and without resale value guarantee consisted of the following (in millions):

	Year ended December 31,	
	2019	2018
Deferred revenue on automotive sales with and without resale value guarantee— beginning of period	\$ 883	\$ 476
Additions	880	532
Net changes in liability for pre-existing contracts	9	(13)
Revenue recognized	(300)	(112)
Deferred revenue on automotive sales with and without resale value guarantee— end of period	\$ 1,472	\$ 883

Deferred revenue is equivalent to the total transaction price allocated to the performance obligations that are unsatisfied, or partially unsatisfied, as of December 31, 2019. From the deferred revenue balance as of December 31, 2018, revenue recognized during the year ended December 31, 2019 was \$220 million. From the deferred revenue balance as of January 1, 2018, revenue recognized during the year ended December 31, 2018 was \$81 million. Of the total deferred revenue on automotive sales with and without resale value guarantees as of December 31, 2019, we expect to recognize \$751 million of revenue in the next 12 months. The remaining balance will be recognized over the performance period as discussed above in *Automotive Sales without Resale Value Guarantee*.

#### Automotive Regulatory Credits

In connection with the production and delivery of our zero emission vehicles in global markets, we have earned and will continue to earn various tradable automotive regulatory credits. We have sold these credits, and will continue to sell future credits, to automotive companies and other regulated entities who can use the credits to comply with emission standards and other regulatory requirements. For example, under California's Zero Emission Vehicle Regulation and those of states that have adopted California's standard, vehicle manufacturers are required to earn or purchase credits, referred to as ZEV credits, for compliance with their annual regulatory requirements. These laws provide that automakers may bank or sell to other regulated parties their excess credits if they earn more credits than the minimum quantity required by those laws. We also earn other types of saleable regulatory credits in the United States and abroad, including greenhouse gas, fuel economy and clean fuels credits. Payments for regulatory credits are typically received at the point control transfers to the customer, or in accordance with payment terms customary to the business.

We recognize revenue on the sale of automotive regulatory credits at the time control of the regulatory credits is transferred to the purchasing party as automotive revenue in the consolidated statements of operations. Revenue from the sale of automotive regulatory credits totaled \$594 million, \$419 million and \$360 million for the years ended December 31, 2019, 2018 and 2017, respectively. Deferred revenue related to sales of automotive regulatory credits was \$140 million and \$0 as of December 31, 2019 and 2018, respectively. We expect to recognize the deferred revenue as of December 31, 2019 in the next 12 months.

#### Automotive Leasing Revenue

Automotive leasing revenue includes revenue recognized under lease accounting guidance for our direct leasing programs as well as the two programs with resale value guarantees which continue to qualify for operating lease treatment. Prior to the adoption of the new revenue standard, all programs with resale value guarantees were accounted for as operating leases.

### Direct Vehicle Leasing Program

We have outstanding leases under our direct vehicle leasing programs in the U.S., Canada and in certain countries in Europe. As of December 31, 2019, the direct vehicle leasing program is offered for all new Model S, Model X and Model 3 vehicles in the U.S. and for new Model S and Model X vehicles in Canada. Qualifying customers are permitted to lease a vehicle directly from Tesla for up to 48 months. At the end of the lease term, customers are required to return the vehicles to us or for Model S and Model X leases, may opt to purchase the vehicles for a pre-determined residual value. We account for these leasing transactions as operating leases. We record leasing revenues to automotive leasing revenue on a straight-line basis over the contractual term, and we record the depreciation of these vehicles to cost of automotive leasing revenue. For the years ended December 31, 2019, 2018 and 2017, we recognized \$532 million, \$393 million and \$221 million of direct vehicle leasing revenue, respectively. As of December 31, 2019 and 2018, we had deferred \$218 million and \$110 million, respectively, of lease-related upfront payments, which will be recognized on a straight-line basis over the contractual terms of the individual leases.

We capitalize shipping costs and initial direct costs such as the incremental cost of referral fees and sales commissions from the origination of automotive lease agreements as an element of operating lease vehicles, net, and subsequently amortize these costs over the term of the related lease agreement. Our policy is to exclude taxes collected from a customer from the transaction price of automotive contracts. Total capitalized costs were immaterial as of December 31, 2019 and 2018.

### Vehicle Sales to Leasing Partners with a Resale Value Guarantee and a Buyback Option

We offer buyback options in connection with automotive sales with resale value guarantees with certain leasing partner sales in the United States. These transactions entail a transfer of leases, which we have originated with an end-customer, to our leasing partner. As control of the vehicles has not been transferred in accordance with the new revenue standard, these transactions were accounted for as interest bearing collateralized borrowings in accordance with ASC 840, *Leases*, prior to January 1, 2019. Under this program, cash is received for the full price of the vehicle and the collateralized borrowing value is generally recorded within resale value guarantees and the customer upfront down payment is recorded within deferred revenue. We amortize the deferred revenue amount to automotive leasing revenue on a straight-line basis over the option period and accrue interest expense based on our borrowing rate. The option period expires at the earlier of the end of the contractual option period or the pay-off of the initial loan. We capitalize vehicles under this program to operating lease vehicles, net, on the consolidated balance sheets, and we record depreciation from these vehicles to cost of automotive leasing revenue during the period the vehicle is under a lease arrangement. Cash received for these vehicles, net of revenue recognized during the period, is classified as collateralized lease (repayments) borrowings within cash flows from financing activities in the consolidated statements of cash flows. Following the adoption of ASC 842 on January 1, 2019, all new agreements under this program are accounted for as operating leases and there was no material change in the timing and amount of revenue recognized over the term. Consequently, any cash flows for new agreements are classified as operating cash activities on the consolidated statements of cash flows.

At the end of the lease term, we settle our liability in cash by either purchasing the vehicle from the leasing partner for the buyback option amount or paying a shortfall to the option amount the leasing partner may realize on the sale of the vehicle. Any remaining balances within deferred revenue and resale value guarantee will be settled to automotive leasing revenue. The end customers can extend the lease for a period of up to 6 months. In cases where the leasing partner retains ownership of the vehicle after the end of our option period, we expense the net value of the leased vehicle to cost of automotive leasing revenue. The maximum amount we could be required to pay under this program, should we decide to repurchase all vehicles, was \$214 million and \$480 million as of December 31, 2019 and 2018, respectively, including \$178 million within a 12-month period from December 31, 2019. As of December 31, 2019 and 2018, we had \$238 million and \$558 million, respectively, of such borrowings recorded in resale value guarantees and \$29 million and \$93 million, respectively, recorded in deferred revenue liability. For the year ended December 31, 2019 and 2018, we recognized \$186 million and \$332 million, respectively, of leasing revenue related to this program. The net carrying amount of operating lease vehicles under this program was \$190 million and \$469 million, respectively, as of December 31, 2019 and 2018.

#### Vehicle Sales to Customers with a Resale Value Guarantee where Exercise is Probable

For certain international programs where we have offered resale value guarantees to certain customers who purchased vehicles and where we expect the customer has a significant economic incentive to exercise the resale value guarantee provided to them, we continue to recognize these transactions as operating leases. The process to determine whether there is a significant economic incentive includes a comparison of a vehicle's estimated market value at the time the option is exercisable with the guaranteed resale value to determine the customer's economic incentive to exercise. We have not sold any vehicles under this program since the first half of 2017 and all current period activity relates to the exercise or cancellation of active transactions. The amount of sale proceeds equal to the resale value guarantee is deferred until the guarantee expires or is exercised. The remaining sale proceeds are deferred and recognized on a straight-line basis over the stated guarantee period to automotive leasing revenue. The guarantee period expires at the earlier of the end of the guarantee period or the pay-off of the initial loan. We capitalize the cost of these vehicles on the consolidated balance sheet as operating lease vehicles, net, and depreciate their value, less salvage value, to cost of automotive leasing revenue over the same period.

In cases where a customer retains ownership of a vehicle at the end of the guarantee period, the resale value guarantee liability and any remaining deferred revenue balances related to the vehicle are settled to automotive leasing revenue, and the net book value of the leased vehicle is expensed to cost of automotive leasing revenue. If a customer returns the vehicle to us during the guarantee period, we purchase the vehicle from the customer in an amount equal to the resale value guarantee and settle any remaining deferred balances to automotive leasing revenue, and we reclassify the net book value of the vehicle on the consolidated balance sheets to used vehicle inventory. As of December 31, 2019 and 2018, \$115 million and \$150 million, respectively, of the guarantees were exercisable by customers within the next 12 months. For the year ended December 31, 2019 and 2018, we recognized \$150 million and \$158 million, respectively, of leasing revenue related to this program. The net carrying amount of operating lease vehicles under this program was \$83 million and \$212 million, respectively, as of December 31, 2019 and 2018.

#### Services and Other Revenue

Services and other revenue consists of non-warranty after-sales vehicle services, sales of used vehicles, retail merchandise, sales by our acquired subsidiaries to third party customers, and vehicle insurance revenue. There were no significant changes to the timing or amount of revenue recognition as a result of our adoption of the new revenue standard.

Revenues related to repair and maintenance services are recognized over time as services are provided and extended service plans are recognized over the performance period of the service contract as the obligation represents a stand-ready obligation to the customer. We sell used vehicles, services, service plans, vehicle components and merchandise separately and thus use standalone selling prices as the basis for revenue allocation to the extent that these items are sold in transactions with other performance obligations. Payment for used vehicles, services, and merchandise are typically received at the point when control transfers to the customer or in accordance with payment terms customary to the business. Payments received for prepaid plans are refundable upon customer cancellation of the related contracts and are included within customer deposits on the consolidated balance sheet. Deferred revenue related to services and other revenue was immaterial as of December 31, 2019 and 2018.

## *Energy Generation and Storage Segment*

### Energy Generation and Storage Sales

Energy generation and storage sales revenue consists of the sale of solar energy systems and energy storage systems to residential, small commercial, and large commercial and utility grade customers. Upon adoption of the new lease standard (refer to *Leases* section below for details), energy generation and storage sales revenue includes agreements for solar energy systems and power purchase agreements (“PPAs”) that commence after January 1, 2019, as these are now accounted for under the new revenue standard. Sales of solar energy systems to residential and small scale commercial customers consist of the engineering, design, and installation of the system. Post installation, residential and small scale commercial customers receive a proprietary monitoring system that captures and displays historical energy generation data. Residential and small scale commercial customers pay the full purchase price of the solar energy system upfront. Revenue for the design and installation obligation is recognized when control transfers, which is when we install a solar energy system and the system passes inspection by the utility or the authority having jurisdiction. Revenue for the monitoring service is recognized ratably as a stand-ready obligation over the warranty period of the solar energy system. Sales of energy storage systems to residential and small scale commercial customers consist of the installation of the energy storage system and revenue is recognized when control transfers, which is when the product has been delivered or, if we are performing installation, when installed and commissioned. Payment for such storage systems is made upon invoice or in accordance with payment terms customary to the business.

For large commercial and utility grade solar energy system and energy storage system sales which consist of the engineering, design, and installation of the system, customers make milestone payments that are consistent with contract-specific phases of a project. Revenue from such contracts is recognized over time using the percentage of completion method based on cost incurred as a percentage of total estimated contract costs for energy storage system sales and as a percentage of total estimated labor hours for solar energy system sales. Certain large-scale commercial and utility grade solar energy system and energy storage system sales also include operations and maintenance service which are negotiated with the design and installation contracts and are thus considered to be a combined contract with the design and installation service. For certain large commercial and utility grade solar energy systems and energy storage systems where the percentage of completion method does not apply, revenue is recognized when control transfers, which is when the product has been delivered to the customer and commissioned for energy storage systems and when the project has received permission to operate from the utility for solar energy systems. Operations and maintenance service revenue is recognized ratably over the respective contract term for solar energy system sales and upon delivery of the service for energy storage system sales. Customer payments for such services are usually paid annually or quarterly in advance.

In instances where there are multiple performance obligations in a single contract, we allocate the consideration to the various obligations in the contract based on the relative standalone selling price method. Standalone selling prices are estimated based on estimated costs plus margin or using market data for comparable products. Costs incurred on the sale of residential installations before the solar energy systems are completed are included as work in process within inventory in the consolidated balance sheets. However, any fees that are paid or payable by us to a solar loan lender would be recognized as an offset against revenue. Costs to obtain a contract relate mainly to commissions paid to our sales personnel related to the sale of solar energy systems and energy storage systems. As our contract costs related to solar energy system and energy storage system sales are typically fulfilled within one year, the costs to obtain a contract are expensed as incurred.

As part of our solar energy system and energy storage system contracts, we may provide the customer with performance guarantees that warrant that the underlying system will meet or exceed the minimum energy generation or retention requirements specified in the contract. In certain instances, we may receive a bonus payment if the system performs above a specified level. Conversely, if a solar energy system or energy storage system does not meet the performance guarantee requirements, we may be required to pay liquidated damages. Other forms of variable consideration related to our large commercial and utility grade solar energy system and energy storage system contracts include variable customer payments that will be made based on our energy market participation activities. Such guarantees and variable customer payments represent a form of variable consideration and are estimated at contract inception at their most likely amount and updated at the end of each reporting period as additional performance data becomes available. Such estimates are included in the transaction price only to the extent that it is probable a significant reversal of revenue will not occur.

We record as deferred revenue any non-refundable amounts that are collected from customers related to fees charged for prepayments and remote monitoring service and operations and maintenance service, which is recognized as revenue ratably over the respective customer contract term. As of December 31, 2019 and 2018, deferred revenue related to such customer payments amounted to \$156 million and \$149 million, respectively. Revenue recognized from the deferred revenue balance as of December 31, 2018 was \$41 million for the year ended December 31, 2019. Revenue recognized from the deferred revenue balance as of January 1, 2018 was \$41 million for the year ended December 31, 2018. We have elected the practical expedient to omit disclosure of the amount of the transaction price allocated to remaining performance obligations for energy generation and storage sales with an original expected contract length of one year or less and the amount that we have the right to invoice when that amount corresponds directly with the value of the performance to date. As of December 31, 2019, total transaction price allocated to performance obligations that were unsatisfied or partially unsatisfied for contracts with an original expected length of more than one year was \$103 million. Of this amount, we expect to recognize \$5 million in the next 12 months and the remaining over a period up to 28 years.

#### Energy Generation and Storage Leasing

For revenue arrangements where we are the lessor under operating lease agreements for energy generation and storage products, we record lease revenue from minimum lease payments, including upfront rebates and incentives earned from such systems, on a straight-line basis over the life of the lease term, assuming all other revenue recognition criteria have been met. The difference between the payments received and the revenue recognized is recorded as deferred revenue on the consolidated balance sheet.

For solar energy systems where customers purchase electricity from us under PPAs prior to January 1, 2019, we have determined that these agreements should be accounted for as operating leases pursuant to ASC 840. Revenue is recognized based on the amount of electricity delivered at rates specified under the contracts, assuming all other revenue recognition criteria are met.

We record as deferred revenue any amounts that are collected from customers, including lease prepayments, in excess of revenue recognized and operations and maintenance service, which is recognized as revenue ratably over the respective customer contract term. As of December 31, 2019 and 2018, deferred revenue related to such customer payments amounted to \$226 million and \$225 million, respectively. Deferred revenue also includes the portion of rebates and incentives received from utility companies and various local and state government agencies, which is recognized as revenue over the lease term. As of December 31, 2019 and December 31, 2018, deferred revenue from rebates and incentives amounted to \$36 million and \$37 million, respectively.

We capitalize initial direct costs from the execution of agreements for solar energy systems and PPAs, which include the referral fees and sales commissions, as an element of solar energy systems, net, and subsequently amortize these costs over the term of the related agreements.

### Revenue by source

The following table disaggregates our revenue by major source (in millions):

	Year Ended December 31,	
	2019	2018
Automotive sales without resale value guarantee	\$ 19,212	\$ 15,810
Automotive sales with resale value guarantee (1)	146	1,403
Automotive regulatory credits	594	419
Energy generation and storage sales (2)	1,000	1,056
Services and other	2,226	1,391
Total revenues from sales and services	23,178	20,079
Automotive leasing	869	883
Energy generation and storage leasing (2)	531	499
Total revenues	\$ 24,578	\$ 21,461

- (1) We made pricing adjustments to our vehicle offerings in 2019, which resulted in a reduction of automotive sales with resale value guarantee revenues. Refer to *Automotive Sales with Resale Value Guarantee* section above for details. The amount presented represents automotive sales with resale value guarantee in year ended December 31, 2019 net of such pricing adjustments impact.

- (2) Under ASC 842, *Leases*, solar energy system sales and PPAs that commence after January 1, 2019, where we are the lessor and were previously accounted for as leases, no longer meet the definition of a lease and are instead accounted for in accordance with the new revenue standard (refer to the *Leases* section below for details).

### Cost of Revenues

#### *Automotive Segment*

##### Automotive Sales

Cost of automotive sales revenue includes direct parts, material and labor costs, manufacturing overhead, including depreciation costs of tooling and machinery, shipping and logistic costs, vehicle connectivity costs,

allocations of electricity and infrastructure costs related to our Supercharger network, and reserves for estimated warranty expenses. Cost of automotive sales revenues also includes adjustments to warranty expense and charges to write down the carrying value of our inventory when it exceeds its estimated net realizable value and to provide for obsolete and on-hand inventory in excess of forecasted demand.

*Automotive Leasing*

Cost of automotive leasing revenue includes primarily the amortization of operating lease vehicles over the lease term, as well as warranty expenses recognized as incurred. Cost of automotive leasing revenue also includes vehicle connectivity costs and allocations of electricity and infrastructure costs related to our Supercharger network for vehicles under our leasing programs.

*Services and Other*

Costs of services and other revenue includes costs associated with providing non-warranty after-sales services, costs to acquire and certify used vehicles, costs for retail merchandise, and costs to provide vehicle insurance. Cost of services and other revenue also includes direct parts, material and labor costs, manufacturing overhead associated with the sales by our acquired subsidiaries to third party customers.



## *Energy Generation and Storage Segment*

### *Energy Generation and Storage*

Energy generation and storage cost of revenue includes direct and indirect material and labor costs, warehouse rent, freight, warranty expense, other overhead costs and amortization of certain acquired intangible assets. In addition, where arrangements are accounted for as operating leases, the cost of revenue is primarily comprised of depreciation of the cost of leased solar energy systems, maintenance costs associated with those systems and amortization of any initial direct costs.

### *Leases*

In February 2016, the FASB issued ASU No. 2016-02 (“ASC 842”), Leases, to require lessees to recognize all leases, with certain exceptions, on the balance sheet, while recognition on the statement of operations will remain similar to lease accounting under ASC 840. Subsequently, the FASB issued ASU No. 2018-10, Codification Improvements to Topic 842, Leases, ASU No. 2018-11, Targeted Improvements, ASU No. 2018-20, Narrow-Scope Improvements for Lessors, and ASU 2019-01, Codification Improvements, to clarify and amend the guidance in ASU No. 2016-02. ASC 842 eliminates real estate-specific provisions and modifies certain aspects of lessor accounting. We adopted ASC 842 as of January 1, 2019 using the cumulative effect adjustment approach (“adoption of the new lease standard”). In addition, we elected the package of practical expedients permitted under the transition guidance within the new standard, which allowed us to carry forward the historical determination of contracts as leases, lease classification and not reassess initial direct costs for historical lease arrangements. Accordingly, previously reported financial statements, including footnote disclosures, have not been recast to reflect the application of the new standard to all comparative periods presented. The finance lease classification under ASC 842 includes leases previously classified as capital leases under ASC 840.

Agreements for solar energy system leases and PPAs (solar leases) that commence after January 1, 2019, where we are the lessor and were previously accounted for as operating leases no longer meet the definition of a lease upon the adoption of ASC 842 and are instead accounted for in accordance with the revenue standard. Under these two types of arrangements, the customer is not responsible for the design of the energy system but rather approved the energy system benefits in terms of energy capacity and production to be received over the term. Accordingly, the revenue from solar leases commencing after January 1, 2019 are now recognized as earned, based on the amount of capacity provided or electricity delivered at the contractual billing rates, assuming all other revenue recognition criteria have been met. Under the practical expedient available under ASC 606-10-55-18, we recognize revenue based on the value of the service which is consistent with the billing amount.

We have lease agreements with lease and non-lease components, and have elected to utilize the practical expedient to account for lease and non-lease components together as a single combined lease component, from both a lessee and lessor perspective. From a lessor perspective, the timing and pattern of transfer are the same for the non-lease components and associated lease component and, the lease component, if accounted for separately, would be classified as an operating lease. Additionally, leases previously identified as build-to-suit leasing arrangements under legacy lease accounting (ASC 840), were derecognized pursuant to the transition guidance provided for build-to-suit leases in ASC 842. Accordingly, these leases have been reassessed as operating leases as of the adoption date under ASC 842, and are included on the consolidated balance sheet as of December 31, 2019.

Operating lease assets are included within operating lease right-of-use assets, and the corresponding operating lease liabilities are included within accrued liabilities and other for the current portion, and within other long-term liabilities for the long-term portion on our consolidated balance sheet as of December 31, 2019. Finance lease assets are included within property, plant and equipment, net, and the corresponding finance lease liabilities are included within current portion of long-term debt and finance leases for the current portion, and within long-term debt and finance leases, net of current portion for the long-term portion on our consolidated balance sheet as of December 31, 2019.

We have elected not to present short-term leases on the consolidated balance sheet as these leases have a lease term of 12 months or less at lease inception and do not contain purchase options or renewal terms that we are reasonably certain to exercise. All other lease assets and lease liabilities are recognized based on the present value of lease payments over the lease term at commencement date. Because most of our leases do not provide an implicit rate of return, we used our incremental borrowing rate based on the information available at adoption date in determining the present value of lease payments.

Adoption of the new lease standard on January 1, 2019 had a material impact on our consolidated financial statements. The most significant impacts related to the (i) recognition of right-of-use ("ROU") assets of \$1.29 billion and lease liabilities of \$1.24 billion for operating leases on the consolidated balance sheet, and (ii) de-recognition of build-to-suit lease assets and liabilities of \$1.62 billion and \$1.74 billion, respectively, with the net impact of \$97 million recorded to accumulated deficit, as of January 1, 2019. We also reclassified prepaid expenses and other current asset balances of \$142 million and deferred rent balance, including tenant improvement allowances, and other liability balances of \$70 million relating to our existing lease arrangements as of December 31, 2018, into the ROU asset balance as of January 1, 2019. ROU assets represent our right to use an underlying asset for the lease term and lease liabilities represent our obligation to make lease payments arising from the lease. The standard did not materially impact our consolidated statement of operations and consolidated statement of cash flows.

The cumulative effect of the changes made to our consolidated balance sheet as of January 1, 2019 for the adoption of the new lease standard was as follows (in millions):

	Balances at December 31, 2018	Adjustments from Adoption of New Lease Standard	Balances at January 1, 2019
<b>Assets</b>			
Prepaid expenses and other current assets	\$ 366	\$ —	\$ 366
Property, plant and equipment, net	11,330	(1,617)	9,713
Operating lease right-of-use assets	—	1,286	1,286
Other assets	572	(141)	431
<b>Liabilities</b>			
Accrued liabilities and other	2,094	118	2,212
Current portion of long-term debt and finance leases	2,568	—	2,568
Long-term debt and finance leases, net of current portion	9,404	—	9,404
Other long-term liabilities	2,710	(687)	2,023
<b>Equity</b>			
Accumulated deficit	(5,318)	97	(5,221)

#### *Research and Development Costs*

Research and development costs are expensed as incurred.

#### *Marketing, Promotional and Advertising Costs*

Marketing, promotional and advertising costs are expensed as incurred and are included as an element of selling, general and administrative expense in the consolidated statement of operations. We incurred marketing, promotional and advertising costs of \$27 million, \$32 million and \$37 million in the years ended December 31, 2019, 2018 and 2017, respectively, of which the majority is related to promotional activities.

#### *Income Taxes*

Income taxes are computed using the asset and liability method, under which deferred tax assets and liabilities are determined based on the difference between the financial statement and tax bases of assets and liabilities using enacted tax rates in effect for the year in which the differences are expected to affect taxable income. Valuation allowances are established when necessary to reduce deferred tax assets to the amount expected to be realized.

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We record liabilities related to uncertain tax positions when, despite our belief that our tax return positions are supportable, we believe that it is more likely than not that those positions may not be fully sustained upon review by tax authorities. Accrued interest and penalties related to unrecognized tax benefits are classified as income tax expense.

#### *Comprehensive Income (Loss)*

Comprehensive income (loss) is comprised of net income (loss) and other comprehensive income (loss). Other comprehensive income (loss) consists of unrealized gains and losses on cash flow hedges and foreign currency translation adjustments that have been excluded from the determination of net income (loss).

#### *Stock-Based Compensation*

We recognize compensation expense for costs related to all share-based payments, including stock options, restricted stock units (“RSUs”) and our employee stock purchase plan (the “ESPP”). The fair value of stock option awards with only service and/or performance conditions and the ESPP is estimated on the grant or offering date using the Black-Scholes option-pricing model. The fair value of RSUs is measured on the grant date based on the closing fair market value of our common stock. Stock-based compensation expense is recognized on a straight-line basis over the requisite service period, net of actual forfeitures in the period.

For performance-based awards, stock-based compensation expense is recognized over the expected performance achievement period of individual performance milestones when the achievement of each individual performance milestone becomes probable. For performance-based awards with a vesting schedule based entirely on the attainment of both performance and market conditions, stock-based compensation expense associated with each tranche is recognized over the longer of (i) the expected achievement period for the operational milestone for such tranche and (ii) the expected achievement period for the related market capitalization milestone determined on the grant date, beginning at the point in time when the relevant operational milestone is considered probable of being met. If such operational milestone becomes probable any time after the grant date, we will recognize a cumulative catch-up expense from the grant date to that point in time. If the related market capitalization milestone is achieved earlier than its expected achievement period and the achievement of the related operational milestone, then the stock-based compensation expense will be recognized over the expected achievement period for the operational milestone, which may accelerate the rate at which such expense is recognized. The fair value of such awards is estimated on the grant date using Monte Carlo simulations (see Note 14, *Equity Incentive Plans*).

As we accumulate additional employee stock-based awards data over time and as we incorporate market data related to our common stock, we may calculate significantly different volatilities and expected lives, which could materially impact the valuation of our stock-based awards and the stock-based compensation expense that we will recognize in future periods. Stock-based compensation expense is recorded in cost of revenues, research and development expense and selling, general and administrative expense in the consolidated statements of operations.

### *Noncontrolling Interests and Redeemable Noncontrolling Interests*

Noncontrolling interests and redeemable noncontrolling interests represent third-party interests in the net assets under certain funding arrangements, or funds, that we enter into to finance the costs of solar energy systems and vehicles under operating leases. We have determined that the contractual provisions of the funds represent substantive profit sharing arrangements. We have further determined that the appropriate methodology for calculating the noncontrolling interest and redeemable noncontrolling interest balances that reflects the substantive profit sharing arrangements is a balance sheet approach using the hypothetical liquidation at book value (“HLBV”) method. We, therefore, determine the amount of the noncontrolling interests and redeemable noncontrolling interests in the net assets of the funds at each balance sheet date using the HLBV method, which is presented on the consolidated balance sheet as noncontrolling interests in subsidiaries and redeemable noncontrolling interests in subsidiaries. Under the HLBV method, the amounts reported as noncontrolling interests and redeemable noncontrolling interests in the consolidated balance sheet represent the amounts the third-parties would hypothetically receive at each balance sheet date under the liquidation provisions of the funds, assuming the net assets of the funds were liquidated at their recorded amounts determined in accordance with GAAP and with tax laws effective at the balance sheet date and distributed to the third-parties. The third-parties’ interests in the results of operations of the funds are determined as the difference in the noncontrolling interest and redeemable noncontrolling interest balances in the consolidated balance sheets between the start and end of each reporting period, after taking into account any capital transactions between the funds and the third-parties. However, the redeemable noncontrolling interest balance is at least equal to the redemption amount. The redeemable noncontrolling interest balance is presented as temporary equity in the mezzanine section of the consolidated balance sheet since these third-parties have the right to redeem their interests in the funds for cash or other assets.

### *Net Income (Loss) per Share of Common Stock Attributable to Common Stockholders*

Basic net income (loss) per share of common stock attributable to common stockholders is calculated by dividing net income (loss) attributable to common stockholders by the weighted-average shares of common stock outstanding for the period. During the year ended December 31, 2019, we increased net loss attributable to common stockholders by \$8 million to arrive at the numerator used to calculate net loss per share. This adjustment represents the difference between the cash we paid to a financing fund investor for their noncontrolling interest in one of our subsidiaries and the carrying amount of the noncontrolling interest on our consolidated balance sheet, in accordance with ASC 260, *Earnings per Share*. Potentially dilutive shares, which are based on the weighted-average shares of common stock underlying outstanding stock-based awards, warrants and convertible senior notes using the treasury stock method or the if-converted method, as applicable, are included when calculating diluted net income (loss) per share of common stock attributable to common stockholders when their effect is dilutive. Since we intend to settle or have settled in cash the principal outstanding under our 0.25% Convertible Senior Notes due in 2019, 1.25% Convertible Senior Notes due in 2021, 2.375% Convertible Senior Notes due in 2022, 2.00% Convertible Senior Notes due in 2024 and 5.50% Convertible Senior Notes due in 2022 (assumed in our Maxwell Technologies, Inc. acquisition), we use the treasury stock method when calculating their potential dilutive effect, if any. Furthermore, in connection with the offerings of our notes, we entered into convertible note hedges and warrants (see Note 12, *Debt*). However, our convertible note hedges are not included when calculating potentially dilutive shares since their effect is always anti-dilutive. Warrants which have a strike price above our share price were out of the money and have not been included in the table below.

The following table presents the potentially dilutive shares that were excluded from the computation of diluted net income (loss) per share of common stock attributable to common stockholders, because their effect was anti-dilutive (in millions):

	Year Ended December 31,		
	2019	2018	2017
Stock-based awards	10	10	10
Convertible senior notes	1	1	2
Warrants	—	—	1

### *Business Combinations*

We account for business acquisitions under ASC 805, *Business Combinations*. The total purchase consideration for an acquisition is measured as the fair value of the assets given, equity instruments issued and liabilities assumed at the acquisition date. Costs that are directly attributable to the acquisition are expensed as incurred. Identifiable assets (including intangible assets), liabilities assumed (including contingent liabilities) and noncontrolling interests in an acquisition are measured initially at their fair values at the acquisition date. We recognize goodwill if the fair value of the total purchase consideration and any noncontrolling interests is in excess of the net fair value of the identifiable assets acquired and the liabilities assumed. We recognize a bargain purchase gain within other income (expense), net, on the consolidated statement of operations if the net fair value of the identifiable assets acquired and the liabilities assumed is in excess of the fair value of the total purchase consideration and any noncontrolling interests. We include the results of operations of the acquired business in the consolidated financial statements beginning on the acquisition date.

### *Cash and Cash Equivalents*

All highly liquid investments with an original maturity of three months or less at the date of purchase are considered cash equivalents. Our cash equivalents are primarily comprised of money market funds.

### *Restricted Cash*

We maintain certain cash balances restricted as to withdrawal or use. Our restricted cash is comprised primarily of cash as collateral for our sales to lease partners with a resale value guarantee, letters of credit, real estate leases, insurance policies, credit card borrowing facilities and certain operating leases. In addition, restricted cash includes cash received from certain fund investors that have not been released for use by us and cash held to service certain payments under various secured debt facilities.

The following table totals cash and cash equivalents and restricted cash as reported on the consolidated balance sheets; the sums are presented in the consolidated statements of cash flows (in millions):

	December 31, 2019	December 31, 2018	December 31, 2017	December 31, 2016
Cash and cash equivalents	\$ 6,268	\$ 3,686	\$ 3,368	\$ 3,393
Restricted cash, current portion	246	193	155	106
Restricted cash, net of current portion	269	398	442	268
Total as presented in the consolidated statements of cash flows	\$ 6,783	\$ 4,277	\$ 3,965	\$ 3,767

### *Accounts Receivable and Allowance for Doubtful Accounts*

Accounts receivable primarily include amounts related to receivables from financial institutions and leasing companies offering various financing products to our customers, sales of energy generation and storage products, sales of regulatory credits to other automotive manufacturers and maintenance services on vehicles owned by leasing companies. We provide an allowance against accounts receivable to the amount we reasonably believe will be collected. We write-off accounts receivable when they are deemed uncollectible.

We typically do not carry significant accounts receivable related to our vehicle and related sales as customer payments are due prior to vehicle delivery, except for amounts due from commercial financial institutions for approved financing arrangements between our customers and the financial institutions.

### *MyPower Customer Notes Receivable*

We have customer notes receivable under the legacy MyPower loan program. MyPower was offered by SolarCity to provide residential customers with the option to finance the purchase of a solar energy system through a 30-year loan. The outstanding balances, net of any allowance for potentially uncollectible amounts, are presented on the consolidated balance sheet as a component of prepaid expenses and other current assets for the current portion and as MyPower customer notes receivable, net of current portion, for the long-term portion. In determining the allowance and credit quality for customer notes receivable, we identify significant customers with known disputes or collection issues and also consider our historical level of credit losses and current economic trends that might impact the level of future credit losses. Customer notes receivable that are individually impaired are charged-off as a write-off of the allowance for losses. Since acquisition, there have been no new significant customers with known disputes or collection issues, and the amount of potentially uncollectible amounts has been insignificant. In addition, there were no material non-accrual or past due customer notes receivable as of December 31, 2019.

### *Concentration of Risk*

#### *Credit Risk*

Financial instruments that potentially subject us to a concentration of credit risk consist of cash, cash equivalents, restricted cash, accounts receivable, convertible note hedges, and interest rate swaps. Our cash balances are primarily invested in money market funds or on deposit at high credit quality financial institutions in the U.S. These deposits are typically in excess of insured limits. As of December 31, 2019 and 2018, no entity represented 10% or more of our total accounts receivable balance. The risk of concentration for our interest rate swaps is mitigated by transacting with several highly-rated multinational banks.

#### *Supply Risk*

We are dependent on our suppliers, the majority of which are single source suppliers, and the inability of these suppliers to deliver necessary components of our products in a timely manner at prices, quality levels and volumes acceptable to us, or our inability to efficiently manage these components from these suppliers, could have a material adverse effect on our business, prospects, financial condition and operating results.

### *Inventory Valuation*

Inventories are stated at the lower of cost or net realizable value. Cost is computed using standard cost for vehicles and energy storage products, which approximates actual cost on a first-in, first-out basis. In addition, cost for solar energy systems is recorded using actual cost. We record inventory write-downs for excess or obsolete inventories based upon assumptions about current and future demand forecasts. If our inventory on-hand is in excess of our future demand forecast, the excess amounts are written-off.

We also review our inventory to determine whether its carrying value exceeds the net amount realizable upon the ultimate sale of the inventory. This requires us to determine the estimated selling price of our vehicles less the estimated cost to convert the inventory on-hand into a finished product. Once inventory is written-down, a new, lower cost basis for that inventory is established and subsequent changes in facts and circumstances do not result in the restoration or increase in that newly established cost basis.

Should our estimates of future selling prices or production costs change, additional and potentially material increases to this reserve may be required. A small change in our estimates may result in a material charge to our reported financial results.



### *Operating Lease Vehicles*

Vehicles that are leased as part of our direct vehicle leasing program, vehicles delivered to leasing partners with a resale value guarantee and a buyback option, and vehicles delivered to customers with resale value guarantee where exercise is probable are classified as operating lease vehicles as the related revenue transactions are treated as operating leases under ASC 842 (refer to the *Automotive Leasing Revenue* section above for details). Operating lease vehicles are recorded at cost less accumulated depreciation. We generally depreciate their value, less salvage value, using the straight-line-method to cost of automotive leasing revenue over the contractual period. The total cost of operating lease vehicles recorded on the consolidated balance sheets as of December 31, 2019 and 2018 was \$2.85 billion and \$2.55 billion, respectively. Accumulated depreciation related to leased vehicles as of December 31, 2019 and 2018 was \$406 million and \$458 million, respectively.

### *Solar Energy Systems, Net*

We are the lessor of solar energy systems. Prior to January 1, 2019, these leases were accounted for as operating leases in accordance with ASC 840. Under ASC 840, to determine lease classification, we evaluated the lease terms to determine whether there was a transfer of ownership or bargain purchase option at the end of the lease, whether the lease term was greater than 75% of the useful life or whether the present value of the minimum lease payments exceeded 90% of the fair value at lease inception. As discussed in the *Leases* section above, agreements for solar energy system leases and PPAs that commence after January 1, 2019 no longer meet the definition of a lease upon the adoption of ASC 842 and are instead accounted for in accordance with the new revenue standard. We utilize periodic appraisals to estimate useful lives and fair values at lease inception and residual values at lease termination. Solar energy systems are stated at cost less accumulated depreciation.

Depreciation and amortization is calculated using the straight-line method over the estimated useful lives of the respective assets, as follows:

Solar energy systems in service	30 to 35 years
Initial direct costs related to customer solar energy system lease acquisition costs	Lease term (up to 25 years)

Solar energy systems pending interconnection will be depreciated as solar energy systems in service when they have been interconnected and placed in-service. Solar energy systems under construction represents systems that are under installation, which will be depreciated as solar energy systems in service when they are completed, interconnected and placed in service. Initial direct costs related to customer solar energy system agreement acquisition costs are capitalized and amortized over the term of the related customer agreements.

### *Property, Plant and Equipment, net*

Property, plant and equipment, net, including leasehold improvements, are recognized at cost less accumulated depreciation. Depreciation is generally computed using the straight-line method over the estimated useful lives of the respective assets, as follows:

Machinery, equipment, vehicles and office furniture	2 to 12 years
Building and building improvements	15 to 30 years
Computer equipment and software	3 to 10 years

Leasehold improvements are depreciated on a straight-line basis over the shorter of their estimated useful lives or the terms of the related leases.

Upon the retirement or sale of our property, plant and equipment, the cost and associated accumulated depreciation are removed from the consolidated balance sheet, and the resulting gain or loss is reflected on the consolidated statement of operations. Maintenance and repair expenditures are expensed as incurred while major improvements that increase the functionality, output or expected life of an asset are capitalized and depreciated ratably over the identified useful life.

Interest expense on outstanding debt is capitalized during the period of significant capital asset construction. Capitalized interest on construction-in-progress is included within property, plant and equipment and is amortized over the life of the related assets.

Prior to the adoption of the new lease standard, we were deemed to be the owner, for accounting purposes, during the construction phase of certain long-lived assets under build-to-suit lease arrangements because of our involvement with the construction, our exposure to any potential cost overruns or our other commitments under the arrangements. In accordance with ASC 840, we recognized build-to-suit lease assets under construction and corresponding build-to-suit lease liabilities on the consolidated balance sheet. Once construction was completed, if a lease met certain “sale-leaseback” criteria, we removed the asset and liability and accounted for the lease as an operating lease. Otherwise, the lease was accounted for as a capital lease. As a result of the adoption of the new lease standard on January 1, 2019, we have de-recognized all build-to-suit lease assets and have reassessed these leases to be operating lease right-of-use assets within the consolidated balance sheet as of December 31, 2019 (refer to *Leases* section above for details).

#### *Long-Lived Assets Including Acquired Intangible Assets*

We review our property, plant and equipment, long-term prepayments and intangible assets for impairment whenever events or changes in circumstances indicate that the carrying amount of an asset (or asset group) may not be recoverable. We measure recoverability by comparing the carrying amount to the future undiscounted cash flows that the asset is expected to generate. If the asset is not recoverable, its carrying amount would be adjusted-down to its fair value. For the years ended December 31, 2019 and 2018, we have recognized certain impairments of our long-lived assets (refer to Note 4, *Goodwill and Intangible Assets* and Note 22, *Restructuring and Other*, for further details). For the year ended December 31, 2017, we have recognized no material impairments of our long-lived assets.

Intangible assets with definite lives are amortized on a straight-line basis over their estimated useful lives, which range from one to thirty years.

#### *Goodwill*

We assess goodwill for impairment annually in the fourth quarter, or more frequently if events or changes in circumstances indicate that it might be impaired, by comparing its carrying value to the reporting unit’s fair value. For the years ended December 31, 2019, 2018, and 2017, we had not recognized any impairment of goodwill.

#### *Capitalization of Software Costs*

For costs incurred in development of internal use software, we capitalize costs incurred during the application development stage. Costs related to preliminary project activities and post-implementation activities are expensed as incurred. Internal use software is amortized on a straight-line basis over its estimated useful life of three to ten years. We evaluate the useful lives of these assets on an annual basis, and we test for impairment whenever events or changes in circumstances occur that could impact the recoverability of these assets.

#### *Foreign Currency*

We determine the functional and reporting currency of each of our international subsidiaries and their operating divisions based on the primary currency in which they operate. In cases where the functional currency is not the U.S. dollar, we recognize a cumulative translation adjustment created by the different rates we apply to accumulated deficits, including current period income or loss and the balance sheet. For each subsidiary, we apply the monthly average functional exchange rate to its monthly income or loss and the month-end functional currency rate to translate the balance sheet.

Foreign currency transaction gains and losses are a result of the effect of exchange rate changes on transactions denominated in currencies other than the functional currency. Transaction gains and losses are recognized in other income (expense), net, in the consolidated statements of operations. For the years ended December 31, 2019, 2018 and 2017, we recorded foreign currency transaction gains of \$48 million, gains of \$2 million and losses of \$52 million, respectively.

### Warranties

We provide a manufacturer's warranty on all new and used vehicles and production powertrain components and systems we sell. In addition, we also provide a warranty on the installation and components of the energy generation and storage systems we sell for periods typically between 10 to 25 years. We accrue a warranty reserve for the products sold by us, which includes our best estimate of the projected costs to repair or replace items under warranties and recalls when identified. These estimates are based on actual claims incurred to date and an estimate of the nature, frequency and costs of future claims. These estimates are inherently uncertain given our relatively short history of sales, and changes to our historical or projected warranty experience may cause material changes to the warranty reserve in the future. The warranty reserve does not include projected warranty costs associated with our vehicles subject to lease accounting and our solar energy systems under lease contracts or PPAs, as the costs to repair these warranty claims are expensed as incurred. The portion of the warranty reserve expected to be incurred within the next 12 months is included within accrued liabilities and other, while the remaining balance is included within other long-term liabilities on the consolidated balance sheets. Warranty expense is recorded as a component of cost of revenues in the consolidated statements of operations. Due to the magnitude of our automotive business, accrued warranty balance as of December 31, 2019 was primarily related to our automotive segment. Accrued warranty activity consisted of the following (in millions):

	Year Ended December 31,		
	2019	2018	2017
Accrued warranty—beginning of period	\$ 748	\$ 402	\$ 267
Assumed warranty liability from acquisition	—	—	5
Warranty costs incurred	(250)	(209)	(123)
Net changes in liability for pre-existing warranties, including expirations and foreign exchange impact	36	(26)	4
Additional warranty accrued from adoption of the new revenue standard	—	37	—
Provision for warranty	555	544	249
Accrued warranty—end of period	<u>\$ 1,089</u>	<u>\$ 748</u>	<u>\$ 402</u>

For the years ended December 31, 2019 and 2018, and 2017, warranty costs incurred for vehicles accounted for as operating leases were \$20 million, \$22 million and \$36 million, respectively.

### Solar Renewable Energy Credits

We account for solar renewable energy credits ("SRECs") when they are purchased by us or sold to third-parties. For SRECs generated by solar energy systems owned by us and minted by government agencies, we do not recognize any specifically identifiable costs as there are no specific incremental costs incurred to generate the SRECs. We recognize revenue within the energy generation and storage segment from the sale of an SREC when the SREC is transferred to the buyer, and the cost of the SREC, if any, is then recorded to energy generation and storage cost of revenue.

### Deferred Investment Tax Credit Revenue

We have solar energy systems that are eligible for ITCs that accrue to eligible property under the Internal Revenue Code ("IRC"). Under Section 50(d)(5) of the IRC and the related regulations, a lessor of qualifying property may elect to treat the lessee as the owner of such property for the purposes of claiming the ITCs associated with such property. These regulations enable the ITCs to be separated from the ownership of the property and allow the transfer of the ITCs. Under our lease pass-through fund arrangements, we can make a tax election to pass-through the ITCs to the investors, who are the legal lessee of the property. Therefore, we are able to monetize these ITCs to the investors who can utilize them in return for cash payments. We consider the monetization of ITCs to constitute one of the key elements of realizing the value associated with solar energy systems. Consequently, we consider the proceeds from the monetization of ITCs to be a component of revenue generated from solar energy systems.

Under the new revenue standard, we recognize revenue upon the delivery of ITCs to investors under our lease pass-through fund arrangements as this is the point in time that control of ITCs has transferred.

We indemnify the investors for any recapture of ITCs due to our non-compliance. We have concluded that the likelihood of a recapture event is remote, and consequently, we have not recognized a liability for this indemnification on the consolidated balance sheets.

#### *Nevada Tax Incentives*

We had entered into agreements with the State of Nevada and Storey County in Nevada that provide abatements for sales, use, real property, personal property and employer excise taxes, discounts to the base tariff energy rates and transferable tax credits. These incentives are available for the applicable periods beginning on October 17, 2014 and ending on either June 30, 2024 or June 30, 2034 (depending on the incentive). Under these agreements, we were eligible for a maximum of \$195 million of transferable tax credits, subject to capital investments by us and our partners for Gigafactory Nevada of at least \$3.50 billion, which we exceeded during 2017, and specified hiring targets for Gigafactory Nevada, which we exceeded during 2018. We recorded these credits as earned when we had evidence there was a market for their sale. Credits were applied as a cost offset to either employee expense or to capital assets, depending on the source of the credits. Credits earned from employee hires or capital spending by our partners at Gigafactory Nevada were recorded as a reduction to operating expenses. As of December 31, 2019 and 2018, we had earned the maximum of \$195 million of transferable tax credits under these agreements.

#### *Recent Accounting Pronouncements*

##### *Recently issued accounting pronouncements not yet adopted*

In June 2016, the FASB issued ASU No. 2016-13, Measurement of Credit Losses on Financial Instruments, to require financial assets carried at amortized cost to be presented at the net amount expected to be collected based on historical experience, current conditions and forecasts. Subsequently, the FASB issued ASU No. 2018-19, Codification Improvements to Topic 326, to clarify that receivables arising from operating leases are within the scope of lease accounting standards. Further, the FASB issued ASU No. 2019-04, ASU No. 2019-05, ASU 2019-10 and ASU 2019-11 to provide additional guidance on the credit losses standard. The ASUs are effective for interim and annual periods beginning after December 15, 2019, with early adoption permitted. Adoption of the ASUs is on a modified retrospective basis. We plan to adopt the ASUs on January 1, 2020. The ASUs are currently not expected to have a material impact on our consolidated financial statements.

In January 2017, the FASB issued ASU No. 2017-04, Simplifying the Test for Goodwill Impairment, to simplify the test for goodwill impairment by removing Step 2. An entity will, therefore, perform the goodwill impairment test by comparing the fair value of a reporting unit with its carrying amount and recognizing an impairment charge for the amount by which the carrying amount exceeds the fair value, not to exceed the total amount of goodwill allocated to the reporting unit. An entity still has the option to perform a qualitative assessment to determine if the quantitative impairment test is necessary. The ASU is effective for interim and annual periods beginning after December 15, 2019, with early adoption permitted. Adoption of the ASU is prospective. We plan to adopt the ASU prospectively on January 1, 2020. The ASU is currently not expected to have a material impact on our consolidated financial statements.

In August 2018, the FASB issued ASU No. 2018-15, Customer's Accounting for Implementation Costs Incurred in a Cloud Computing Arrangement that Is a Service Contract. The ASU aligns the requirements for capitalizing implementation costs incurred in a hosting arrangement that is a service contract with the requirements for capitalizing implementation costs incurred to develop or obtain internal-use software (and hosting arrangements that include an internal-use software license). The ASU is effective for interim and annual periods beginning after December 15, 2019, with early adoption permitted. Adoption of the ASU is either retrospective or prospective. We plan to adopt the ASU prospectively on January 1, 2020. The ASU is currently not expected to have a material impact on our consolidated financial statements.

In December 2019, the FASB issued ASU No. 2019-12, *Simplifying the Accounting for Income Taxes*, as part of its initiative to reduce complexity in accounting standards. The amendments in the ASU are effective for fiscal years beginning after December 15, 2020, including interim periods therein. Early adoption of the standard is permitted, including adoption in interim or annual periods for which financial statements have not yet been issued. We have not early adopted this ASU for 2019. The ASU is currently not expected to have a material impact on our consolidated financial statements.

#### *Recently adopted accounting pronouncements*

In February 2016, the FASB issued ASU No. 2016-02, *Leases*, to require lessees to recognize all leases, with limited exceptions, on the balance sheet, while recognition on the statement of operations will remain similar to legacy lease accounting, ASC 840. The ASU also eliminates real estate-specific provisions and modifies certain aspects of lessor accounting. Subsequently, the FASB issued ASU No. 2018-10, *Codification Improvements to Topic 842*, ASU No. 2018-11, *Targeted Improvements*, ASU No. 2018-20, *Narrow-Scope Improvements for Lessors*, and ASU 2019-01, *Codification Improvements*, to clarify and amend the guidance in ASU No. 2016-02. We adopted the ASUs on January 1, 2019 on a modified retrospective basis through a cumulative adjustment to our beginning accumulated deficit balance. Prior comparative periods have not been recast under this method, and we adopted all available practical expedients, as applicable. Further, solar leases that commence on or after January 1, 2019, where we are the lessor and which were accounted for as leases under ASC 840, will no longer meet the definition of a lease. Instead, solar leases commencing on or after January 1, 2019 will be accounted for under the new revenue standard. In addition to recognizing operating leases that were previously not recognized on the consolidated balance sheet, our build-to-suit leases were also de-recognized with a net decrease of approximately \$97 million to our beginning accumulated deficit after income tax effects, as our build-to-suit leases no longer qualify for build-to-suit accounting and are instead recognized as operating leases. Upon adoption, our consolidated balance sheet include an overall reduction in assets of \$473 million and a reduction in liabilities of \$570 million. The adoption of the ASUs did not have a material impact on the consolidated statement of operations or the consolidated statement of cash flows.

In August 2017, the FASB issued ASU No. 2017-12, *Targeted Improvements to Accounting for Hedging Activities*, to simplify the application of current hedge accounting guidance. The ASU expands and refines hedge accounting for both non-financial and financial risk components and aligns the recognition and presentation of the effects of the hedging instrument and the hedged item in the financial statements. We adopted the ASU prospectively on January 1, 2019, and the ASU did not have a material impact on the consolidated financial statements.

In January 2018, the FASB issued ASU No. 2018-01, *Land Easement Practical Expedient Transition to Topic 842*, to permit an entity to elect a practical expedient to not re-evaluate land easements that existed or expired before the entity's adoption of ASU No. 2016-02, *Leases*, and that were not accounted for as leases. The ASU did not have a material impact on the consolidated financial statements.

### **Note 3 – Business Combinations**

#### ***Maxwell Acquisition***

On May 16, 2019 (the “Acquisition Date”), we completed our strategic acquisition of Maxwell Technologies, Inc. (“Maxwell”), an energy storage and power delivery products company, for its complementary technology and workforce. Pursuant to the related Agreement and Plan of Merger (the “Merger Agreement”), each issued and outstanding share of Maxwell common stock was converted into 0.0193 (the “Exchange Ratio”) shares of our common stock. In addition, Maxwell's stock option awards and restricted stock unit awards were assumed by us and converted into corresponding equity awards in respect of our common stock based on the Exchange Ratio, with the awards retaining the same vesting and other terms and conditions as in effect immediately prior to the acquisition.

#### *Fair Value of Purchase Consideration*

The Acquisition Date fair value of the purchase consideration was \$207 million (902,968 shares issued at \$229.49 per share, the opening price of our common stock on the Acquisition Date).

### *Fair Value of Assets Acquired and Liabilities Assumed*

We accounted for the acquisition using the purchase method of accounting for business combinations under ASC 805, *Business Combinations*. The total purchase price is allocated to the tangible and identifiable intangible assets acquired and liabilities based on their estimated fair values as of the Acquisition Date.

Fair value estimates are based on a complex series of judgments about future events and uncertainties and rely heavily on estimates and assumptions. The judgments used to determine the estimated fair value assigned to each class of assets acquired and liabilities assumed, as well as asset lives and the expected future cash flows and related discount rates, can materially impact our consolidated financial statements. Significant inputs used for the model included the amount of cash flows, the expected period of the cash flows and the discount rates. In 2019, we finalized our estimate of the Acquisition Date fair values of the assets acquired and the liabilities assumed and there were no changes to the fair values of the assets acquired and the liabilities assumed.

The allocation of the purchase price is based on management's estimate of the Acquisition Date fair values of the assets acquired and liabilities assumed, as follows (in millions):

<b>Assets acquired:</b>	
Cash and cash equivalents	\$ 32
Accounts receivable	24
Inventory	32
Property, plant and equipment, net	27
Operating lease right-of-use assets	10
Intangible assets	105
Prepaid expenses and other assets, current and non-current	3
Total assets acquired	233
<b>Liabilities and equity assumed:</b>	
Accounts payable	(10)
Accrued liabilities and other	(28)
Debt and finance leases, current and non-current	(44)
Deferred revenue, current	(1)
Other long-term liabilities	(14)
Additional paid-in capital	(8)
Total liabilities and equity assumed	(105)
Net assets acquired	128
Goodwill	79
Total purchase price	\$ 207

Goodwill represented the excess of the purchase price over the fair value of the net assets acquired and was primarily attributable to the expected synergies from integrating Maxwell's technology into our automotive segment as well as the acquired talent. Goodwill is not deductible for U.S. income tax purposes and is not amortized.

### *Identifiable Intangible Assets Acquired*

The determination of the fair value of identified intangible assets and their respective useful lives are as follows (in millions, except for estimated useful life):

	Fair Value	Useful Life (in years)
Developed technology	\$ 102	9
Customer relations	2	9
Trade name	1	10
Total intangible assets	\$ 105	

Maxwell's results of operations since the Acquisition Date have been included within the automotive segment. Standalone and pro forma results of operations have not been presented because they were not material to the consolidated financial statements.

#### **Other Acquisitions**

During the year ended December 31, 2019, we completed various other acquisitions generally for the related technology and workforce. Total consideration for these acquisitions was \$96 million, of which \$80 million was paid in cash. In aggregate, \$36 million was attributed to intangible assets, \$51 million was attributed to goodwill within the automotive segment, and \$9 million was attributed to net assets assumed. Goodwill is not deductible for U.S. income tax purposes. The identifiable intangible assets were related to purchased technology, with estimated useful lives of one to nine years.

Standalone and pro forma results of operations have not been presented because they were not material to the consolidated financial statements, either individually or in aggregate.

#### **Note 4 – Goodwill and Intangible Assets**

Goodwill increased \$130 million from \$68 million as of December 31, 2018 to \$198 million as of December 31, 2019 primarily due to completed business combinations during the year ended December 31, 2019 (see Note 3, *Business Combinations*). There were no accumulated impairment losses as of December 31, 2019 and 2018.

Information regarding our intangible assets including assets recognized from our acquisitions was as follows (in millions):

	December 31, 2019				December 31, 2018			
	Gross Carrying Amount	Accumulated Amortization	Other	Net Carrying Amount	Gross Carrying Amount	Accumulated Amortization	Other	Net Carrying Amount
<b>Finite-lived</b>								
<b>intangible assets:</b>								
Developed technology	\$ 291	\$ (72)	\$ 1	\$ 220	\$ 152	\$ (40)	\$ 1	\$ 113
Trade names	3	(1)	1	3	45	(44)	—	1
Favorable contracts and leases, net	113	(24)	—	89	113	(17)	—	96
Other	38	(16)	—	22	36	(12)	1	25
Total finite-lived intangible assets	445	(113)	2	334	346	(113)	2	235
<b>Indefinite-lived</b>								
<b>intangible assets:</b>								
Gigafactory Nevada water rights	5	—	—	5	—	—	—	—



In-process research and development	60	—	(60)	—	60	—	(13)	47
(“IPR&D”)								
Total indefinite-lived intangible assets	65	—	(60)	5	60	—	(13)	47
Total intangible assets	\$ 510	\$ (113)	\$ (58)	\$ 339	\$ 406	\$ (113)	\$ (11)	\$ 282

During 2019, the Company determined to abandon further development efforts on the IPR&D and therefore impaired the remaining \$47 million in restructuring and other expenses in the consolidated statement of operations. Amortization expense during the years ended December 31, 2019, 2018 and 2017 was \$44 million, \$66 million and \$40 million, respectively.

Total future amortization expense for finite-lived intangible assets was estimated as follows (in millions):

2020	\$	50
2021		49
2022		48
2023		42
2024		27
Thereafter		118
Total	\$	<u>334</u>

#### Note 5 – Fair Value of Financial Instruments

ASC 820, *Fair Value Measurements*, states that fair value is an exit price, representing the amount that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants. As such, fair value is a market-based measurement that should be determined based on assumptions that market participants would use in pricing an asset or a liability. The three-tiered fair value hierarchy, which prioritizes which inputs should be used in measuring fair value, is comprised of: (Level I) observable inputs such as quoted prices in active markets; (Level II) inputs other than quoted prices in active markets that are observable either directly or indirectly and (Level III) unobservable inputs for which there is little or no market data. The fair value hierarchy requires the use of observable market data when available in determining fair value. Our assets and liabilities that were measured at fair value on a recurring basis were as follows (in millions):

	December 31, 2019				December 31, 2018			
	Fair Value	Level I	Level II	Level III	Fair Value	Level I	Level II	Level III
Money market funds (cash and cash equivalents & restricted cash)	\$ 1,632	\$ 1,632	\$ —	\$ —	\$ 1,813	\$ 1,813	\$ —	\$ —
Interest rate swap asset	1	—	1	—	12	—	12	—
Interest rate swap liability	(27)	—	(27)	—	(1)	—	(1)	—
Total	<u>\$ 1,606</u>	<u>\$ 1,632</u>	<u>\$ (26)</u>	<u>\$ —</u>	<u>\$ 1,824</u>	<u>\$ 1,813</u>	<u>\$ 11</u>	<u>\$ —</u>

All of our money market funds were classified within Level I of the fair value hierarchy because they were valued using quoted prices in active markets. Our interest rate swaps were classified within Level II of the fair value hierarchy because they were valued using alternative pricing sources or models that utilized market observable inputs, including current and forward interest rates. During the year ended December 31, 2019, there were no transfers between the levels of the fair value hierarchy.

#### Interest Rate Swaps

We enter into fixed-for-floating interest rate swap agreements to swap variable interest payments on certain debt for fixed interest payments, as required by certain of our lenders. We do not designate our interest rate swaps as hedging instruments. Accordingly, our interest rate swaps are recorded at fair value on the consolidated balance sheets within other assets or other long-term liabilities, with any changes in their fair values recognized as other income (expense), net, in the consolidated statements of operations and with any cash flows recognized as investing activities in the consolidated statements of cash flows. Our interest rate swaps outstanding were as follows (in millions):

	December 31, 2019			December 31, 2018		
	Aggregate Notional Amount	Gross Asset at Fair Value	Gross Liability at Fair Value	Aggregate Notional Amount	Gross Asset at Fair Value	Gross Liability at Fair Value
Interest rate swaps	\$ 821	\$ 1	\$ 27	\$ 800	\$ 12	\$ 1

Our interest rate swaps activity was as follows (in millions):

	Year Ended December 31,		
	2019	2018	2017
Gross gains	\$ 11	\$ 22	\$ 7
Gross losses	\$ 51	\$ 12	\$ 13

#### Disclosure of Fair Values

Our financial instruments that are not re-measured at fair value include accounts receivable, MyPower customer notes receivable, rebates receivable, accounts payable, accrued liabilities, customer deposits, participation interest and debt. The carrying values of these financial instruments other than our 1.25% Convertible Senior Notes due in 2021, 2.375% Convertible Senior Notes due in 2022 and 2.00% Convertible Senior Notes due in 2024 and our subsidiary's Zero-Coupon Convertible Senior Notes due in 2020 (collectively referred to as "Convertible Senior Notes" below), 5.30% Senior Notes due in 2025, solar asset-backed notes and solar loan-backed notes approximate their fair values.

We estimate the fair value of the Convertible Senior Notes and the 5.30% Senior Notes due in 2025 using commonly accepted valuation methodologies and market-based risk measurements that are indirectly observable, such as credit risk (Level II). In addition, we estimate the fair values of our solar asset-backed notes and solar loan-backed notes based on rates currently offered for instruments with similar maturities and terms (Level III). The following table presents the estimated fair values and the carrying values (in millions):

	December 31, 2019		December 31, 2018	
	Carrying Value	Fair Value	Carrying Value	Fair Value
Convertible Senior Notes	\$ 3,686	\$ 6,067	\$ 3,661	\$ 4,347
5.30% Senior Notes due in 2025	\$ 1,782	\$ 1,748	\$ 1,779	\$ 1,575
Solar asset-backed notes	\$ 1,155	\$ 1,211	\$ 1,183	\$ 1,207
Solar loan-backed notes	\$ 175	\$ 189	\$ 203	\$ 212

#### Note 6 – Inventory

Our inventory consisted of the following (in millions):

	December 31, 2019	December 31, 2018
Raw materials	\$ 1,428	\$ 932
Work in process	362	297
Finished goods (1)	1,356	1,581
Service parts	406	303
Total	\$ 3,552	\$ 3,113

(1)

Finished goods inventory includes vehicles in transit to fulfill customer orders, new vehicles available for sale, used vehicles and energy storage products.

For solar energy systems, we commence transferring component parts from inventory to construction in progress, a component of solar energy systems, once a lease or PPA contract with a customer has been executed and installation has been initiated. Additional costs incurred on the leased solar energy systems, including labor and overhead, are recorded within construction in progress.

We write-down inventory for any excess or obsolete inventories or when we believe that the net realizable value of inventories is less than the carrying value. During the years ended December 31, 2019, 2018 and 2017, we recorded write-downs of \$138 million, \$78 million and \$124 million, respectively, in cost of revenues.

**Note 7 – Solar Energy Systems, Net**

Solar energy systems, net, consisted of the following (in millions):

	December 31, 2019	December 31, 2018
Solar energy systems in service	\$ 6,682	\$ 6,431
Initial direct costs related to customer solar energy system lease acquisition costs	102	99
	<u>6,784</u>	<u>6,530</u>
Less: accumulated depreciation and amortization (1)	(723)	(496)
	<u>6,061</u>	<u>6,034</u>
Solar energy systems under construction	18	68
Solar energy systems pending interconnection	59	169
Solar energy systems, net (2)	<u>\$ 6,138</u>	<u>\$ 6,271</u>

- (1) Depreciation and amortization expense during the years ended December 31, 2019, 2018 and 2017 was \$227 million, \$276 million, and \$213 million, respectively.
- (2) As of December 31, 2019 and 2018, solar energy systems, net, included \$36 million of gross finance leased assets with accumulated depreciation and amortization of \$6 million and \$4 million, respectively.

**Note 8 – Property, Plant and Equipment, Net**

Our property, plant and equipment, net, consisted of the following (in millions):

	December 31, 2019	December 31, 2018
Machinery, equipment, vehicles and office furniture	\$ 7,167	\$ 6,329
Tooling	1,493	1,398
Leasehold improvements	1,087	961
Land and buildings	3,024	4,047
Computer equipment, hardware and software	595	487
Construction in progress	764	807
	<u>14,130</u>	<u>14,029</u>
Less: Accumulated depreciation	(3,734)	(2,699)
Total	<u>\$ 10,396</u>	<u>\$ 11,330</u>

As of December 31, 2018, the table above included \$1.69 billion of gross build-to-suit lease assets. As a result of the adoption of the new lease standard on January 1, 2019, we have de-recognized all build-to-suit lease assets and have reassessed these leases to be operating lease right-of-use assets within the consolidated balance sheet as of December 31, 2019 (see Note 2, *Summary of Significant Accounting Policies*).

Construction in progress is primarily comprised of tooling and equipment related to the manufacturing of our products and Gigafactory Shanghai construction. Completed assets are transferred to their respective asset classes, and depreciation begins when an asset is ready for its intended use. Interest on outstanding debt is capitalized during periods of significant capital asset construction and amortized over the useful lives of the related assets. During the years ended December 31, 2019 and 2018, we capitalized \$31 million and \$55 million, respectively, of interest.

Depreciation expense during the years ended December 31, 2019, 2018 and 2017 was \$1.37 billion, \$1.11 billion and \$769 million, respectively. Gross property plant and equipment under finance leases as of December 31, 2019 and 2018 was \$2.08 billion and \$1.52 billion, respectively. Accumulated depreciation on property, plant and equipment under finance leases as of these dates was \$483 million and \$232 million, respectively.

Panasonic has partnered with us on Gigafactory Nevada with investments in the production equipment that it uses to manufacture and supply us with battery cells. Under our arrangement with Panasonic, we plan to purchase the full output from their production equipment at negotiated prices. As the terms of the arrangement convey a finance lease under ASC 842, *Leases*, we account for their production equipment as leased assets when production commences. This results in us recording the cost of their production equipment within property, plant and equipment, net, on the consolidated balance sheets with a corresponding liability recorded to debt and finance leases. As of December 31, 2019 and 2018, we had cumulatively capitalized costs of \$1.73 billion and \$1.24 billion, respectively, on the consolidated balance sheets in relation to the production equipment under our Panasonic arrangement. We had cumulatively capitalized total costs for Gigafactory Nevada, including costs under our Panasonic arrangement, of \$5.27 billion and \$4.62 billion as of December 31, 2019 and 2018, respectively.

In 2019, the Shanghai government agreed to provide \$85 million of certain incentives in connection with us making certain manufacturing equipment investments at Gigafactory Shanghai, of which \$46 million was received in cash and the remaining \$39 million was in the form of assets and services contributed by the government. These incentives were taken as a reduction to property, plant and equipment, net, on the consolidated balance sheet.

#### Note 9 – Accrued Liabilities and Other

As of December 31, 2019 and 2018, accrued liabilities and other current liabilities consisted of the following (in millions):

	December 31, 2019	December 31, 2018
Accrued purchases (1)	\$ 638	\$ 394
Payroll and related costs	466	449
Taxes payable (2)	611	348
Accrued interest	86	78
Financing obligation, current portion	57	62
Accrued warranty, current portion	344	201
Sales return reserve, current portion	272	108
Build-to-suit lease liability, current portion	—	82
Operating lease right-of-use liabilities, current portion	228	—
Other current liabilities	203	372
Total	<u>\$ 2,905</u>	<u>\$ 2,094</u>

- (1) Accrued purchases primarily reflects receipts of goods and services that we had not been invoiced yet. As we are invoiced for these goods and services, this balance will reduce and accounts payable will increase.
- (2) Taxes payable includes value added tax, sales tax, property tax, use tax and income tax payables.

Due to price adjustments we made to our vehicle offerings during 2019, we increased our sales return reserve significantly on vehicles previously sold under our buyback options program. See Note 2, *Summary of Significant Accounting Policies* for details.

As of December 31, 2018, the table above included \$82 million of current build-to-suit lease liabilities. As a result of the adoption of the new lease standard on January 1, 2019, we have de-recognized all build-to-suit lease liabilities and have reassessed these leases to be operating lease right-of-use liabilities as of December 31, 2019.

**Note 10 – Other Long-Term Liabilities**

As of December 31, 2019 and 2018, other long-term liabilities consisted of the following (in millions):

	December 31, 2019	December 31, 2018
Accrued warranty reserve	\$ 745	\$ 547
Build-to-suit lease liability	—	1,662
Operating lease right-of-use liabilities	956	—
Deferred rent expense	—	59
Financing obligation	37	50
Sales return reserve	545	84
Other noncurrent liabilities	372	308
Total other long-term liabilities	\$ 2,655	\$ 2,710

As of December 31, 2018, the table above included \$1.66 billion of non-current build-to-suit lease liabilities. As a result of the adoption of the new lease standard on January 1, 2019, we have de-recognized all build-to-suit lease liabilities and have reassessed these leases to be operating lease right-of-use liabilities as of December 31, 2019.

Due to price adjustments we made to our vehicle offerings during 2019, we increased our sales return reserve significantly on vehicles previously sold under our buyback options program. Refer to Note 2, *Summary of Significant Accounting Policies*, for details on these transactions.

**Note 11 – Customer Deposits**

Customer deposits primarily consisted of cash payments from customers at the time they place an order or reservation for a vehicle or an energy product and any additional payments up to the point of delivery or the completion of installation, including the fair values of any customer trade-in vehicles that are applicable toward a new vehicle purchase. Customer deposits also include prepayments on contracts that can be cancelled without significant penalties, such as vehicle maintenance plans. Customer deposit amounts and timing vary depending on the vehicle model, the energy product and the country of delivery. In the case of a vehicle, customer deposits are fully refundable. In the case of an energy generation or storage product, customer deposits are fully refundable prior to the entry into a purchase agreement or in certain cases for a limited time thereafter (in accordance with applicable laws). Customer deposits are included in current liabilities until refunded or until they are applied towards the customer's purchase balance. As of December 31, 2019 and December 31, 2018, we held \$726 million and \$793 million, respectively, in customer deposits.



## Note 12 –Debt

The following is a summary of our debt as of December 31, 2019 (in millions):

	Unpaid Principal Balance	Net Carrying Value		Unused Committed Amount (1)	Contractual Interest Rates	Contractual Maturity Date
		Current	Long-Term			
<b>Recourse debt:</b>						
1.25% Convertible Senior Notes due in 2021 ("2021 Notes")	\$ 1,380	\$ —	\$ 1,304	\$ —	1.25%	March 2021
2.375% Convertible Senior Notes due in 2022 ("2022 Notes")	978	—	902	—	2.375%	March 2022
2.00% Convertible Senior Notes due in 2024 ("2024 Notes")	1,840	—	1,383	—	2.00%	May 2024
5.30% Senior Notes due in 2025 ("2025 Notes")	1,800	—	1,782	—	5.30%	August 2025
Credit Agreement	1,727	141	1,586	499	2.7%-4.8%	June 2020-July 2023
Zero-Coupon Convertible Senior Notes due in 2020	103	97	—	—	0.0%	December 2020
Solar Bonds and other Loans	70	15	53	—	3.6%-5.8%	March 2020-January 2031
Total recourse debt	7,898	253	7,010	499		
<b>Non-recourse debt:</b>						
Automotive Asset-backed Notes	1,577	573	997	—	2.0%-7.9%	February 2020- May 2023
Solar Asset-backed Notes	1,183	32	1,123	—	4.0%-7.7%	September 2024-February 2048
China Loan Agreements	741	444	297	1,542	3.7%-4.0%	September 2020-December 2024
Cash Equity Debt	454	10	430	—	5.3%-5.8%	July 2033-January 2035
Solar Loan-backed Notes	182	11	164	—	4.8%-7.5%	September 2048-September 2049
Warehouse Agreements	167	21	146	933	3.1%-3.6%	September 2021
Solar Term Loans	161	8	152	—	5.4%	January 2021
Canada Credit Facility	40	24	16	—	4.2%-5.9%	November 2022
Solar Renewable Energy Credit and other Loans	89	23	67	6	4.5%-7.4%	March 2020-June 2022
Total non-recourse debt	4,594	1,146	3,392	2,481		
Total debt	<u>\$ 12,492</u>	<u>\$ 1,399</u>	<u>\$ 10,402</u>	<u>\$ 2,980</u>		

The following is a summary of our debt as of December 31, 2018 (in millions):

	Unpaid Principal Balance	Net Carrying Value		Unused Committed Amount (1)	Contractual Interest Rates	Contractual Maturity Date
		Current	Long-Term			
<b>Recourse debt:</b>						
0.25% Convertible Senior Notes due in 2019 ("2019 Notes")	\$ 920	\$ 913	\$ —	\$ —	0.25%	March 2019
2021 Notes	1,380	—	1,244	—	1.25%	March 2021
2022 Notes	978	—	871	—	2.375%	March 2022
2025 Notes	1,800	—	1,779	—	5.30%	August 2025
Credit Agreement	1,540	—	1,540	231	1% plus LIBOR	June 2020
1.625% Convertible Senior Notes due in 2019	566	541	—	—	1.625%	November 2019
Zero-Coupon Convertible Senior Notes due in 2020	103	—	92	—	0.0%	December 2020
Vehicle, Solar Bonds and other Loans	101	1	100	—	1.8%-7.6%	January 2019-January 2031
Total recourse debt	7,388	1,455	5,626	231		
<b>Non-recourse debt:</b>						
Solar Asset-backed Notes	1,214	28	1,155	—	4.0%-7.7%	September 2024-February 2048
Automotive Asset-backed Notes	1,178	468	704	—	2.3%-7.9%	December 2019-June 2022
Cash Equity Debt	467	11	442	—	5.3%-5.8%	July 2033-January 2035
Solar Term Loans	350	188	162	—	6.0%-6.1%	January 2019-January 2021
Solar Loan-backed Notes	210	10	193	—	4.8%-7.5%	September 2048-September 2049
Warehouse Agreements	92	14	78	1,008	3.9%-4.2%	September 2020
Canada Credit Facility	73	32	41	—	3.6%-5.9%	November 2022
Solar Renewable Energy Credit and other Loans	27	16	10	18	5.1%-7.9%	December 2019-July 2021
Total non-recourse debt	3,611	767	2,785	1,026		
Total debt	<u>\$ 10,999</u>	<u>\$ 2,222</u>	<u>\$ 8,411</u>	<u>\$ 1,257</u>		

- (1) Unused committed amounts under some of our credit facilities and financing funds are subject to satisfying specified conditions prior to draw-down (such as pledging to our lenders sufficient amounts of qualified receivables, inventories, leased vehicles and our interests in those leases, solar energy systems and the associated customer contracts, our interests in financing funds or various other assets). Upon draw-down of any unused committed amounts, there are no restrictions on use of available funds for general corporate purposes.

Recourse debt refers to debt that is recourse to our general assets. Non-recourse debt refers to debt that is recourse to only assets of our subsidiaries. The differences between the unpaid principal balances and the net carrying values are due to convertible senior note conversion features, debt discounts or deferred financing costs. As of December 31, 2019, we were in material compliance with all financial debt covenants, which include minimum liquidity and expense-coverage balances and ratios.

#### **2019 Notes, 2021 Notes, Bond Hedges and Warrant Transactions**

In March 2014, we issued \$800 million in aggregate principal amount of 0.25% Convertible Senior Notes due in March 2019 and \$1.20 billion in aggregate principal amount of 1.25% Convertible Senior Notes due in March 2021 in a public offering. In April 2014, we issued an additional \$120 million in aggregate principal amount of the 2019 Notes and \$180 million in aggregate principal amount of the 2021 Notes, pursuant to the exercise in full of the overallotment options by the underwriters. The total net proceeds from the issuances, after deducting transaction costs, were \$906 million for the 2019 Notes and \$1.36 billion for the 2021 Notes.

Each \$1,000 of principal of these notes is initially convertible into 2.7788 shares of our common stock, which is equivalent to an initial conversion price of \$359.87 per share, subject to adjustment upon the occurrence of specified events. Holders of these notes had the option to convert on or after December 1, 2018 for the 2019 Notes and may elect to convert on or after December 1, 2020 for the 2021 Notes. The settlement of such an election to convert the 2019 Notes was in cash and/or shares of our common stock, which we settled in cash on the maturity date. The settlement of such an election to convert the 2021 Notes would be in cash for the principal amount and, if applicable, cash and/or shares of our common stock for any conversion premium at our election. Further, holders of these notes may convert, at their option, prior to the respective dates above only under the following circumstances: (1) during a quarter in which the closing price of our common stock for at least 20 trading days (whether or not consecutive) during the last 30 consecutive trading days immediately preceding the quarter is greater than or equal to 130% of the conversion price; (2) during the five-business day period following any five-consecutive trading day period in which the trading price of these notes is less than 98% of the product of the closing price of our common stock and the applicable conversion rate for each day during such five-consecutive trading day period, or (3) if we make specified distributions to holders of our common stock or if specified corporate transactions occur. Upon such a conversion of the 2019 Notes, we would pay or deliver (as applicable) cash, shares of our common stock or a combination thereof, at our election. Upon such a conversion of the 2021 Notes, we would pay cash for the principal amount and, if applicable, deliver shares of our common stock (subject to our right to deliver cash in lieu of all or a portion of such shares of our common stock) based on a daily conversion value. If a fundamental change occurs prior to the applicable maturity date, holders of these notes may require us to repurchase all or a portion of their notes for cash at a repurchase price equal to 100% of the principal amount plus any accrued and unpaid interest. In addition, if specific corporate events occur prior to the applicable maturity date, we would increase the conversion rate for a holder who elects to convert their notes in connection with such an event in certain circumstances. As of December 31, 2019, none of the conditions permitting the holders of 2021 to early convert had been met. Therefore, the 2021 Notes are classified as long-term.

In accordance with GAAP relating to embedded conversion features, we initially valued and bifurcated the conversion features associated with these notes. We recorded to stockholders' equity \$188 million for the 2019 Notes' conversion feature and \$369 million for the 2021 Notes' conversion feature. The resulting debt discounts are being amortized to interest expense at an effective interest rate of 4.89% and 5.96%, respectively.

In connection with the offering of these notes in March and April 2014, we entered into convertible note hedge transactions whereby we had the option to purchase 2.6 million shares of our common stock for the 2019 Notes and have the option to purchase initially (subject to adjustment for certain specified events) 3.8 million shares of our common stock for the 2021 Notes at a price of \$359.87 per share. The total cost of the convertible note hedge transactions was \$604 million. In addition, we sold warrants whereby the holders of the warrants had the option to purchase 2.6 million shares of our common stock at a price of \$512.66 per share for the 2019 Notes and have the option to purchase initially (subject to adjustment for certain specified events) 3.8 million shares of our common stock at a price of \$560.64 per share for the 2021 Notes. We received \$389 million in total cash proceeds from the sales of these warrants. Taken together, the purchases of the convertible note hedges and the sales of the warrants are intended to reduce potential dilution and/or cash payments from the conversion of these notes and to effectively increase the overall conversion price from \$359.87 to \$512.66 per share for the 2019 Notes and from \$359.87 to \$560.64 per share for the 2021 Notes. As these transactions meet certain accounting criteria, the convertible note hedges and warrants are recorded in stockholders' equity and are not accounted for as derivatives. The net cost incurred in connection with the convertible note hedge and warrant transactions was recorded as a reduction to additional paid-in capital on the consolidated balance sheet.

During the first quarter of 2019, we repaid the \$920 million in aggregate principal amount of the 2019 Notes. As of December 31, 2019, the convertible note hedges and warrants associated with the 2019 Notes have expired.

As of December 31, 2019, the if-converted value of the 2021 Notes exceeds the outstanding principal amount by \$224 million.

### ***2022 Notes, Bond Hedges and Warrant Transactions***

In March 2017, we issued \$978 million in aggregate principal amount of 2.375% Convertible Senior Notes due in March 2022 in a public offering. The net proceeds from the issuance, after deducting transaction costs, were \$966 million.

Each \$1,000 of principal of the 2022 Notes is initially convertible into 3.0534 shares of our common stock, which is equivalent to an initial conversion price of \$327.50 per share, subject to adjustment upon the occurrence of specified events. Holders of the 2022 Notes may convert, at their option, on or after December 15, 2021. Further, holders of the 2022 Notes may convert, at their option, prior to December 15, 2021 only under the following circumstances: (1) during any quarter beginning after June 30, 2017, if the closing price of our common stock for at least 20 trading days (whether or not consecutive) during the last 30 consecutive trading days immediately preceding the quarter is greater than or equal to 130% of the conversion price; (2) during the five-business day period following any five-consecutive trading day period in which the trading price of the 2022 Notes is less than 98% of the product of the closing price of our common stock and the applicable conversion rate for each day during such five-consecutive trading day period or (3) if we make specified distributions to holders of our common stock or if specified corporate transactions occur. Upon a conversion, we would pay cash for the principal amount and, if applicable, deliver shares of our common stock (subject to our right to deliver cash in lieu of all or a portion of such shares of our common stock) based on a daily conversion value. If a fundamental change occurs prior to the maturity date, holders of the 2022 Notes may require us to repurchase all or a portion of their 2022 Notes for cash at a repurchase price equal to 100% of the principal amount plus any accrued and unpaid interest. In addition, if specific corporate events occur prior to the maturity date, we would increase the conversion rate for a holder who elects to convert its 2022 Notes in connection with such an event in certain circumstances. As of December 31, 2019, none of the conditions permitting the holders of the 2022 Notes to early convert had been met. Therefore, the 2022 Notes are classified as long-term.

In accordance with GAAP relating to embedded conversion features, we initially valued and bifurcated the conversion feature associated with the 2022 Notes. We recorded to stockholders' equity \$146 million for the conversion feature. The resulting debt discount is being amortized to interest expense at an effective interest rate of 6.00%.

In connection with the offering of the 2022 Notes, we entered into convertible note hedge transactions whereby we have the option to purchase initially (subject to adjustment for certain specified events) 3.0 million shares of our common stock at a price of \$327.50 per share. The cost of the convertible note hedge transactions was \$204 million. In addition, we sold warrants whereby the holders of the warrants have the option to purchase initially (subject to adjustment for certain specified events) 3.0 million shares of our common stock at a price of \$655.00 per share. We received \$53 million in cash proceeds from the sale of these warrants. Taken together, the purchase of the convertible note hedges and the sale of the warrants are intended to reduce potential dilution from the conversion of the 2022 Notes and to effectively increase the overall conversion price from \$327.50 to \$655.00 per share. As these transactions meet certain accounting criteria, the convertible note hedges and warrants are recorded in stockholders' equity and are not accounted for as derivatives. The net cost incurred in connection with the convertible note hedge and warrant transactions was recorded as a reduction to additional paid-in capital on the consolidated balance sheet.

As of December 31, 2019, the if-converted value of the notes exceeds the outstanding principal amount by \$271 million.

#### ***2024 Notes, Bond Hedges and Warrant Transactions***

In May 2019, we issued \$1.84 billion in aggregate principal amount of 2.00% Convertible Senior Notes due in May 2024 in a public offering. The net proceeds from the issuance, after deducting transaction costs, were \$1.82 billion.

Each \$1,000 of principal of the 2024 Notes is initially convertible into 3.2276 shares of our common stock, which is equivalent to an initial conversion price of \$309.83 per share, subject to adjustment upon the occurrence of specified events. Holders of the 2024 Notes may convert, at their option, on or after February 15, 2024. Further, holders of the 2024 Notes may convert, at their option, prior to February 15, 2024 only under the following circumstances: (1) during any calendar quarter commencing after September 30, 2019 (and only during such calendar quarter), if the last reported sale price of our common stock for at least 20 trading days (whether or not consecutive) during a period of 30 consecutive trading days ending on the last trading day of immediately preceding calendar quarter is greater than or equal to 130% of the conversion price on each trading day; (2) during the five-business day period after any five-consecutive trading day period in which the trading price per \$1,000 principal amount of the 2024 Notes for each trading day of such period is less than 98% of the product of the last reported sale price of our common stock and the conversion rate on each such trading day, or (3) if specified corporate events occur. Upon conversion, the 2024 Notes will be settled in cash, shares of our common stock or a combination thereof, at our election. If a fundamental change occurs prior to the maturity date, holders of the 2024 Notes may require us to repurchase all or a portion of their 2024 Notes for cash at a repurchase price equal to 100% of the principal amount plus any accrued and unpaid interest. In addition, if specific corporate events occur prior to the maturity date, we would increase the conversion rate for a holder who elects to convert its 2024 Notes in connection with such an event in certain circumstances. As of December 31, 2019, none of the conditions permitting the holders of the 2024 Notes to early convert had been met. Therefore, the 2024 Notes are classified as long-term.

In accordance with GAAP relating to embedded conversion features, we initially valued and bifurcated the conversion feature associated with the 2024 Notes. We recorded to stockholders' equity \$491 million for the conversion feature. The resulting debt discount is being amortized to interest expense at an effective interest rate of 8.68%.

In connection with the offering of the 2024 Notes, we entered into convertible note hedge transactions whereby we have the option to purchase initially (subject to adjustment for certain specified events) 5.9 million shares of our common stock at a price of \$309.83 per share. The cost of the convertible note hedge transactions was \$476 million. In addition, we sold warrants whereby the holders of the warrants have the option to purchase initially (subject to adjustment for certain specified events) 5.9 million shares of our common stock at a price of \$607.50 per share. We received \$174 million in cash proceeds from the sale of these warrants. Taken together, the purchase of the convertible note hedges and the sale of the warrants are intended to reduce potential dilution from the conversion of the 2024 Notes and to effectively increase the overall conversion price from \$309.83 to \$607.50 per share. As these transactions meet certain accounting criteria, the convertible note hedges and warrants are recorded in stockholders' equity and are not accounted for as derivatives. The net cost incurred in connection with the convertible note hedge and warrant transactions was recorded as a reduction to additional paid-in capital on the consolidated balance sheet.

As of December 31, 2019, the if-converted value of the notes exceeds the outstanding principal amount by \$644 million.

## **2025 Notes**

In August 2017, we issued \$1.80 billion in aggregate principal amount of unsecured 5.30% Senior Notes due in August 2025 pursuant to Rule 144A and Regulation S under the Securities Act. The net proceeds from the issuance, after deducting transaction costs, were \$1.77 billion.

## **Credit Agreement**

In June 2015, we entered into a senior asset-based revolving credit agreement (as amended from time to time, the "Credit Agreement") with a syndicate of banks. Borrowed funds bear interest, at our option, at an annual rate of (a) 1% plus LIBOR or (b) the highest of (i) the federal funds rate plus 0.50%, (ii) the lenders' "prime rate" or (iii) 1% plus LIBOR. The fee for undrawn amounts is 0.25% per annum. The Credit Agreement is secured by certain of our accounts receivable, inventory and equipment. Availability under the Credit Agreement is based on the value of such assets, as reduced by certain reserves.

In March 2019, we amended and restated the Credit Agreement to increase the total lender commitments by \$500 million to \$2.425 billion and extend the term of substantially all of the total commitments to July 2023.

### ***1.625% Convertible Senior Notes due in 2019***

In 2014, SolarCity issued \$566 million in aggregate principal amount of 1.625% Convertible Senior Notes due on November 1, 2019 in a private placement.

Each \$1,000 of principal of the convertible senior notes was convertible into 1.3169 shares of our common stock, which is equivalent to a conversion price of \$759.36 per share (subject to adjustment upon the occurrence of specified events related to dividends, tender offers or exchange offers). The maximum conversion rate was capped at 1.7449 shares for each \$1,000 of principal of the convertible senior notes, which is equivalent to a minimum conversion price of \$573.10 per share. The convertible senior notes did not have a cash conversion option and the convertible senior note holders could require us to repurchase their convertible senior notes for cash only under certain defined fundamental changes.

In November 2019, we fully repaid \$566 million in aggregate principal amount of the Notes.

### ***Zero-Coupon Convertible Senior Notes due in 2020***

In December 2015, SolarCity issued \$113 million in aggregate principal amount of Zero-Coupon Convertible Senior Notes due on December 1, 2020 in a private placement. \$13 million of the convertible senior notes were issued to related parties (see Note 20, *Related Party Transactions*).

Each \$1,000 of principal of the convertible senior notes is now convertible into 3.3333 shares of our common stock, which is equivalent to a conversion price of \$300.00 per share (subject to adjustment upon the occurrence of specified events related to dividends, tender offers or exchange offers). The maximum conversion rate is capped at 4.2308 shares for each \$1,000 of principal of the convertible senior notes, which is equivalent to a minimum conversion price of \$236.36 per share. The convertible senior notes do not have a cash conversion option. The convertible senior note holders may require us to repurchase their convertible senior notes for cash only under certain defined fundamental changes. On or after June 30, 2017, the convertible senior notes are redeemable by us in the event that the closing price of our common stock exceeds 200% of the conversion price for 45 consecutive trading days ending within three trading days of such redemption notice at a redemption price equal to 100% of the principal amount plus any accrued and unpaid interest.

As of December 31, 2019, the if-converted value of the notes exceeds the outstanding principal amount by \$41 million.

### ***Solar Bonds and other Loans***

Solar Bonds are senior unsecured obligations that are structurally subordinate to the indebtedness and other liabilities of our subsidiaries. Solar Bonds were issued under multiple series with various terms and interest rates. Additionally, we have assumed the 5.50% Convertible Senior Notes due in 2022 issued by Maxwell, which are convertible into shares of our common stock as a result of our acquisition of Maxwell.

### ***Automotive Asset-backed Notes***

From time to time, we transfer receivables or beneficial interests related to certain leased vehicles into SPEs and issue Automotive Asset-backed Notes, backed by these automotive assets to investors. The SPEs are consolidated in the financial statements. The cash flows generated by these automotive assets are used to service the principal and interest payments on the Automotive Asset-backed Notes and satisfy the SPEs' expenses, and any remaining cash is distributed to the owners of the SPEs. We recognize revenue earned from the associated customer lease contracts in accordance with our revenue recognition policy. The SPEs' assets and cash flows are not available to our other creditors, and the creditors of the SPEs, including the Automotive Asset-backed Note holders, have no recourse to our other assets. A third-party contracted with us to provide administrative and collection services for these automotive assets.

In November 2019, we issued \$861 million in aggregate principal amount of Automotive Asset-backed Notes. The proceeds from the issuance, net of discounts and fees, were \$857 million.

### ***Solar Asset-backed Notes***

From time to time, our subsidiaries pool and transfer either qualifying solar energy systems and the associated customer contracts or our interests in certain financing funds into Special Purpose Entities (“SPEs”) and issue Solar Asset-backed Notes backed by these solar assets or interests to investors. The SPEs are wholly owned by us and are consolidated in the financial statements. The cash flows generated by these solar assets or distributed by the underlying financing funds to certain SPEs are used to service the principal and interest payments on the Solar Asset-backed Notes and satisfy the SPEs’ expenses, and any remaining cash is distributed to us. We recognize revenue earned from the associated customer contracts in accordance with our revenue recognition policy. The SPEs’ assets and cash flows are not available to our other creditors, and the creditors of the SPEs, including the Solar Asset-backed Note holders, have no recourse to our other assets. We contracted with the SPEs to provide operations & maintenance and administrative services for the solar energy systems. As of December 31, 2019, solar assets pledged as collateral for Solar Asset-backed Notes had a carrying value of \$690 million and are included within solar energy systems, net, on the consolidated balance sheets.

### ***China Loan Agreements***

In March 2019, one of our subsidiaries entered into a loan agreement with a syndicate of lenders in China for a bridge loan to be used for expenditures related to the construction of and production at our Gigafactory Shanghai. The loan agreement was terminated in December 2019.

In September 2019, one of our subsidiaries entered into a loan agreement with a lender in China for an unsecured 12-month revolving facility of up to RMB 5.0 billion (or the equivalent drawn in U.S. dollars), to finance vehicles in-transit to China. Borrowed funds bear interest at an annual rate no greater than 90% of the one-year rate published by the People’s Bank of China. The loan facility is non-recourse to our assets.

In December 2019, one of our subsidiaries entered into loan agreements with a syndicate of lenders in China for: (i) a secured term loan facility of up to RMB 9.0 billion or the equivalent amount drawn in U.S. dollars (the “Fixed Asset Facility”) and (ii) an unsecured revolving loan facility of up to RMB 2.25 billion or the equivalent amount drawn in U.S. dollars (the “Working Capital Facility”), in each case to be used in connection with our construction of and production at our Gigafactory Shanghai. Outstanding borrowings pursuant to the Fixed Asset Facility accrue interest at a rate equal to: (i) for RMB-denominated loans, the market quoted interest rate published by the People’s Bank of China minus 0.7625%, and (ii) for U.S. dollar-denominated loans, the sum of one-year LIBOR plus 1.3%. Outstanding borrowings pursuant to the Working Capital Facility accrue interest at a rate equal to: (i) for RMB-denominated loans, the market quoted interest rate published by the People’s Bank of China minus 0.4525%, and (ii) for U.S. dollar-denominated loans, the sum of one-year LIBOR plus 0.8%. The Fixed Asset Facility is secured by the land and buildings at Gigafactory Shanghai and both facilities are non-recourse to our other assets.

### ***Cash Equity Debt***

In connection with the cash equity financing deals closed in 2016, our subsidiaries issued \$502 million in aggregate principal amount of debt that bears interest at fixed rates. This debt is secured by, among other things, our interests in certain financing funds and is non-recourse to our other assets.

### ***Solar Loan-backed Notes***

In January 2016 and January 2017, our subsidiaries pooled and transferred certain MyPower customer notes receivable into two SPEs and issued \$330 million in aggregate principal amount of Solar Loan-backed Notes, backed by these notes receivable to investors. Accordingly, we did not recognize a gain or loss on the transfer of these notes receivable. The SPEs are wholly owned by us and are consolidated in the financial statements. The payments received by the SPEs from these notes receivable are used to service the semi-annual principal and interest payments on the Solar Loan-backed Notes and satisfy the SPEs’ expenses, and any remaining cash is distributed to us. The SPEs’ assets and cash flows are not available to our other creditors, and the creditors of the SPEs, including the Solar Loan-backed Note holders, have no recourse to our other assets.

### ***Warehouse Agreements***

In August 2016, our subsidiaries entered into a loan and security agreement (the “2016 Warehouse Agreement”) for borrowings secured by the future cash flows arising from certain leases and the associated leased vehicles. On August 17, 2017, the 2016 Warehouse Agreement was amended to modify the interest rates and extend the availability period and the maturity date, and our subsidiaries entered into another loan and security agreement (the “2017 Warehouse Agreement”) with substantially the same terms as and that shares the same committed amount with the 2016 Warehouse Agreement. On August 16, 2018, the 2016 Warehouse Agreement and 2017 Warehouse Agreement were amended to extend the availability period from August 17, 2018 to August 16, 2019 and extend the maturity date from September 2019 to September 2020. On December 28, 2018, our subsidiaries terminated the 2017 Warehouse Agreement after having fully repaid all obligations thereunder, and entered into a third loan and security agreement with substantially the same terms as and that shares the same committed amount with the 2016 Warehouse Agreement. We refer to these agreements together as the “Warehouse Agreements.” Amounts drawn under the Warehouse Agreements generally bear interest at a fixed margin above (i) LIBOR or (ii) the commercial paper rate. The Warehouse Agreements are non-recourse to our other assets.

Pursuant to the Warehouse Agreements, an undivided beneficial interest in the future cash flows arising from certain leases and the related leased vehicles has been sold for legal purposes but continues to be reported in the consolidated financial statements. The interest in the future cash flows arising from these leases and the related vehicles is not available to pay the claims of our creditors other than pursuant to obligations to the lenders under the Warehouse Agreements. Any excess cash flows not required to pay obligations under the Warehouse Agreements are available for distributions.

In August 2019, our subsidiaries amended the Warehouse Agreements to extend the availability period from August 16, 2019 to August 14, 2020 and extend the maturity date from September 2020 to September 2021.

In November 2019, we repaid \$723 million of the principal outstanding under the Warehouse Agreements.

### ***Solar Term Loans***

Our subsidiaries have entered into agreements for term loans with various financial institutions. The term loans are secured by substantially all of the assets of the subsidiaries, including its interests in certain financing funds, and are non-recourse to our other assets.

During the fourth quarter of 2019, we fully repaid the \$159 million in aggregate principal of one term loan.

### ***Canada Credit Facility***

In December 2016, one of our subsidiaries entered into a credit agreement (the “Canada Credit Facility”) with a bank for borrowings secured by our interests in certain vehicle leases. In December 2017 and December 2018, the Canada Credit Facility was amended to add our interests in additional vehicle leases as collateral, allowing us to draw additional funds. Amounts drawn under the Canada Credit Facility bear interest at fixed rates. The Canada Credit Facility is non-recourse to our other assets.

### ***Solar Renewable Energy Credit and other Loans***

We have entered into various solar renewable energy credit and other loan agreements with various financial institutions, including a solar revolving credit facility. The solar renewable energy credit loan facility is secured by substantially all of the assets of one of our wholly owned subsidiaries, including its rights under forward contracts to sell SRECs, and is non-recourse to our other assets. The solar revolving credit facility is secured by certain assets of the subsidiary and is non-recourse to our other assets.



### ***Interest Expense***

The following table presents the interest expense related to the contractual interest coupon, the amortization of debt issuance costs and the amortization of debt discounts on our convertible senior notes with cash conversion features, which include the 1.50% Convertible Senior Notes due in 2018, the 2019 Notes, the 2021 Notes, the 2022 Notes and the 2024 Notes (in millions):

	Year Ended December 31,		
	2019	2018	2017
Contractual interest coupon	\$ 65	\$ 43	\$ 39
Amortization of debt issuance costs	7	7	7
Amortization of debt discounts	148	123	114
Total	<u>\$ 220</u>	<u>\$ 173</u>	<u>\$ 160</u>

### ***Pledged Assets***

As of December 31, 2019 and 2018, we had pledged or restricted \$5.72 billion and \$5.23 billion of our assets (consisted principally of restricted cash, receivables, inventory, SRECs, solar energy systems, operating lease vehicles, land use rights, property and equipment, and equity interests in certain SPEs) as collateral for our outstanding debt.

### ***Schedule of Principal Maturities of Debt***

The future scheduled principal maturities of debt as of December 31, 2019 were as follows (in millions):

	Recourse debt	Non-recourse debt	Total
2020	\$ 259	\$ 1,155	\$ 1,414
2021	1,382	909	2,291
2022	1,024	1,013	2,037
2023	1,586	199	1,785
2024	1,840	558	2,398
Thereafter	1,807	760	2,567
Total	<u>\$ 7,898</u>	<u>\$ 4,594</u>	<u>\$ 12,492</u>

### ***Note 13 – Leases***

We have entered into various non-cancellable operating and finance lease agreements for certain of our offices, manufacturing and warehouse facilities, retail and service locations, equipment, vehicles, and solar energy systems, worldwide. We determine if an arrangement is a lease, or contains a lease, at inception and record the leases in our financial statements upon lease commencement, which is the date when the underlying asset is made available for use by the lessor.

Our leases, where we are the lessee, often include options to extend the lease term for up to 10 years. Some of our leases also include options to terminate the lease prior to the end of the agreed upon lease term. For purposes of calculating lease liabilities, lease terms include options to extend or terminate the lease when it is reasonably certain that we will exercise such options.

Lease expense for operating lease payments is recognized on a straight-line basis over the lease term. Certain operating leases provide for annual increases to lease payments based on an index or rate. We calculate the present value of future lease payments based on the index or rate at the lease commencement date for new leases commencing after January 1, 2019. For historical leases, we used the index or rate as of the adoption date. Differences between the calculated lease payment and actual payment are expensed as incurred. Lease expense for

finance lease payments is recognized as amortization expense of the finance lease ROU asset and interest expense on the finance lease liability over the lease term.

The balances for the operating and finance leases where we are the lessee are presented as follows (in millions) within our consolidated balance sheet:

	December 31, 2019	
<b>Operating leases:</b>		
Operating lease right-of-use assets	\$	1,218
Accrued liabilities and other	\$	228
Other long-term liabilities		956
Total operating lease liabilities	\$	1,184
<b>Finance leases:</b>		
Solar energy systems, net	\$	30
Property, plant and equipment, net		1,600
Total finance lease assets	\$	1,630
Current portion of long-term debt and finance leases	\$	386
Long-term debt and finance leases, net of current portion		1,232
Total finance lease liabilities	\$	1,618

The components of lease expense are as follows (in millions) within our consolidated statements of operations:

	Year Ended December 31, 2019	
<b>Operating lease expense:</b>		
Operating lease expense (1)	\$	426
<b>Finance lease expense:</b>		
Amortization of leased assets	\$	299
Interest on lease liabilities		104
Total finance lease expense	\$	403
Total lease expense	\$	829

(1) Includes short-term leases and variable lease costs, which are immaterial.

Other information related to leases where we are the lessee is as follows:

	December 31, 2019
<b>Weighted-average remaining lease term:</b>	

Operating leases	6.2 years
Finance leases	3.9 years
<b>Weighted-average discount rate:</b>	
Operating leases	6.5%
Finance leases	6.5%

Because most of our leases do not provide an implicit rate of return, we used our incremental borrowing rate based on the information available at lease commencement date in determining the present value of lease payments.

Supplemental cash flow information related to leases where we are the lessee is as follows (in millions):

	Year Ended December 31, 2019	
<b>Cash paid for amounts included in the measurement of lease liabilities:</b>		
Operating cash outflows from operating leases	\$	396
Operating cash outflows from finance leases (interest payments)	\$	104
Financing cash outflows from finance leases	\$	321
Leased assets obtained in exchange for finance lease liabilities	\$	616
Leased assets obtained in exchange for operating lease liabilities	\$	202

As of December 31, 2019, the maturities of our operating and finance lease liabilities (excluding short-term leases) are as follows (in millions):

	Operating Leases	Finance Leases
2020	\$ 296	\$ 474
2021	262	478
2022	210	600
2023	174	224
2024	146	5
Thereafter	372	13
Total minimum lease payments	1,460	1,794
Less: Interest	276	176
Present value of lease obligations	1,184	1,618
Less: Current portion	228	386
Long-term portion of lease obligations	\$ 956	\$ 1,232

Under legacy lease accounting (ASC 840), future minimum lease payments under non-cancellable leases as of December 31, 2018 are as follows (in millions):

	Operating Leases	Finance Leases
2019	\$ 276	\$ 417
2020	257	503
2021	230	506
2022	183	24
2023	158	5
Thereafter	524	6
Total minimum lease payments	\$ 1,628	1,461
Less: Interest		122

Present value of lease obligations	1,339
Less: Current portion	346
Long-term portion of lease obligations	<u>\$ 993</u>

### Non-cancellable Operating Lease Receivables

Under the new lease standard, we are the lessor of certain vehicle arrangements as described in Note 2, *Summary of Significant Accounting Policies*. Following the adoption of the new lease standard, solar energy system leases and PPAs that commenced after January 1, 2019, where we are the lessor and were previously accounted for as leases, no longer meet the definition of a lease and are therefore not included in the table as of December 31, 2019 (refer to Note 2, *Summary of Significant Accounting Policies*). As of December 31, 2019, maturities of our operating lease receivables from customers for each of the next five years and thereafter were as follows (in millions):

2020	\$	644
2021		494
2022		317
2023		190
2024		191
Thereafter		2,294
Total	\$	<u>4,130</u>

Under legacy lease accounting (ASC 840), future minimum lease payments to be received from customers under non-cancellable leases as of December 31, 2018 are as follows (in millions):

2019	\$	502
2020		418
2021		271
2022		187
2023		189
Thereafter		2,469
Total	\$	<u>4,036</u>

The above tables do not include vehicle sales to customers or leasing partners with a resale value guarantee as the cash payments were received upfront. For our solar PPA arrangements, customers are charged solely based on actual power produced by the installed solar energy system at a predefined rate per kilowatt-hour of power produced. The future payments from such arrangements are not included in the above table as they are a function of the power generated by the related solar energy systems in the future.

### Note 14 – Equity Incentive Plans

In June 2019, we adopted the 2019 Equity Incentive Plan (the “2019 Plan”), and simultaneously terminated the 2010 Equity Incentive Plan (the “2010 Plan”). No new awards have been granted under the 2010 Plan following the adoption of the 2019 Plan, but such termination did not affect outstanding awards under the 2010 Plan. The 2019 Plan has similar terms as the 2010 Plan and provides for the granting of stock options, restricted stock, RSUs, stock appreciation rights, performance units and performance shares to our employees, directors and consultants. Stock options granted under the 2019 Plan may be either incentive stock options or nonstatutory stock options. Incentive stock options may only be granted to our employees. Nonstatutory stock options may be granted to our employees, directors and consultants. Generally, our stock options and RSUs vest over four years and our stock options are exercisable over a maximum period of 10 years from their grant dates. Vesting typically terminates when the employment or consulting relationship ends.

As of December 31, 2019, 11 million shares were reserved and available for issuance under the 2019 Plan.

The following table summarizes our stock option and RSU activity:

	Stock Options				RSUs	
	Number of Options (in thousands)	Weighted-Average Exercise Price	Weighted-Average Remaining Contractual Life (years)	Aggregate Intrinsic Value (in billions)	Number of RSUs (in thousands)	Weighted-Average Grant Date Fair Value
Balance, December 31, 2018	31,208	\$ 273.40			4,659	\$ 294.63
Granted	1,473	\$ 265.26			3,752	\$ 282.74
Exercised or released	(1,441)	\$ 106.68			(1,949)	\$ 277.13
Cancelled	(1,245)	\$ 310.57			(1,656)	\$ 295.05
Balance, December 31, 2019	29,995	\$ 279.49	6.89	\$ 4.17	4,806	\$ 291.06
Vested and expected to vest, December 31, 2019	15,860	\$ 228.29	6.05	\$ 3.02	4,804	\$ 291.05
Exercisable and vested, December 31, 2019	7,025	\$ 94.07	3.39	\$ 2.28		

The weighted-average grant date fair value of RSUs in the years ended December 31, 2019, 2018, and 2017 was \$282.74, \$316.46 and \$308.71, respectively. The aggregate release date fair value of RSUs in the years ended December 31, 2019, 2018 and 2017 was \$502 million, \$546 million and \$491 million, respectively.

The aggregate intrinsic value of options exercised in the years ended December 31, 2019, 2018, and 2017 was \$237 million, \$293 million and \$544 million, respectively.

#### Fair Value Assumptions

We use the fair value method in recognizing stock-based compensation expense. Under the fair value method, we estimate the fair value of each stock option award with service or service and performance conditions and the ESPP on the grant date generally using the Black-Scholes option pricing model and the weighted-average assumptions in the following table:

	Year Ended December 31,		
	2019	2018	2017
Risk-free interest rate:			
Stock options	2.4%	2.5%	1.8%
ESPP	2.2%	2.0%	1.1%
Expected term (in years):			
Stock options	4.5	4.7	5.1
ESPP	0.5	0.5	0.5
Expected volatility:			
Stock options	48%	42%	42%
ESPP	53%	43%	35%
Dividend yield:			
Stock options	0.0%	0.0%	0.0%
ESPP	0.0%	0.0%	0.0%
Grant date fair value per share:			
Stock options	\$ 111.59	\$ 121.92	\$ 122.25
ESPP	\$ 78.25	\$ 84.37	\$ 75.05



The fair value of RSUs with service or service and performance conditions is measured on the grant date based on the closing fair market value of our common stock. The risk-free interest rate is based on the U.S. Treasury yield for zero-coupon U.S. Treasury notes with maturities approximating each grant's expected life. Prior to the fourth quarter of 2017, given our then limited history with employee grants, we used the "simplified" method in estimating the expected term of our employee grants; the simplified method utilizes the average of the time-to-vesting and the contractual life of the employee grant. Beginning with the fourth quarter of 2017, we use our historical data in estimating the expected term of our employee grants. The expected volatility is based on the average of the implied volatility of publicly traded options for our common stock and the historical volatility of our common stock.

## 2018 CEO Performance Award

In March 2018, our stockholders approved the Board of Directors' grant of 20,264,042 stock option awards to our CEO (the "2018 CEO Performance Award"). The 2018 CEO Performance Award consists of 12 vesting tranches with a vesting schedule based entirely on the attainment of both operational milestones (performance conditions) and market conditions, assuming continued employment either as the CEO or as both Executive Chairman and Chief Product Officer and service through each vesting date. Each of the 12 vesting tranches of the 2018 CEO Performance Award will vest upon certification by the Board of Directors that both (i) the market capitalization milestone for such tranche, which begins at \$100 billion for the first tranche and increases by increments of \$50 billion thereafter, and (ii) any one of the following eight operational milestones focused on revenue or eight operational milestones focused on Adjusted EBITDA have been met for the previous four consecutive fiscal quarters on an annualized basis. Adjusted EBITDA is defined as net income (loss) attributable to common stockholders before interest expense, provision (benefit) for income taxes, depreciation and amortization and stock-based compensation.

Total Annualized Revenue (in billions)	Annualized Adjusted EBITDA (in billions)
\$20.0	\$1.5
\$35.0	\$3.0
\$55.0	\$4.5
\$75.0	\$6.0
\$100.0	\$8.0
\$125.0	\$10.0
\$150.0	\$12.0
\$ 175.0	\$14.0

As of December 31, 2019, two operational milestones have been achieved: (i) \$20.0 billion total annualized revenue and (ii) \$1.5 billion annualized adjusted EBITDA, each subject to the formal certification by our Board of Directors, while no market capitalization milestones have been achieved. Consequently, no shares subject to the 2018 CEO Performance Award have vested as of the date of this filing.

As of December 31, 2019, the following operational milestones were considered probable of achievement:

- Adjusted EBITDA of \$3.0 billion
- Total revenue of \$35.0 billion

Stock-based compensation expense associated with each tranche under the 2018 CEO Performance Award is recognized over the longer of (i) the expected achievement period for the operational milestone for such tranche and (ii) the expected achievement period for the related market capitalization milestone determined on the grant date, beginning at the point in time when the relevant operational milestone is considered probable of being met. If such operational milestone becomes probable any time after the grant date, we will recognize a cumulative catch-up expense from the grant date to that point in time. If the related market capitalization milestone is achieved earlier than its expected achievement period and the achievement of the related operational milestone, then the stock-based compensation expense will be recognized over the expected achievement period for the operational milestone, which may accelerate the rate at which such expense is recognized.

The market capitalization milestone period and the valuation of each tranche are determined using a Monte Carlo simulation and is used as the basis for determining the expected achievement period. The probability of meeting an operational milestone is based on a subjective assessment of our future financial projections. No tranches of the 2018 CEO Performance Award will vest unless a market capitalization and a matching operational milestone are both achieved. The first tranche of the 2018 CEO Performance Award will not vest unless our market capitalization were to approximately double from the initial level at the time the award was approved, based on both a six calendar month trailing average and a 30 calendar day trailing average (counting only trading days). Upon vesting of a tranche, all unamortized expense for the tranche will be recognized immediately. Additionally, stock-based compensation represents a non-cash expense and is recorded as a selling, general, and administrative operating expense in our consolidated statement of operations.

As of December 31, 2019, we had \$527 million of total unrecognized stock-based compensation expense for the operational milestones that were considered probable of achievement, which will be recognized over a weighted-average period of 2.72 years. As of December 31, 2019, we had unrecognized stock-based compensation expense of \$1.29 billion for the operational milestones that were considered not probable of achievement. For the year ended December 31, 2019, we recorded stock-based compensation expense of \$296 million related to the 2018 CEO Performance Award. From March 21, 2018, when the grant was approved by our stockholders, through December 31, 2018, we recorded stock-based compensation expense of \$175 million related to this award. The increase in stock-based compensation expense was primarily related to a \$72 million cumulative catch-up expense for the service provided from the grant date when an additional operational milestone was considered probable of being met in the fourth quarter of 2019 and a shorter expense period in the prior year.

#### **2014 Performance-Based Stock Option Awards**

In 2014, to create incentives for continued long-term success beyond the Model S program and to closely align executive pay with our stockholders' interests in the achievement of significant milestones by us, the Compensation Committee of our Board of Directors granted stock option awards to certain employees (excluding our CEO) to purchase an aggregate of 1,073,000 shares of our common stock. Each award consisted of the following four vesting tranches with the vesting schedule based entirely on the attainment of the future performance milestones, assuming continued employment and service through each vesting date:

- 1/4th of each award vests upon completion of the first Model X production vehicle;
- 1/4th of each award vests upon achieving aggregate production of 100,000 vehicles in a trailing 12-month period;
- 1/4th of each award vests upon completion of the first Model 3 production vehicle; and
- 1/4th of each award vests upon achieving an annualized gross margin of greater than 30% for any three-year period.

As of December 31, 2019, the following performance milestones had been achieved:

- Completion of the first Model X production vehicle;
- Completion of the first Model 3 production vehicle; and
- Aggregate production of 100,000 vehicles in a trailing 12-month period.

We begin recognizing stock-based compensation expense as each performance milestone becomes probable of achievement. As of December 31, 2019, we had unrecognized stock-based compensation expense of \$5 million for the performance milestone that was considered not probable of achievement. For the years ended December 31, 2019 and 2018, we did not record any additional stock-based compensation related to these awards. For the year ended December 2017, we recorded stock-based compensation expense of \$7 million related to these awards.

## 2012 CEO Performance Award

In August 2012, our Board of Directors granted 5,274,901 stock option awards to our CEO (the “2012 CEO Performance Award”). The 2012 CEO Performance Award consists of 10 vesting tranches with a vesting schedule based entirely on the attainment of both performance conditions and market conditions, assuming continued employment and service through each vesting date. Each vesting tranche requires a combination of a pre-determined performance milestone and an incremental increase in our market capitalization of \$4.00 billion, as compared to our initial market capitalization of \$3.20 billion at the time of grant. As of December 31, 2019, the market capitalization conditions for all of the vesting tranches and the following performance milestones had been achieved:

- Successful completion of the Model X alpha prototype;
- Successful completion of the Model X beta prototype;
- Completion of the first Model X production vehicle;
- Aggregate production of 100,000 vehicles;
- Successful completion of the Model 3 alpha prototype;
- Successful completion of the Model 3 beta prototype;
- Completion of the first Model 3 production vehicle;
- Aggregate production of 200,000 vehicles; and
- Aggregate production of 300,000 vehicles.

We begin recognizing stock-based compensation expense as each milestone becomes probable of achievement. As of December 31, 2019, we had unrecognized stock-based compensation expense of \$6 million for the performance milestone that was considered not probable of achievement. For the year ended December 31, 2019, we recorded no stock-based compensation expense related to the 2012 CEO Performance Award. For the year ended December 31, 2018, the stock-based compensation we recorded related to this award was immaterial. For the year ended December 31, 2017, we recorded stock-based compensation expense of \$5 million related to this award.

Our CEO earns a base salary that reflects the currently applicable minimum wage requirements under California law, and he is subject to income taxes based on such base salary. However, he has never accepted his salary. Commencing in May 2019 at our CEO’s request, we eliminated altogether the earning and accrual of his base salary.

## Summary Stock-Based Compensation Information

The following table summarizes our stock-based compensation expense by line item in the consolidated statements of operations (in millions):

	Year Ended December 31,		
	2019	2018	2017
Cost of revenues	\$ 128	\$ 109	\$ 64
Research and development	285	261	218
Selling, general and administrative	482	375	185
Restructuring and other	3	4	—
Total	<u>\$ 898</u>	<u>\$ 749</u>	<u>\$ 467</u>

We realized no income tax benefit from stock option exercises in each of the periods presented due to cumulative losses and valuation allowances. As of December 31, 2019, we had \$1.57 billion of total unrecognized stock-based compensation expense related to non-performance awards, which will be recognized over a weighted-average period of 2.91 years.

## ESPP

Our employees are eligible to purchase our common stock through payroll deductions of up to 15% of their eligible compensation, subject to any plan limitations. The purchase price would be 85% of the lower of the fair market value on the first and last trading days of each six-month offering period. During the years ended December 31, 2019, 2018 and 2017, we issued 0.5 million, 0.4 million and 0.4 million shares under the ESPP with an associated expense of \$40 million, \$109 million and \$71 million, respectively. There were 7 million shares available for issuance under the ESPP as of December 31, 2019.

## Note 15 – Income Taxes

A provision for income taxes of \$110 million, \$58 million and \$32 million has been recognized for the years ended December 31, 2019, 2018 and 2017, respectively, related primarily to our subsidiaries located outside of the U.S. Our loss before provision for income taxes for the years ended December 31, 2019, 2018 and 2017 was as follows (in millions):

	Year Ended December 31,		
	2019	2018	2017
Domestic	\$ 287	\$ 412	\$ 993
Noncontrolling interest and redeemable noncontrolling interest	(87)	87	279
Foreign	465	506	937
Loss before income taxes	<u>\$ 665</u>	<u>\$ 1,005</u>	<u>\$ 2,209</u>

The components of the provision for income taxes for the years ended December 31, 2019, 2018 and 2017 consisted of the following (in millions):

	Year Ended December 31,		
	2019	2018	2017
Current:			
Federal	\$ —	\$ (1)	\$ (10)
State	5	3	2
Foreign	86	24	43
Total current	<u>91</u>	<u>26</u>	<u>35</u>
Deferred:			
Federal	(4)	—	—
State	—	—	—
Foreign	23	32	(3)
Total deferred	<u>19</u>	<u>32</u>	<u>(3)</u>
Total provision for income taxes	<u>\$ 110</u>	<u>\$ 58</u>	<u>\$ 32</u>

On December 22, 2017, the 2017 Tax Cuts and Jobs Act (“Tax Act”) was enacted into law making significant changes to the Internal Revenue Code. Changes include, but are not limited to, a federal corporate tax rate decrease from 35% to 21% for tax years beginning after December 31, 2017, the transition of U.S. international taxation from a worldwide tax system to a territorial system and a one-time transition tax on the mandatory deemed repatriation of foreign earnings. We were required to recognize the effect of the tax law changes in the period of enactment, such as re-measuring our U.S. deferred tax assets and liabilities as well as reassessing the net realizability of our deferred tax assets and liabilities. The Tax Act did not give rise to any material impact on the consolidated balance sheets and consolidated statements of operations due to our historical worldwide loss position and the full valuation allowance on our net U.S. deferred tax assets.

Deferred tax assets (liabilities) as of December 31, 2019 and 2018 consisted of the following (in millions):

	December 31, 2019	December 31, 2018
<b>Deferred tax assets:</b>		
Net operating loss carry-forwards	\$ 1,846	\$ 1,760
Research and development credits	486	377
Other tax credits	126	128
Deferred revenue	301	156
Inventory and warranty reserves	243	165
Stock-based compensation	102	102
Operating lease right-of-use liabilities	290	—
Accruals and others	16	28
Total deferred tax assets	3,410	2,716
Valuation allowance	(1,956)	(1,806)
Deferred tax assets, net of valuation allowance	1,454	910
<b>Deferred tax liabilities:</b>		
Depreciation and amortization	(1,185)	(861)
Investment in certain financing funds	(17)	(33)
Operating lease right-of-use assets	(263)	—
Other	(24)	(24)
Total deferred tax liabilities	(1,489)	(918)
Deferred tax liabilities, net of valuation allowance and deferred tax assets	\$ (35)	\$ (8)

As of December 31, 2019, we recorded a valuation allowance of \$1.96 billion for the portion of the deferred tax asset that we do not expect to be realized. The valuation allowance on our net deferred taxes increased by \$150 million, decreased by \$38 million, and increased by \$821 million during the years ended December 31, 2019, 2018 and 2017, respectively. The changes in valuation allowance are primarily due to additional U.S. deferred tax assets and liabilities incurred in the respective year. We have net \$151 million of deferred tax assets in foreign jurisdictions, which management believes are more-likely-than-not to be fully realized given the expectation of future earnings in these jurisdictions. We continue to monitor the realizability of the U.S. deferred tax assets taking into account multiple factors, including the results of operations and magnitude of excess tax deductions for stock-based compensation. We intend to continue maintaining a full valuation allowance on our U.S. deferred tax assets until there is sufficient evidence to support the reversal of all or some portion of these allowances. Release of all, or a portion, of the valuation allowance would result in the recognition of certain deferred tax assets and a decrease to income tax expense for the period the release is recorded.

The reconciliation of taxes at the federal statutory rate to our provision for income taxes for the years ended December 31, 2019, 2018 and 2017 was as follows (in millions):

	Year Ended December 31,		
	2019	2018	2017
Tax at statutory federal rate	\$ (139)	\$ (211)	\$ (773)
State tax, net of federal benefit	5	3	2
Nondeductible expenses	94	65	30
Excess tax benefits related to stock based compensation (1)	(7)	(44)	(1,013)
Foreign income rate differential	189	161	365
U.S. tax credits	(107)	(80)	(110)
Noncontrolling interests and redeemable noncontrolling interests adjustment	(29)	32	66
Effect of U.S. tax law change	—	—	723
Bargain in purchase gain	—	—	20
Convertible debt	(4)	—	—
Unrecognized tax benefits	17	1	3
Change in valuation allowance	91	131	719
Provision for income taxes	<u>\$ 110</u>	<u>\$ 58</u>	<u>\$ 32</u>

- As of January 1, 2017, upon the adoption of ASU No. 2016-09, Improvements to Employee Share-based Payment Accounting, excess tax benefits from share-based award activity incurred from the prior and current years are reflected as a reduction of the provision for income taxes. The excess tax benefits result in an increase to our gross U.S. deferred tax assets that is offset by a corresponding increase to our valuation allowance.
- (1)

As of December 31, 2019, we had \$7.51 billion of federal and \$6.16 billion of state net operating loss carry-forwards available to offset future taxable income, which will not begin to significantly expire until 2024 for federal and 2028 for state purposes. A portion of these losses were generated by SolarCity prior to our acquisition in 2016 and, therefore, are subject to change of control provisions, which limit the amount of acquired tax attributes that can be utilized in a given tax year. We do not expect these change of control limitations to significantly impact our ability to utilize these attributes.

As of December 31, 2019, we had research and development tax credits of \$320 million and \$284 million for federal and state income tax purposes, respectively. If not utilized, the federal research and development tax credits will expire in various amounts beginning in 2024. However, the state research and development tax credits can be carried forward indefinitely. In addition, we have other general business tax credits of \$125 million for federal income tax purposes, which will not begin to significantly expire until 2033.

No deferred tax liabilities for foreign withholding taxes have been recorded relating to the earnings of our foreign subsidiaries since all such earnings are intended to be indefinitely reinvested. The amount of the unrecognized deferred tax liability associated with these earnings is immaterial.

Federal and state laws can impose substantial restrictions on the utilization of net operating loss and tax credit carry-forwards in the event of an “ownership change,” as defined in Section 382 of the Internal Revenue Code. We have determined that no significant limitation would be placed on the utilization of our net operating loss and tax credit carry-forwards due to prior ownership changes.

## Uncertain Tax Positions

The changes to our gross unrecognized tax benefits were as follows (in millions):

December 31, 2016	\$ 204
Decreases in balances related to prior year tax positions	(31)
Increases in balances related to current year tax positions	84
Changes in balances related to effect of U.S. tax law change	(58)
December 31, 2017	199
Decreases in balances related to prior year tax positions	(6)
Increases in balances related to current year tax positions	60
December 31, 2018	253
Decreases in balances related to prior year tax positions	(39)
Increases in balances related to current year tax positions	59
December 31, 2019	<u>\$ 273</u>

As of December 31, 2019, accrued interest and penalties related to unrecognized tax benefits are classified as income tax expense and were immaterial. Unrecognized tax benefits of \$247 million, if recognized, would not affect our effective tax rate since the tax benefits would increase a deferred tax asset that is currently fully offset by a full valuation allowance.

We file income tax returns in the U.S., California and various state and foreign jurisdictions. We are currently under examination by the IRS for the years 2015 and 2016. Additional tax years within the period 2004 to 2018 remain subject to examination for federal income tax purposes, and tax years 2004 to 2018 remain subject to examination for California income tax purposes. All net operating losses and tax credits generated to date are subject to adjustment for U.S. federal and California income tax purposes. Tax years 2008 to 2018 remain subject to examination in other U.S. state and foreign jurisdictions.

The potential outcome of the current examination could result in a change to unrecognized tax benefits within the next twelve months. However, we cannot reasonably estimate possible adjustments at this time.

The U.S. Tax Court issued a decision in *Altera Corp v. Commissioner* related to the treatment of stock-based compensation expense in a cost-sharing arrangement. On June 7, 2019, the Court reversed the Tax Court decision and upheld the validity of Treas. Reg. Section 1.482-7A(d)(2), requiring stock-based compensation costs be included in the costs shared under a cost sharing agreement. Given that the current active decision can still be appealed because Altera has the option to petition up to the Supreme Court, Tesla's position is to continue to include stock-based compensation in cost sharing allocation agreement. If and when the current tax court's decision is overturned, we will treat the amount previously shared as a pre-payment to future cost sharing agreement costs. Because we have a full valuation allowance in the U.S., any potential tax benefits would increase our U.S. deferred tax asset and would not have a material impact to our financials.

## **Note 16 – Commitments and Contingencies**

### ***Operating Lease Arrangement in Buffalo, New York***

We have an operating lease through the Research Foundation for the State University of New York (the “SUNY Foundation”) for a manufacturing facility constructed on behalf of the SUNY Foundation and which was substantially completed in April 2018. We use this facility, referred to as Gigafactory New York, primarily for the development and production of our Solar Roof and other solar products and components, energy storage components, and Supercharger components, and for other lessor-approved functions. Under the lease and a related research and development agreement, on behalf of the SUNY Foundation, we have and will continue to install certain utilities and other improvements and acquire certain equipment designated by us to be used in the manufacturing facility. The SUNY Foundation covered (i) construction costs related to the manufacturing facility up to \$350 million, (ii) the acquisition and commissioning of the manufacturing equipment in an amount up to \$275 million and (iii) \$125 million for additional specified scope costs, in cases (i) and (ii) only, subject to the maximum funding allocation from the State of New York; and we were responsible for any construction or equipment costs in excess of such amounts. The SUNY Foundation owns the manufacturing facility and the manufacturing equipment purchased by the SUNY Foundation. Following completion of the manufacturing facility, we have commenced leasing of the manufacturing facility and the manufacturing equipment owned by the SUNY Foundation for an initial period of 10 years, with an option to renew, for \$2.00 per year plus utilities. Following the adoption of ASC 842, we no longer recognize the build-to-suit asset and related depreciation expense or the corresponding financing liability and related amortization for Gigafactory New York in our consolidated financial statements.

Under the terms of the operating lease arrangement, we are required to achieve specific operational milestones during the initial lease term; which include employing a certain number of employees at the manufacturing facility, within western New York and within the State of New York within specified periods following the completion of the manufacturing facility. We are also required to spend or incur \$5.00 billion in combined capital, operational expenses and other costs in the State of New York within 10 years following the achievement of full production. On an annual basis during the initial lease term, as measured on each anniversary of the commissioning of the manufacturing facility, if we fail to meet these specified investment and job creation requirements, then we would be obligated to pay a \$41 million “program payment” to the SUNY Foundation for each year that we fail to meet these requirements. Furthermore, if the arrangement is terminated due to a material breach by us, then additional amounts might become payable by us. As of December 31, 2019, we have met the targets as of the applicable measurement dates and anticipate meeting the remaining obligations through our operations at this facility and other operations within the State of New York.

### ***Operating Lease Arrangement in Shanghai, China***

We have an operating lease arrangement for an initial term of 50 years with the local government of Shanghai for land use rights where we are constructing Gigafactory Shanghai. Under the terms of the arrangement, we are required to spend RMB 14.08 billion in capital expenditures, and to generate RMB 2.23 billion of annual tax revenues starting at the end of 2023. If we are unwilling or unable to meet such target or obtain periodic project approvals, in accordance with the Chinese government’s standard terms for such arrangements, we would be required to revert the site to the local government and receive compensation for the remaining value of the land lease, buildings and fixtures. We believe the capital expenditure requirement and the tax revenue target will be attainable even if our actual vehicle production was far lower than the volumes we are forecasting.



## ***Legal Proceedings***

### ***Securities Litigation Relating to the SolarCity Acquisition***

Between September 1, 2016 and October 5, 2016, seven lawsuits were filed in the Delaware Court of Chancery by purported stockholders of Tesla challenging our acquisition of SolarCity. Following consolidation, the lawsuit names as defendants the members of Tesla's board of directors as then constituted and alleges, among other things, that board members breached their fiduciary duties in connection with the acquisition. The complaint asserts both derivative claims and direct claims on behalf of a purported class and seeks, among other relief, unspecified monetary damages, attorneys' fees, and costs. On January 27, 2017, defendants filed a motion to dismiss the operative complaint. Rather than respond to the defendants' motion, the plaintiffs filed an amended complaint. On March 17, 2017, defendants filed a motion to dismiss the amended complaint. On December 13, 2017, the Court heard oral argument on the motion. On March 28, 2018, the Court denied defendants' motion to dismiss. Defendants filed a request for interlocutory appeal, but the Delaware Supreme Court denied that request without ruling on the merits but electing not to hear an appeal at this early stage of the case. Defendants filed their answer on May 18, 2018, and mediations were held on June 10, 2019. Plaintiffs and defendants filed respective motions for summary judgment on August 25, 2019, and further mediations were held on October 3, 2019. The Court held a hearing on the motions for summary judgment on November 4, 2019. On January 22, 2020, all of the director defendants except Elon Musk reached a tentative settlement to resolve the lawsuit against them for an amount that would be paid entirely under the applicable insurance policy. The settlement does not involve an admission of any wrongdoing by any party. Tesla will receive such amount, which would be recognized as a gain in its financial statements, if the settlement is finally approved by the Court. On February 4, 2020, the Court issued a ruling that denied plaintiffs' previously-filed motion and granted in part and denied in part defendants' previously-filed motion. Fact and expert discovery is complete, and the case is set for trial in March 2020.

These plaintiffs and others filed parallel actions in the U.S. District Court for the District of Delaware on or about April 21, 2017. They include claims for violations of the federal securities laws and breach of fiduciary duties by Tesla's board of directors. Those actions have been consolidated and stayed pending the above-referenced Chancery Court litigation.

We believe that claims challenging the SolarCity acquisition are without merit and intend to defend against them vigorously. We are unable to estimate the possible loss or range of loss, if any, associated with these claims.

### ***Securities Litigation Relating to Production of Model 3 Vehicles***

On October 10, 2017, a purported stockholder class action was filed in the U.S. District Court for the Northern District of California against Tesla, two of its current officers, and a former officer. The complaint alleges violations of federal securities laws and seeks unspecified compensatory damages and other relief on behalf of a purported class of purchasers of Tesla securities from May 4, 2016 to October 6, 2017. The lawsuit claims that Tesla supposedly made materially false and misleading statements regarding the Company's preparedness to produce Model 3 vehicles. Plaintiffs filed an amended complaint on March 23, 2018, and defendants filed a motion to dismiss on May 25, 2018. The court granted defendants' motion to dismiss with leave to amend. Plaintiffs filed their amended complaint on September 28, 2018, and defendants filed a motion to dismiss the amended complaint on February 15, 2019. The hearing on the motion to dismiss was held on March 22, 2019, and on March 25, 2019, the Court ruled in favor of defendants and dismissed the complaint with prejudice. On April 8, 2019, plaintiffs filed a notice of appeal and on July 17, 2019 filed their opening brief. We filed our opposition on September 16, 2019. We continue to believe that the claims are without merit and intend to defend against this lawsuit vigorously. We are unable to estimate the possible loss or range of loss, if any, associated with this lawsuit.

On October 26, 2018, in a similar action, a purported stockholder class action was filed in the Superior Court of California in Santa Clara County against Tesla, Elon Musk and seven initial purchasers in an offering of debt securities by Tesla in August 2017. The complaint alleges misrepresentations made by Tesla regarding the number of Model 3 vehicles Tesla expected to produce by the end of 2017 in connection with such offering and seeks unspecified compensatory damages and other relief on behalf of a purported class of purchasers of Tesla securities in such offering. Tesla thereafter removed the case to federal court. On January 22, 2019, plaintiff abandoned its effort to proceed in state court, instead filing an amended complaint against Tesla, Elon Musk and seven initial purchasers in the debt offering before the same judge in the U.S. District Court for the Northern District of California who is hearing the above-referenced earlier filed federal case. On February 5, 2019, the Court stayed this new case pending a ruling on the motion to dismiss the complaint in such earlier filed federal case. After such earlier filed federal case was dismissed, defendants filed a motion on July 2, 2019 to dismiss this case as well. This case is now stayed pending a ruling from the appellate court on such earlier filed federal case with an agreement that if defendants prevail on appeal in such case, this case will be dismissed. We believe that the claims are without merit and intend to defend against this lawsuit vigorously. We are unable to estimate the possible loss or range of loss, if any, associated with this lawsuit.

#### *Litigation Relating to 2018 CEO Performance Award*

On June 4, 2018, a purported Tesla stockholder filed a putative class and derivative action in the Delaware Court of Chancery against Elon Musk and the members of Tesla's board of directors as then constituted, alleging corporate waste, unjust enrichment and that such board members breached their fiduciary duties by approving the stock-based compensation plan. The complaint seeks, among other things, monetary damages and rescission or reformation of the stock-based compensation plan. On August 31, 2018, defendants filed a motion to dismiss the complaint; plaintiff filed its opposition brief on November 1, 2018 and defendants filed a reply brief on December 13, 2018. The hearing on the motion to dismiss was held on May 9, 2019. On September 20, 2019, the Court granted the motion to dismiss as to the corporate waste claim but denied the motion as to the breach of fiduciary duty and unjust enrichment claims. Our answer was filed on December 3, 2019, and trial is set for June 2021. We believe the claims asserted in this lawsuit are without merit and intend to defend against them vigorously.

#### *Securities Litigation Relating to Potential Going Private Transaction*

Between August 10, 2018 and September 6, 2018, nine purported stockholder class actions were filed against Tesla and Elon Musk in connection with Elon Musk's August 7, 2018 Twitter post that he was considering taking Tesla private. All of the suits are now pending in the U.S. District Court for the Northern District of California. Although the complaints vary in certain respects, they each purport to assert claims for violations of federal securities laws related to Mr. Musk's statement and seek unspecified compensatory damages and other relief on behalf of a purported class of purchasers of Tesla's securities. Plaintiffs filed their consolidated complaint on January 16, 2019 and added as defendants the members of Tesla's board of directors. The now-consolidated purported stockholder class action was stayed while the issue of selection of lead counsel was briefed and argued before the U.S. Court of Appeals for the Ninth Circuit. The Ninth Circuit ruled regarding lead counsel. Defendants filed a motion to dismiss the complaint on November 22, 2019. The hearing on the motion is set for March 6, 2020. We believe that the claims have no merit and intend to defend against them vigorously. We are unable to estimate the potential loss, or range of loss, associated with these claims.

Between October 17, 2018 and November 9, 2018, five derivative lawsuits were filed in the Delaware Court of Chancery against Mr. Musk and the members of Tesla's board of directors as then constituted in relation to statements made and actions connected to a potential going private transaction. In addition to these cases, on October 25, 2018, another derivative lawsuit was filed in the U.S. District Court for the District of Delaware against Mr. Musk and the members of the Tesla board of directors as then constituted. The Courts in both the Delaware federal court and Delaware Court of Chancery actions have consolidated their respective actions and stayed each consolidated action pending resolution of the above-referenced consolidated purported stockholder class action. We believe that the claims have no merit and intend to defend against them vigorously. We are unable to estimate the potential loss, or range of loss, associated with these claims.

On March 7, 2019, various stockholders filed a derivative suit in the Delaware Court of Chancery, purportedly on behalf of the Company, naming Elon Musk and Tesla's board of directors, also related to Mr. Musk's August 7, 2018 Twitter post that is the basis of the above-referenced consolidated purported stockholder class action as well as Mr. Musk's February 19, 2019 Twitter post regarding Tesla's vehicle production. The suit asserts claims for breach of fiduciary duty and seeks declaratory and injunctive relief, unspecified damages, and other relief. Plaintiffs moved for expedited proceedings in connection with the declaratory and injunctive relief. Briefs were filed on March 13, 2019 and the hearing held on March 18, 2019. Defendants prevailed, with the Court denying plaintiffs' request for an expedited trial and granting defendants' request to stay this action pending the outcome of the above-referenced consolidated purported stockholder class action.

#### *Settlement with SEC related to Potential Going Private Transaction*

On October 16, 2018, the U.S. District Court for the Southern District of New York entered a final judgment approving the terms of a settlement filed with the Court on September 29, 2018, in connection with the actions taken by the U.S. Securities and Exchange Commission (the "SEC") relating to Elon Musk's prior statement that he was considering taking Tesla private. Without admitting or denying any of the SEC's allegations, and with no restriction on Mr. Musk's ability to serve as an officer or director on the Board (other than as its Chair), among other things, we and Mr. Musk paid civil penalties of \$20 million each and agreed that an independent director will serve as Chair of the Board for at least three years, and we appointed such an independent Chair of the Board and two additional independent directors to the Board, and further enhanced our disclosure controls and other corporate governance-related matters. On April 26, 2019, the settlement was amended to modify certain of the previously-agreed disclosure procedures to clarify the application of such procedures, which was subsequently approved by the Court. All other terms of the prior settlement were reaffirmed without modification.

#### *Certain Investigations and Other Matters*

We receive requests for information from regulators and governmental authorities, such as the National Highway Traffic Safety Administration, the National Transportation Safety Board, the SEC, the Department of Justice ("DOJ") and various state, federal and international agencies. We routinely cooperate with such regulatory and governmental requests.

In particular, the SEC had issued subpoenas to Tesla in connection with (a) Elon Musk's prior statement that he was considering taking Tesla private and (b) certain projections that we made for Model 3 production rates during 2017 and other public statements relating to Model 3 production. The take-private investigation was resolved and closed with the settlement with the SEC described above. On December 4, 2019, the SEC (i) closed the investigation into the projections and other public statements regarding Model 3 production rates and (ii) issued a subpoena seeking information concerning certain financial data and contracts including Tesla's regular financing arrangements. Separately, the DOJ had also asked us to voluntarily provide it with information about the above matters related to taking Tesla private and Model 3 production rates.

Aside from the settlement, as amended, with the SEC relating to Mr. Musk's statement that he was considering taking Tesla private, there have not been any developments in these matters that we deem to be material, and to our knowledge no government agency in any ongoing investigation has concluded that any wrongdoing occurred. As is our normal practice, we have been cooperating and will continue to cooperate with government authorities. We cannot predict the outcome or impact of any ongoing matters. Should the government decide to pursue an enforcement action, there exists the possibility of a material adverse impact on our business, results of operation, prospects, cash flows, and financial position.

We are also subject to various other legal proceedings and claims that arise from the normal course of business activities. If an unfavorable ruling or development were to occur, there exists the possibility of a material adverse impact on our business, results of operations, prospects, cash flows, financial position and brand.

### ***Indemnification and Guaranteed Returns***

We are contractually obligated to compensate certain fund investors for any losses that they may suffer in certain limited circumstances resulting from reductions in U.S. Treasury grants or investment tax credits (“ITC”s). Generally, such obligations would arise as a result of reductions to the value of the underlying solar energy systems as assessed by the U.S. Treasury Department for purposes of claiming U.S. Treasury grants or as assessed by the IRS for purposes of claiming ITCs or U.S. Treasury grants. For each balance sheet date, we assess and recognize, when applicable, a distribution payable for the potential exposure from this obligation based on all the information available at that time, including any guidelines issued by the U.S. Treasury Department on solar energy system valuations for purposes of claiming U.S. Treasury grants and any audits undertaken by the IRS. We believe that any payments to the fund investors in excess of the amounts already recognized by us for this obligation are not probable or material based on the facts known at the filing date.

The maximum potential future payments that we could have to make under this obligation would depend on the difference between the fair values of the solar energy systems sold or transferred to the funds as determined by us and the values that the U.S. Treasury Department would determine as fair value for the systems for purposes of claiming U.S. Treasury grants or the values the IRS would determine as the fair value for the systems for purposes of claiming ITCs or U.S. Treasury grants. We claim U.S. Treasury grants based on guidelines provided by the U.S. Treasury department and the statutory regulations from the IRS. We use fair values determined with the assistance of independent third-party appraisals commissioned by us as the basis for determining the ITCs that are passed-through to and claimed by the fund investors. Since we cannot determine future revisions to U.S. Treasury Department guidelines governing solar energy system values or how the IRS will evaluate system values used in claiming ITCs or U.S. Treasury grants, we are unable to reliably estimate the maximum potential future payments that it could have to make under this obligation as of each balance sheet date.

We are eligible to receive certain state and local incentives that are associated with renewable energy generation. The amount of incentives that can be claimed is based on the projected or actual solar energy system size and/or the amount of solar energy produced. We also currently participate in one state’s incentive program that is based on either the fair market value or the tax basis of solar energy systems placed in service. State and local incentives received are allocated between us and fund investors in accordance with the contractual provisions of each fund. We are not contractually obligated to indemnify any fund investor for any losses they may incur due to a shortfall in the amount of state or local incentives actually received.

Our lease pass-through financing funds have a one-time lease payment reset mechanism that occurs after the installation of all solar energy systems in a fund. As a result of this mechanism, we may be required to refund master lease prepayments previously received from investors. Any refunds of master lease prepayments would reduce the lease pass-through financing obligation.

### ***Letters of Credit***

As of December 31, 2019, we had \$282 million of unused letters of credit outstanding.

### **Note 17 – Variable Interest Entity Arrangements**

We have entered into various arrangements with investors to facilitate the funding and monetization of our solar energy systems and vehicles. In particular, our wholly owned subsidiaries and fund investors have formed and contributed cash and assets into various financing funds and entered into related agreements. We have determined that the funds are variable interest entities (“VIEs”) and we are the primary beneficiary of these VIEs by reference to the power and benefits criterion under ASC 810, *Consolidation*. We have considered the provisions within the agreements, which grant us the power to manage and make decisions that affect the operation of these VIEs, including determining the solar energy systems or vehicles and the associated customer contracts to be sold or contributed to these VIEs, redeploying solar energy systems or vehicles and managing customer receivables. We consider that the rights granted to the fund investors under the agreements are more protective in nature rather than participating.

As the primary beneficiary of these VIEs, we consolidate in the financial statements the financial position, results of operations and cash flows of these VIEs, and all intercompany balances and transactions between us and these VIEs are eliminated in the consolidated financial statements. Cash distributions of income and other receipts by a fund, net of agreed upon expenses, estimated expenses, tax benefits and detriments of income and loss and tax credits, are allocated to the fund investor and our subsidiary as specified in the agreements.

Generally, our subsidiary has the option to acquire the fund investor's interest in the fund for an amount based on the market value of the fund or the formula specified in the agreements.

Upon the sale or liquidation of a fund, distributions would occur in the order and priority specified in the agreements.

Pursuant to management services, maintenance and warranty arrangements, we have been contracted to provide services to the funds, such as operations and maintenance support, accounting, lease servicing and performance reporting. In some instances, we have guaranteed payments to the fund investors as specified in the agreements. A fund's creditors have no recourse to our general credit or to that of other funds. None of the assets of the funds had been pledged as collateral for their obligations.

The aggregate carrying values of the VIEs' assets and liabilities, after elimination of any intercompany transactions and balances, in the consolidated balance sheets were as follows (in millions):

	December 31, 2019	December 31, 2018
<b>Assets</b>		
Current assets		
Cash and cash equivalents	\$ 106	\$ 75
Restricted cash	90	131
Accounts receivable, net	27	19
Prepaid expenses and other current assets	10	10
Total current assets	233	235
Operating lease vehicles, net	1,183	155
Solar energy systems, net	5,030	5,117
Restricted cash, net of current portion	69	65
Other assets	87	56
Total assets	\$ 6,602	\$ 5,628
<b>Liabilities</b>		
Current liabilities		

Accrued liabilities and other	80	133
Deferred revenue	78	21
Customer deposits	9	—
Current portion of long-term debt and finance leases	608	663
Total current liabilities	775	817
Deferred revenue, net of current portion	264	178
Long-term debt and finance leases, net of current portion	1,516	1,238
Other long-term liabilities	22	26
Total liabilities	\$ 2,577	\$ 2,259

#### Note 18 – Lease Pass-Through Financing Obligation

Through December 31, 2019, we had entered into eight transactions referred to as “lease pass-through fund arrangements”. Under these arrangements, our wholly owned subsidiaries finance the cost of solar energy systems with investors through arrangements contractually structured as master leases for an initial term ranging between 10 and 25 years. These solar energy systems are subject to lease or PPAs with customers with an initial term not exceeding 25 years. These solar energy systems are included within solar energy systems, net on the consolidated balance sheets.

The cost of the solar energy systems under lease pass-through fund arrangements as of December 31, 2019 and 2018 was \$1.05 billion. The accumulated depreciation on these assets as of December 31, 2019 and 2018 was \$101 million and \$66 million, respectively. The total lease pass-through financing obligation as of December 31, 2019 was \$94 million, of which \$57 million is classified as a current liability. The total lease pass-through financing obligation as of December 31, 2018 was \$112 million, of which \$62 million was classified as a current liability. Lease pass-through financing obligation is included in accrued liabilities and other for the current portion and other long-term liabilities for the long-term portion on the consolidated balance sheets.

Under a lease pass-through fund arrangement, the investor makes a large upfront payment to the lessor, which is one of our subsidiaries, and in some cases, subsequent periodic payments. We allocate a portion of the aggregate investor payments to the fair value of the assigned ITCs, which is estimated by discounting the projected cash flow impact of the ITCs using a market interest rate and is accounted for separately (see Note 2, *Summary of Significant Accounting Policies*). We account for the remainder of the investor payments as a borrowing by recording the proceeds received as a lease pass-through financing obligation, which is repaid from the future customer lease payments and any incentive rebates. A portion of the amounts received by the investor is allocated to interest expense using the effective interest rate method.

The lease pass-through financing obligation is non-recourse once the associated solar energy systems have been placed in-service and the associated customer arrangements have been assigned to the investors. However, we are required to comply with certain financial covenants specified in the contractual agreements, which we had met as of December 31, 2019. In addition, we are responsible for any warranties, performance guarantees, accounting and performance reporting. Furthermore, we continue to account for the customer arrangements and any incentive rebates in the consolidated financial statements, regardless of whether the cash is received by us or directly by the investors.

As of December 31, 2019, the future minimum master lease payments to be received from investors, for each of the next five years and thereafter, were as follows (in millions):

2020	\$	42
2021		41
2022		33
2023		26
2024		18
Thereafter		450
Total	\$	<u>610</u>

For two of the lease pass-through fund arrangements, our subsidiaries have pledged its assets to the investors as security for its obligations under the contractual agreements.

Each lease pass-through fund arrangement has a one-time master lease prepayment adjustment mechanism that occurs when the capacity and the placed-in-service dates of the associated solar energy systems are finalized or on an agreed-upon date. As part of this mechanism, the master lease prepayment amount is updated, and we may be obligated to refund a portion of a master lease prepayment or entitled to receive an additional master lease prepayment. Any additional master lease prepayments are recorded as an additional lease pass-through financing obligation while any master lease prepayment refunds would reduce the lease pass-through financing obligation.

#### **Note 19 – Defined Contribution Plan**

We have a 401(k) savings plan that is intended to qualify as a deferred salary arrangement under Section 401(k) of the Internal Revenue Code. Under the 401(k) savings plan, participating employees may elect to contribute up to 100% of their eligible compensation, subject to certain limitations. Participants are fully vested in their contributions. We did not make any contributions to the 401(k) savings plan during the years ended December 31, 2019, 2018 and 2017 (other than employee deferrals of eligible compensation).

**Note 20 – Related Party Transactions**

Related party balances were comprised of the following (in millions):

	December 31, 2019	December 31, 2018
Convertible senior notes due to related parties	\$ 3	\$ 3

Our convertible senior notes are not re-measured at fair value (refer to Note 5, *Fair Value of Financial Instruments*). As of December 31, 2019 and 2018, the unpaid principal balance of convertible senior notes due to related parties is \$3 million.

In March 2017, our CEO purchased from us 95,420 shares of our common stock in a public offering at the public offering price for an aggregate \$25 million.

In April 2017, our CEO exercised his right under the indenture to convert all of his Zero-Coupon Convertible Senior Notes due in 2020, which had an aggregate principal amount of \$10 million. As a result, on April 26, 2017, we issued 33,333 shares of our common stock to our CEO in accordance with the specified conversion rate, and we recorded an increase to additional paid-in capital of \$10 million.

In November 2018, our CEO purchased from us 56,915 shares of our common stock in a private placement at a per share price equal to the last closing price of our stock prior to the execution of the purchase agreement for an aggregate \$20 million.

In May 2019, our CEO purchased from us 102,880 shares of our common stock in a public offering at the public offering price for an aggregate \$25 million.

**Note 21 – Segment Reporting and Information about Geographic Areas**

We have two operating and reportable segments: (i) automotive and (ii) energy generation and storage. The automotive segment includes the design, development, manufacturing, sales, and leasing of electric vehicles as well as sales of automotive regulatory credits. Additionally, the automotive segment is also comprised of services and other, which includes non-warranty after-sales vehicle services, sales of used vehicles, retail merchandise, sales by our acquired subsidiaries to third party customers, and vehicle insurance revenue. The energy generation and storage segment includes the design, manufacture, installation, sales, and leasing of solar energy generation and energy storage products and related services and sales of solar energy systems incentives. Our CODM does not evaluate operating segments using asset or liability information. The following table presents revenues and gross profit by reportable segment (in millions):

	Year Ended December 31,		
	2019	2018	2017
Automotive segment			
Revenues	\$ 23,047	\$ 19,906	\$ 10,643
Gross profit	\$ 3,879	\$ 3,852	\$ 1,981
Energy generation and storage segment			
Revenues	\$ 1,531	\$ 1,555	\$ 1,116
Gross profit	\$ 190	\$ 190	\$ 242



The following table presents revenues by geographic area based on the sales location of our products (in millions):

	Year Ended December 31,		
	2019	2018	2017
United States	\$ 12,653	\$ 14,872	\$ 6,221
China	2,979	1,757	2,027
Netherlands	1,590	965	331
Norway	1,201	813	823
Other	6,155	3,054	2,357
Total	<u>\$ 24,578</u>	<u>\$ 21,461</u>	<u>\$ 11,759</u>

The revenues in certain geographic areas were impacted by the price adjustments we made to our vehicle offerings during 2019. Refer to Note 2, *Summary of Significant Accounting Policies*, for details.

The following table presents long-lived assets by geographic area (in millions):

	December 31, 2019	December 31, 2018
United States	\$ 15,644	\$ 16,741
International	890	860
Total	<u>\$ 16,534</u>	<u>\$ 17,601</u>

## Note 22 – Restructuring and Other

During the year ended December 31, 2019, we carried out certain restructuring actions in order to reduce costs and improve efficiency. As a result, we recognized \$50 million of costs primarily related to employee termination expenses and losses from closing certain stores impacting both segments. We recognized \$47 million in impairment related to the IPR&D intangible asset as we abandoned further development efforts (refer to Note 4, *Goodwill and Intangible Assets* for details) and \$15 million for the related equipment within the energy generation and storage segment. We also incurred a loss of \$37 million for closing operations in certain facilities. On the statement of cash flows, the amounts were presented in the captions in which such amounts would have been recorded absent the impairment charges. The employee termination expenses were substantially paid by December 31, 2019, while the remaining amounts were non-cash.

During the year ended December 31, 2018, we carried-out certain restructuring actions in order to reduce costs and improve efficiency and recognized \$37 million of employee termination expenses and estimated losses from sub-leasing a certain facility. The employee termination cash expenses of \$27 million were substantially paid by the end of 2018, while the remaining amounts were non-cash. Also included within restructuring and other activities was \$55 million of expenses (materially all of which were non-cash) from restructuring the energy generation and storage segment, which comprised of disposals of certain tangible assets, the shortening of the useful life of a trade name intangible asset and a contract termination penalty. In addition, we concluded that a small portion of the IPR&D asset is not commercially feasible. Consequently, we recognized an impairment loss of \$13 million. We recognized settlement and legal expenses of \$30 million in the year ended December 31, 2018 for the settlement with the SEC relating to a take-private proposal for Tesla. These expenses were substantially paid by the end of 2018.

**Note 23 – Quarterly Results of Operations (Unaudited)**

The following table presents selected quarterly results of operations data for the years ended December 31, 2019 and 2018 (in millions, except per share amounts):

	Three Months Ended			
	March 31	June 30	September 30	December 31
<b>2019</b>				
Total revenues	\$ 4,541	\$ 6,350	\$ 6,303	\$ 7,384
Gross profit	\$ 566	\$ 921	\$ 1,191	\$ 1,391
Net (loss) income attributable to common stockholders	\$ (702)	\$ (408)	\$ 143	\$ 105
Net (loss) income per share of common stock attributable to common stockholders, basic	\$ (4.10)	\$ (2.31)	\$ 0.80	\$ 0.58
Net (loss) income per share of common stock attributable to common stockholders, diluted	\$ (4.10)	\$ (2.31)	\$ 0.78	\$ 0.56
<b>2018</b>				
Total revenues	\$ 3,409	\$ 4,002	\$ 6,824	\$ 7,226
Gross profit	\$ 456	\$ 619	\$ 1,524	\$ 1,443
Net (loss) income attributable to common stockholders	\$ (709)	\$ (718)	\$ 311	\$ 140
Net (loss) income per share of common stock attributable to common stockholders, basic	\$ (4.19)	\$ (4.22)	\$ 1.82	\$ 0.81
Net (loss) income per share of common stock attributable to common stockholders, diluted	\$ (4.19)	\$ (4.22)	\$ 1.75	\$ 0.78

## **ITEM 9. CHANGES IN AND DISAGREEMENTS WITH ACCOUNTANTS ON ACCOUNTING AND FINANCIAL DISCLOSURE**

None.

### **ITEM 9A. CONTROLS AND PROCEDURES**

#### *Evaluation of Disclosure Controls and Procedures*

Our management, with the participation of our Chief Executive Officer and our Chief Financial Officer, evaluated the effectiveness of our disclosure controls and procedures pursuant to Rule 13a-15 under the Securities Exchange Act of 1934, as amended (the “Exchange Act”). In designing and evaluating the disclosure controls and procedures, our management recognizes that any controls and procedures, no matter how well designed and operated, can provide only reasonable assurance of achieving the desired control objectives. In addition, the design of disclosure controls and procedures must reflect the fact that there are resource constraints and that our management is required to apply its judgment in evaluating the benefits of possible controls and procedures relative to their costs.

Based on this evaluation, our Chief Executive Officer and our Chief Financial Officer concluded that, as of December 31, 2019, our disclosure controls and procedures were designed at a reasonable assurance level and were effective to provide reasonable assurance that the information we are required to disclose in reports that we file or submit under the Exchange Act is recorded, processed, summarized and reported within the time periods specified in the Securities and Exchange Commission rules and forms, and that such information is accumulated and communicated to our management, including our Chief Executive Officer and our Chief Financial Officer, as appropriate, to allow timely decisions regarding required disclosures.

#### *Management’s Report on Internal Control over Financial Reporting*

Our management is responsible for establishing and maintaining adequate internal control over financial reporting. Internal control over financial reporting is a process designed by, or under the supervision of, our Chief Executive Officer and Chief Financial Officer to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles and includes those policies and procedures that (1) pertain to the maintenance of records that in reasonable detail accurately and fairly reflect the transactions and dispositions of our assets; (2) provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with generally accepted accounting principles, and that our receipts and expenditures are being made only in accordance with authorizations of our management and directors and (3) provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use or disposition of our assets that could have a material effect on the financial statements.

Under the supervision and with the participation of our management, including our Chief Executive Officer and Chief Financial Officer, we conducted an evaluation of the effectiveness of our internal control over financial reporting based on criteria established in *Internal Control – Integrated Framework (2013)* issued by the Committee of Sponsoring Organizations of the Treadway Commission (“COSO”). Our management concluded that our internal control over financial reporting was effective as of December 31, 2019.

Our independent registered public accounting firm, PricewaterhouseCoopers LLP, has audited the effectiveness of our internal control over financial reporting as of December 31, 2019, as stated in their report which is included herein.

#### *Limitations on the Effectiveness of Controls*

Because of inherent limitations, internal control over financial reporting may not prevent or detect misstatements and projections of any evaluation of effectiveness to future periods are subject to the risk that controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate.

*Changes in Internal Control over Financial Reporting*

There was no change in our internal control over financial reporting that occurred during the fourth fiscal quarter of the year ended December 31, 2019, which has materially affected, or is reasonably likely to materially affect, our internal control over financial reporting.

**ITEM 9B. OTHER INFORMATION**

None.

## **PART III**

### **ITEM 10. DIRECTORS, EXECUTIVE OFFICERS AND CORPORATE GOVERNANCE**

The information required by this Item 10 of Form 10-K will be included in our 2020 Proxy Statement to be filed with the Securities and Exchange Commission in connection with the solicitation of proxies for our 2020 Annual Meeting of Stockholders and is incorporated herein by reference. The 2020 Proxy Statement will be filed with the Securities and Exchange Commission within 120 days after the end of the fiscal year to which this report relates.

### **ITEM 11. EXECUTIVE COMPENSATION**

The information required by this Item 11 of Form 10-K will be included in our 2020 Proxy Statement and is incorporated herein by reference.

### **ITEM 12. SECURITY OWNERSHIP OF CERTAIN BENEFICIAL OWNERS AND MANAGEMENT AND RELATED STOCKHOLDER MATTERS**

The information required by this Item 12 of Form 10-K will be included in our 2020 Proxy Statement and is incorporated herein by reference.

### **ITEM 13. CERTAIN RELATIONSHIPS AND RELATED TRANSACTIONS AND DIRECTOR INDEPENDENCE**

The information required by this Item 13 of Form 10-K will be included in our 2020 Proxy Statement and is incorporated herein by reference.

### **ITEM 14. PRINCIPAL ACCOUNTANT FEES AND SERVICES**

The information required by this Item 14 of Form 10-K will be included in our 2020 Proxy Statement and is incorporated herein by reference.

### **ITEM 15. EXHIBITS AND FINANCIAL STATEMENT SCHEDULES**

1. Financial statements (see *Index to Consolidated Financial Statements* in Part II, Item 8 of this report)
2. All financial statement schedules have been omitted since the required information was not applicable or was not present in amounts sufficient to require submission of the schedules, or because the information required is included in the consolidated financial statements or the accompanying notes
3. The exhibits listed in the following *Index to Exhibits* are filed or incorporated by reference as part of this report

## INDEX TO EXHIBITS

Exhibit Number	Exhibit Description	Incorporated by Reference				Filed Herewith
		Form	File No.	Exhibit	Filing Date	
3.1	<a href="#"><u>Amended and Restated Certificate of Incorporation of the Registrant.</u></a>	10-K	001-34756	3.1	March 1, 2017	
3.2	<a href="#"><u>Certificate of Amendment to the Amended and Restated Certificate of Incorporation of the Registrant.</u></a>	10-K	001-34756	3.2	March 1, 2017	
3.3	<a href="#"><u>Amended and Restated Bylaws of the Registrant.</u></a>	8-K	001-34756	3.2	February 1, 2017	
4.1	<a href="#"><u>Specimen common stock certificate of the Registrant.</u></a>	10-K	001-34756	4.1	March 1, 2017	
4.2	<a href="#"><u>Fifth Amended and Restated Investors' Rights Agreement, dated as of August 31, 2009, between Registrant and certain holders of the Registrant's capital stock named therein.</u></a>	S-1	333-164593	4.2	January 29, 2010	
4.3	<a href="#"><u>Amendment to Fifth Amended and Restated Investors' Rights Agreement, dated as of May 20, 2010, between Registrant and certain holders of the Registrant's capital stock named therein.</u></a>	S-1/A	333-164593	4.2A	May 27, 2010	
4.4	<a href="#"><u>Amendment to Fifth Amended and Restated Investors' Rights Agreement between Registrant, Toyota Motor Corporation and certain holders of the Registrant's capital stock named therein.</u></a>	S-1/A	333-164593	4.2B	May 27, 2010	
4.5	<a href="#"><u>Amendment to Fifth Amended and Restated Investor's Rights Agreement, dated as of June 14, 2010, between Registrant and certain holders of the Registrant's capital stock named therein.</u></a>	S-1/A	333-164593	4.2C	June 15, 2010	
4.6	<a href="#"><u>Amendment to Fifth Amended and Restated Investor's Rights Agreement, dated as of November 2, 2010, between Registrant and certain holders of the Registrant's capital stock named therein.</u></a>	8-K	001-34756	4.1	November 4, 2010	
4.7	<a href="#"><u>Waiver to Fifth Amended and Restated Investor's Rights Agreement, dated as of May 22, 2011, between Registrant and certain holders of the Registrant's capital stock named therein.</u></a>	S-1/A	333-174466	4.2E	June 2, 2011	
4.8	<a href="#"><u>Amendment to Fifth Amended and Restated Investor's Rights Agreement, dated as of May 30, 2011, between Registrant and certain holders of the Registrant's capital stock named therein.</u></a>	8-K	001-34756	4.1	June 1, 2011	

Exhibit Number	Exhibit Description	Incorporated by Reference				Filed Herewith
		Form	File No.	Exhibit	Filing Date	
4.9	<a href="#"><u>Sixth Amendment to Fifth Amended and Restated Investors' Rights Agreement, dated as of May 15, 2013 among the Registrant, the Elon Musk Revocable Trust dated July 22, 2003 and certain other holders of the capital stock of the Registrant named therein.</u></a>	8-K	001-34756	4.1	May 20, 2013	
4.10	<a href="#"><u>Waiver to Fifth Amended and Restated Investor's Rights Agreement, dated as of May 14, 2013, between the Registrant and certain holders of the capital stock of the Registrant named therein.</u></a>	8-K	001-34756	4.2	May 20, 2013	
4.11	<a href="#"><u>Waiver to Fifth Amended and Restated Investor's Rights Agreement, dated as of August 13, 2015, between the Registrant and certain holders of the capital stock of the Registrant named therein.</u></a>	8-K	001-34756	4.1	August 19, 2015	
4.12	<a href="#"><u>Waiver to Fifth Amended and Restated Investors' Rights Agreement, dated as of May 18, 2016, between the Registrant and certain holders of the capital stock of the Registrant named therein.</u></a>	8-K	001-34756	4.1	May 24, 2016	
4.13	<a href="#"><u>Waiver to Fifth Amended and Restated Investors' Rights Agreement, dated as of March 15, 2017, between the Registrant and certain holders of the capital stock of the Registrant named therein.</u></a>	8-K	001-34756	4.1	March 17, 2017	
4.14	<a href="#"><u>Waiver to Fifth Amended and Restated Investors' Rights Agreement, dated as of May 1, 2019, between the Registrant and certain holders of the capital stock of the Registrant named therein.</u></a>	8-K	001-34756	4.1	May 3, 2019	
4.15	<a href="#"><u>Indenture, dated as of May 22, 2013, by and between the Registrant and U.S. Bank National Association.</u></a>	8-K	001-34756	4.1	May 22, 2013	
4.16	<a href="#"><u>Third Supplemental Indenture, dated as of March 5, 2014, by and between the Registrant and U.S. Bank National Association.</u></a>	8-K	001-34756	4.4	March 5, 2014	
4.17	<a href="#"><u>Form of 1.25% Convertible Senior Note Due March 1, 2021 (included in Exhibit 4.19).</u></a>	8-K	001-34756	4.4	March 5, 2014	
4.18	<a href="#"><u>Fourth Supplemental Indenture, dated as of March 22, 2017, by and between the Registrant and U.S. Bank National Association.</u></a>	8-K	001-34756	4.2	March 22, 2017	
4.19	<a href="#"><u>Form of 2.375% Convertible Senior Note Due March 15, 2022 (included in Exhibit 4.21).</u></a>	8-K	001-34756	4.2	March 22, 2017	

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Exhibit Number	Exhibit Description	Incorporated by Reference				Filed Herewith
		Form	File No.	Exhibit	Filing Date	
4.20	<a href="#">Indenture, dated as of August 18, 2017, by and among the Registrant, SolarCity, and U.S. Bank National Association, as trustee.</a>	8-K	001-34756	4.1	August 23, 2017	
4.21	<a href="#">Form of 5.30% Senior Note due August 15, 2025.</a>	8-K	001-34756	4.2	August 23, 2017	
4.22	<a href="#">Indenture, dated as of September 30, 2014, between SolarCity and Wells Fargo Bank, National Association</a>	8-K(1)	001-35758	4.1	October 6, 2014	
4.23	<a href="#">First Supplemental Indenture, dated as of November 21, 2016, between SolarCity and Wells Fargo Bank, National Association, as trustee to the Indenture, dated as of September 30, 2014, between SolarCity and Wells Fargo Bank, National Association, as trustee.</a>	8-K	001-34756	4.2	November 21, 2016	
4.24	<a href="#">Indenture, dated as of December 7, 2015, between SolarCity and Wells Fargo Bank, National Association</a>	8-K(1)	001-35758	4.1	December 7, 2015	
4.25	<a href="#">First Supplemental Indenture, dated as of November 21, 2016, between SolarCity and Wells Fargo Bank, National Association, as trustee to the Indenture, dated as of December 7, 2015, between SolarCity and Wells Fargo Bank, National Association, as trustee.</a>	8-K	001-34756	4.3	November 21, 2016	
4.26	<a href="#">Indenture, dated as of October 15, 2014, between SolarCity and U.S. Bank National Association, as trustee.</a>	S-3ASR(1)	333-199321	4.1	October 15, 2014	
4.27	<a href="#">Fifth Supplemental Indenture, dated as of May 7, 2019, by and between Registrant and U.S. Bank National Association, related to 2.00% Convertible Senior Notes due May 15, 2024.</a>	8-K	001-34756	4.2	May 8, 2019	
4.28	<a href="#">Form of 2.00% Convertible Senior Notes due May 15, 2024 (included in Exhibit 4.27).</a>	8-K	001-34756	4.3	May 8, 2019	
4.29	<a href="#">Fourth Supplemental Indenture, dated as of October 15, 2014, by and between SolarCity and the Trustee, related to SolarCity's 4.00% Solar Bonds, Series 2014/4-7.</a>	8-K(1)	001-35758	4.5	October 15, 2014	
4.30	<a href="#">Eighth Supplemental Indenture, dated as of January 29, 2015, by and between SolarCity and the Trustee, related to SolarCity's 4.00% Solar Bonds, Series 2015/4-7.</a>	8-K(1)	001-35758	4.5	January 29, 2015	

Exhibit Number	Exhibit Description	Incorporated by Reference				Filed Herewith
		Form	File No.	Exhibit	Filing Date	
4.31	<a href="#"><u>Ninth Supplemental Indenture, dated as of March 9, 2015, by and between SolarCity and the Trustee, related to SolarCity's 4.00% Solar Bonds, Series 2015/5-5.</u></a>	8-K(1)	001-35758	4.2	March 9, 2015	
4.32	<a href="#"><u>Tenth Supplemental Indenture, dated as of March 9, 2015, by and between SolarCity and the Trustee, related to SolarCity's 5.00% Solar Bonds, Series 2015/6-10.</u></a>	8-K(1)	001-35758	4.3	March 9, 2015	
4.33	<a href="#"><u>Eleventh Supplemental Indenture, dated as of March 9, 2015, by and between SolarCity and the Trustee, related to SolarCity's 5.75% Solar Bonds, Series 2015/7-15.</u></a>	8-K(1)	001-35758	4.4	March 9, 2015	
4.34	<a href="#"><u>Fourteenth Supplemental Indenture, dated as of March 19, 2015, by and between SolarCity and the Trustee, related to SolarCity's 3.60% Solar Bonds, Series 2015/C3-5.</u></a>	8-K(1)	001-35758	4.4	March 19, 2015	
4.35	<a href="#"><u>Fifteenth Supplemental Indenture, dated as of March 19, 2015, by and between SolarCity and the Trustee, related to SolarCity's 4.70% Solar Bonds, Series 2015/C4-10.</u></a>	8-K(1)	001-35758	4.5	March 19, 2015	
4.36	<a href="#"><u>Sixteenth Supplemental Indenture, dated as of March 19, 2015, by and between SolarCity and the Trustee, related to SolarCity's 5.45% Solar Bonds, Series 2015/C5-15.</u></a>	8-K(1)	001-35758	4.6	March 19, 2015	
4.37	<a href="#"><u>Nineteenth Supplemental Indenture, dated as of March 26, 2015, by and between SolarCity and the Trustee, related to SolarCity's 3.60% Solar Bonds, Series 2015/C8-5.</u></a>	8-K(1)	001-35758	4.4	March 26, 2015	
4.38	<a href="#"><u>Twentieth Supplemental Indenture, dated as of March 26, 2015, by and between SolarCity and the Trustee, related to SolarCity's 4.70% Solar Bonds, Series 2015/C9-10.</u></a>	8-K(1)	001-35758	4.5	March 26, 2015	
4.39	<a href="#"><u>Twenty-First Supplemental Indenture, dated as of March 26, 2015, by and between SolarCity and the Trustee, related to SolarCity's 5.45% Solar Bonds, Series 2015/C10-15.</u></a>	8-K(1)	001-35758	4.6	March 26, 2015	
4.40	<a href="#"><u>Twenty-Fifth Supplemental Indenture, dated as of April 2, 2015, by and between SolarCity and the Trustee, related to SolarCity's 3.60% Solar Bonds, Series 2015/C13-5.</u></a>	8-K(1)	001-35758	4.4	April 2, 2015	

Exhibit Number	Exhibit Description	Incorporated by Reference				Filed Herewith
		Form	File No.	Exhibit	Filing Date	
4.41	<a href="#"><u>Twenty-Sixth Supplemental Indenture, dated as of April 2, 2015, by and between SolarCity and the Trustee, related to SolarCity's 4.70% Solar Bonds, Series 2015/C14-10.</u></a>	8-K(1)	001-35758	4.5	April 2, 2015	
4.42	<a href="#"><u>Twenty-Ninth Supplemental Indenture, dated as of April 9, 2015, by and between SolarCity and the Trustee, related to SolarCity's 3.60% Solar Bonds, Series 2015/C18-5.</u></a>	8-K(1)	001-35758	4.4	April 9, 2015	
4.43	<a href="#"><u>Thirtieth Supplemental Indenture, dated as of April 9, 2015, by and between SolarCity and the Trustee, related to SolarCity's 4.70% Solar Bonds, Series 2015/C19-10.</u></a>	8-K(1)	001-35758	4.5	April 9, 2015	
4.44	<a href="#"><u>Thirty-First Supplemental Indenture, dated as of April 9, 2015, by and between SolarCity and the Trustee, related to SolarCity's 5.45% Solar Bonds, Series 2015/C20-15.</u></a>	8-K(1)	001-35758	4.6	April 9, 2015	
4.45	<a href="#"><u>Thirty-Fourth Supplemental Indenture, dated as of April 14, 2015, by and between SolarCity and the Trustee, related to SolarCity's 3.60% Solar Bonds, Series 2015/C23-5.</u></a>	8-K(1)	001-35758	4.4	April 14, 2015	
4.46	<a href="#"><u>Thirty-Fifth Supplemental Indenture, dated as of April 14, 2015, by and between SolarCity and the Trustee, related to SolarCity's 4.70% Solar Bonds, Series 2015/C24-10.</u></a>	8-K(1)	001-35758	4.5	April 14, 2015	
4.47	<a href="#"><u>Thirty-Sixth Supplemental Indenture, dated as of April 14, 2015, by and between SolarCity and the Trustee, related to SolarCity's 5.45% Solar Bonds, Series 2015/C25-15.</u></a>	8-K(1)	001-35758	4.6	April 14, 2015	
4.48	<a href="#"><u>Thirty-Eighth Supplemental Indenture, dated as of April 21, 2015, by and between SolarCity and the Trustee, related to SolarCity's 4.70% Solar Bonds, Series 2015/C27-10.</u></a>	8-K(1)	001-35758	4.3	April 21, 2015	
4.49	<a href="#"><u>Thirty-Ninth Supplemental Indenture, dated as of April 21, 2015, by and between SolarCity and the Trustee, related to SolarCity's 5.45% Solar Bonds, Series 2015/C28-15.</u></a>	8-K(1)	001-35758	4.4	April 21, 2015	
4.50	<a href="#"><u>Forty-Second Supplemental Indenture, dated as of April 27, 2015, by and between SolarCity and the Trustee, related to SolarCity's 3.60% Solar Bonds, Series 2015/C31-5.</u></a>	8-K(1)	001-35758	4.4	April 27, 2015	

Exhibit Number	Exhibit Description	Incorporated by Reference				Filed Herewith
		Form	File No.	Exhibit	Filing Date	
4.51	<a href="#"><u>Forty-Third Supplemental Indenture, dated as of April 27, 2015, by and between SolarCity and the Trustee, related to SolarCity's 4.70% Solar Bonds, Series 2015/C32-10.</u></a>	8-K(1)	001-35758	4.5	April 27, 2015	
4.52	<a href="#"><u>Forty-Fourth Supplemental Indenture, dated as of April 27, 2015, by and between SolarCity and the Trustee, related to SolarCity's 5.45% Solar Bonds, Series 2015/C33-15.</u></a>	8-K(1)	001-35758	4.6	April 27, 2015	
4.53	<a href="#"><u>Forty-Seventh Supplemental Indenture, dated as of May 1, 2015, by and between SolarCity and the Trustee, related to SolarCity's 4.00% Solar Bonds, Series 2015/11-5.</u></a>	8-K(1)	001-35758	4.4	May 1, 2015	
4.54	<a href="#"><u>Forty-Eighth Supplemental Indenture, dated as of May 1, 2015, by and between SolarCity and the Trustee, related to SolarCity's 5.00% Solar Bonds, Series 2015/12-10.</u></a>	8-K(1)	001-35758	4.5	May 1, 2015	
4.55	<a href="#"><u>Forty-Ninth Supplemental Indenture, dated as of May 1, 2015, by and between SolarCity and the Trustee, related to SolarCity's 5.75% Solar Bonds, Series 2015/13-15.</u></a>	8-K(1)	001-35758	4.6	May 1, 2015	
4.56	<a href="#"><u>Fifty-First Supplemental Indenture, dated as of May 11, 2015, by and between SolarCity and the Trustee, related to SolarCity's 3.60% Solar Bonds, Series 2015/C35-5.</u></a>	8-K(1)	001-35758	4.3	May 11, 2015	
4.57	<a href="#"><u>Fifty-Second Supplemental Indenture, dated as of May 11, 2015, by and between SolarCity and the Trustee, related to SolarCity's 4.70% Solar Bonds, Series 2015/C36-10.</u></a>	8-K(1)	001-35758	4.4	May 11, 2015	
4.58	<a href="#"><u>Fifty-Third Supplemental Indenture, dated as of May 11, 2015, by and between SolarCity and the Trustee, related to SolarCity's 5.45% Solar Bonds, Series 2015/C37-15.</u></a>	8-K(1)	001-35758	4.5	May 11, 2015	
4.59	<a href="#"><u>Fifty-Sixth Supplemental Indenture, dated as of May 18, 2015, by and between SolarCity and the Trustee, related to SolarCity's 3.60% Solar Bonds, Series 2015/C39-5.</u></a>	8-K(1)	001-35758	4.3	May 18, 2015	
4.60	<a href="#"><u>Fifty-Seventh Supplemental Indenture, dated as of May 18, 2015, by and between SolarCity and the Trustee, related to SolarCity's 4.70% Solar Bonds, Series 2015/C40-10.</u></a>	8-K(1)	001-35758	4.4	May 18, 2015	

Exhibit Number	Exhibit Description	Incorporated by Reference				Filed Herewith
		Form	File No.	Exhibit	Filing Date	
4.61	<a href="#"><u>Fifty-Eighth Supplemental Indenture, dated as of May 18, 2015, by and between SolarCity and the Trustee, related to SolarCity's 5.45% Solar Bonds, Series 2015/C41-15.</u></a>	8-K(1)	001-35758	4.5	May 18, 2015	
4.62	<a href="#"><u>Sixtieth Supplemental Indenture, dated as of May 26, 2015, by and between SolarCity and the Trustee, related to SolarCity's 3.60% Solar Bonds, Series 2015/C43-5.</u></a>	8-K(1)	001-35758	4.3	May 26, 2015	
4.63	<a href="#"><u>Sixty-First Supplemental Indenture, dated as of May 26, 2015, by and between SolarCity and the Trustee, related to SolarCity's 4.70% Solar Bonds, Series 2015/C44-10.</u></a>	8-K(1)	001-35758	4.4	May 26, 2015	
4.64	<a href="#"><u>Sixty-Second Supplemental Indenture, dated as of May 26, 2015, by and between SolarCity and the Trustee, related to SolarCity's 5.45% Solar Bonds, Series 2015/C45-15.</u></a>	8-K(1)	001-35758	4.5	May 26, 2015	
4.65	<a href="#"><u>Sixty-Fifth Supplemental Indenture, dated as of June 8, 2015, by and between SolarCity and the Trustee, related to SolarCity's 3.60% Solar Bonds, Series 2015/C47-5.</u></a>	8-K(1)	001-35758	4.3	June 10, 2015	
4.66	<a href="#"><u>Sixty-Seventh Supplemental Indenture, dated as of June 8, 2015, by and between SolarCity and the Trustee, related to SolarCity's 5.45% Solar Bonds, Series 2015/C49-15.</u></a>	8-K(1)	001-35758	4.5	June 10, 2015	
4.67	<a href="#"><u>Seventieth Supplemental Indenture, dated as of June 16, 2015, by and between SolarCity and the Trustee, related to SolarCity's 4.70% Solar Bonds, Series 2015/C52-10.</u></a>	8-K(1)	001-35758	4.4	June 16, 2015	
4.68	<a href="#"><u>Seventy-First Supplemental Indenture, dated as of June 16, 2015, by and between SolarCity and the Trustee, related to SolarCity's 5.45% Solar Bonds, Series 2015/C53-15.</u></a>	8-K(1)	001-35758	4.5	June 16, 2015	
4.69	<a href="#"><u>Seventy-Fourth Supplemental Indenture, dated as of June 22, 2015, by and between SolarCity and the Trustee, related to SolarCity's 4.70% Solar Bonds, Series 2015/C56-10.</u></a>	8-K(1)	001-35758	4.4	June 23, 2015	
4.70	<a href="#"><u>Seventy-Fifth Supplemental Indenture, dated as of June 22, 2015, by and between SolarCity and the Trustee, related to SolarCity's 5.45% Solar Bonds, Series 2015/C57-15.</u></a>	8-K(1)	001-35758	4.5	June 23, 2015	

Exhibit Number	Exhibit Description	Incorporated by Reference				Filed Herewith
		Form	File No.	Exhibit	Filing Date	
4.71	<a href="#"><u>Seventy-Ninth Supplemental Indenture, dated as of June 29, 2015, by and between SolarCity and the Trustee, related to SolarCity's 3.60% Solar Bonds, Series 2015/C60-5.</u></a>	8-K(1)	001-35758	4.4	June 29, 2015	
4.72	<a href="#"><u>Eightieth Supplemental Indenture, dated as of June 29, 2015, by and between SolarCity and the Trustee, related to SolarCity's 4.70% Solar Bonds, Series 2015/C61-10.</u></a>	8-K(1)	001-35758	4.5	June 29, 2015	
4.73	<a href="#"><u>Eighty-First Supplemental Indenture, dated as of June 29, 2015, by and between SolarCity and the Trustee, related to SolarCity's 5.45% Solar Bonds, Series 2015/C62-15.</u></a>	8-K(1)	001-35758	4.6	June 29, 2015	
4.74	<a href="#"><u>Eighty-Fourth Supplemental Indenture, dated as of July 14, 2015, by and between SolarCity and the Trustee, related to SolarCity's 3.60% Solar Bonds, Series 2015/C65-5.</u></a>	8-K(1)	001-35758	4.4	July 14, 2015	
4.75	<a href="#"><u>Eighty-Sixth Supplemental Indenture, dated as of July 14, 2015, by and between SolarCity and the Trustee, related to SolarCity's 5.45% Solar Bonds, Series 2015/C67-15.</u></a>	8-K(1)	001-35758	4.6	July 14, 2015	
4.76	<a href="#"><u>Eighty-Ninth Supplemental Indenture, dated as of July 20, 2015, by and between SolarCity and the Trustee, related to SolarCity's 3.60% Solar Bonds, Series 2015/C70-5.</u></a>	8-K(1)	001-35758	4.4	July 21, 2015	
4.77	<a href="#"><u>Ninetieth Supplemental Indenture, dated as of July 20, 2015, by and between SolarCity and the Trustee, related to SolarCity's 4.70% Solar Bonds, Series 2015/C71-10.</u></a>	8-K(1)	001-35758	4.5	July 21, 2015	
4.78	<a href="#"><u>Ninety-First Supplemental Indenture, dated as of July 20, 2015, by and between SolarCity and the Trustee, related to SolarCity's 5.45% Solar Bonds, Series 2015/C72-15.</u></a>	8-K(1)	001-35758	4.6	July 21, 2015	
4.79	<a href="#"><u>Ninety-Fourth Supplemental Indenture, dated as of July 31, 2015, by and between SolarCity and the Trustee, related to SolarCity's 4.00% Solar Bonds, Series 2015/19-5.</u></a>	8-K(1)	001-35758	4.4	July 31, 2015	
4.80	<a href="#"><u>Ninety-Fifth Supplemental Indenture, dated as of July 31, 2015, by and between SolarCity and the Trustee, related to SolarCity's 5.00% Solar Bonds, Series 2015/20-10.</u></a>	8-K(1)	001-35758	4.5	July 31, 2015	

Exhibit Number	Exhibit Description	Incorporated by Reference				Filed Herewith
		Form	File No.	Exhibit	Filing Date	
4.81	<a href="#"><u>Ninety-Sixth Supplemental Indenture, dated as of July 31, 2015, by and between SolarCity and the Trustee, related to SolarCity's 5.75% Solar Bonds, Series 2015/21-15.</u></a>	8-K(1)	001-35758	4.6	July 31, 2015	
4.82	<a href="#"><u>Ninety-Ninth Supplemental Indenture, dated as of August 3, 2015, by and between SolarCity and the Trustee, related to SolarCity's 3.60% Solar Bonds, Series 2015/C75-5.</u></a>	8-K(1)	001-35758	4.4	August 3, 2015	
4.83	<a href="#"><u>One Hundred-and-Fifth Supplemental Indenture, dated as of August 10, 2015, by and between SolarCity and the Trustee, related to SolarCity's 4.70% Solar Bonds, Series 2015/C81-10.</u></a>	8-K(1)	001-35758	4.5	August 10, 2015	
4.84	<a href="#"><u>One Hundred-and-Ninth Supplemental Indenture, dated as of August 17, 2015, by and between SolarCity and the Trustee, related to SolarCity's 3.60% Solar Bonds, Series 2015/C85-5.</u></a>	8-K(1)	001-35758	4.4	August 17, 2015	
4.85	<a href="#"><u>One Hundred-and-Eleventh Supplemental Indenture, dated as of August 17, 2015, by and between SolarCity and the Trustee, related to SolarCity's 5.45% Solar Bonds, Series 2015/C87-15.</u></a>	8-K(1)	001-35758	4.6	August 17, 2015	
4.86	<a href="#"><u>One Hundred-and-Fourteenth Supplemental Indenture, dated as of August 24, 2015, by and between SolarCity and the Trustee, related to SolarCity's 3.60% Solar Bonds, Series 2015/C90-5.</u></a>	8-K(1)	001-35758	4.4	August 24, 2015	
4.87	<a href="#"><u>One Hundred-and-Sixteenth Supplemental Indenture, dated as of August 24, 2015, by and between SolarCity and the Trustee, related to SolarCity's 5.45% Solar Bonds, Series 2015/C92-15.</u></a>	8-K(1)	001-35758	4.6	August 24, 2015	
4.88	<a href="#"><u>One Hundred-and-Nineteenth Supplemental Indenture, dated as of August 31, 2015, by and between SolarCity and the Trustee, related to SolarCity's 3.60% Solar Bonds, Series 2015/C95-5.</u></a>	8-K(1)	001-35758	4.4	August 31, 2015	
4.89	<a href="#"><u>One Hundred-and-Twenty-First Supplemental Indenture, dated as of August 31, 2015, by and between SolarCity and the Trustee, related to SolarCity's 5.45% Solar Bonds, Series 2015/C97-15.</u></a>	8-K(1)	001-35758	4.6	August 31, 2015	

Exhibit Number	Exhibit Description	Incorporated by Reference				Filed Herewith
		Form	File No.	Exhibit	Filing Date	
4.90	<a href="#"><u>One Hundred-and-Twenty-Seventh Supplemental Indenture, dated as of September 14, 2015, by and between SolarCity and the Trustee, related to SolarCity's 3.60% Solar Bonds, Series 2015/C100-5.</u></a>	8-K(1)	001-35758	4.4	September 15, 2015	
4.91	<a href="#"><u>One Hundred-and-Twenty-Eighth Supplemental Indenture, dated as of September 14, 2015, by and between SolarCity and the Trustee, related to SolarCity's 4.70% Solar Bonds, Series 2015/C101-10.</u></a>	8-K(1)	001-35758	4.5	September 15, 2015	
4.92	<a href="#"><u>One Hundred-and-Twenty-Ninth Supplemental Indenture, dated as of September 14, 2015, by and between SolarCity and the Trustee, related to SolarCity's 5.45% Solar Bonds, Series 2015/C102-15.</u></a>	8-K(1)	001-35758	4.6	September 15, 2015	
4.93	<a href="#"><u>One Hundred-and-Thirty-Second Supplemental Indenture, dated as of September 28, 2015, by and between SolarCity and the Trustee, related to SolarCity's 3.60% Solar Bonds, Series 2015/C105-5.</u></a>	8-K(1)	001-35758	4.4	September 29, 2015	
4.94	<a href="#"><u>One Hundred-and-Thirty-Third Supplemental Indenture, dated as of September 28, 2015, by and between SolarCity and the Trustee, related to SolarCity's 4.70% Solar Bonds, Series 2015/C106-10.</u></a>	8-K(1)	001-35758	4.5	September 29, 2015	
4.95	<a href="#"><u>One Hundred-and-Thirty-Fourth Supplemental Indenture, dated as of September 28, 2015, by and between SolarCity and the Trustee, related to SolarCity's 5.45% Solar Bonds, Series 2015/C107-15.</u></a>	8-K(1)	001-35758	4.6	September 29, 2015	
4.96	<a href="#"><u>One Hundred-and-Thirty-Seventh Supplemental Indenture, dated as of October 13, 2015, by and between SolarCity and the Trustee, related to SolarCity's 3.60% Solar Bonds, Series 2015/C110-5.</u></a>	8-K(1)	001-35758	4.4	October 13, 2015	
4.97	<a href="#"><u>One Hundred-and-Thirty-Eighth Supplemental Indenture, dated as of October 13, 2015, by and between SolarCity and the Trustee, related to SolarCity's 4.70% Solar Bonds, Series 2015/C111-10.</u></a>	8-K(1)	001-35758	4.5	October 13, 2015	



Exhibit Number	Exhibit Description	Incorporated by Reference				Filed Herewith
		Form	File No.	Exhibit	Filing Date	
4.98	<a href="#"><u>One Hundred-and-Forty-Second Supplemental Indenture, dated as of October 30, 2015, by and between SolarCity and the Trustee, related to SolarCity's 4.00% Solar Bonds, Series 2015/24-5.</u></a>	8-K(1)	001-35758	4.4	October 30, 2015	
4.99	<a href="#"><u>One Hundred-and-Forty-Third Supplemental Indenture, dated as of October 30, 2015, by and between SolarCity and the Trustee, related to SolarCity's 5.00% Solar Bonds, Series 2015/25-10.</u></a>	8-K(1)	001-35758	4.5	October 30, 2015	
4.100	<a href="#"><u>One Hundred-and-Forty-Fourth Supplemental Indenture, dated as of October 30, 2015, by and between SolarCity and the Trustee, related to SolarCity's 5.75% Solar Bonds, Series 2015/26-15.</u></a>	8-K(1)	001-35758	4.6	October 30, 2015	
4.101	<a href="#"><u>One Hundred-and-Forty-Seventh Supplemental Indenture, dated as of November 4, 2015, by and between SolarCity and the Trustee, related to SolarCity's 3.60% Solar Bonds, Series 2015/C115-5.</u></a>	8-K(1)	001-35758	4.4	November 4, 2015	
4.102	<a href="#"><u>One Hundred-and-Forty-Eighth Supplemental Indenture, dated as of November 4, 2015, by and between SolarCity and the Trustee, related to SolarCity's 4.70% Solar Bonds, Series 2015/C116-10.</u></a>	8-K(1)	001-35758	4.5	November 4, 2015	
4.103	<a href="#"><u>One Hundred-and-Fifty-Third Supplemental Indenture, dated as of November 16, 2015, by and between SolarCity and the Trustee, related to SolarCity's 4.70% Solar Bonds, Series 2015/C121-10.</u></a>	8-K(1)	001-35758	4.5	November 17, 2015	
4.104	<a href="#"><u>One Hundred-and-Fifty-Fourth Supplemental Indenture, dated as of November 16, 2015, by and between SolarCity and the Trustee, related to SolarCity's 5.45% Solar Bonds, Series 2015/C122-15.</u></a>	8-K(1)	001-35758	4.6	November 17, 2015	
4.105	<a href="#"><u>One Hundred-and-Fifty-Eighth Supplemental Indenture, dated as of November 30, 2015, by and between SolarCity and the Trustee, related to SolarCity's 4.70% Solar Bonds, Series 2015/C126-10.</u></a>	8-K(1)	001-35758	4.5	November 30, 2015	

Exhibit Number	Exhibit Description	Incorporated by Reference				Filed Herewith
		Form	File No.	Exhibit	Filing Date	
4.106	<a href="#"><u>One Hundred-and-Fifty-Ninth Supplemental Indenture, dated as of November 30, 2015, by and between SolarCity and the Trustee, related to SolarCity's 5.45% Solar Bonds, Series 2015/C127-15.</u></a>	8-K(1)	001-35758	4.6	November 30, 2015	
4.107	<a href="#"><u>One Hundred-and-Sixty-Second Supplemental Indenture, dated as of December 14, 2015, by and between SolarCity and the Trustee, related to SolarCity's 3.60% Solar Bonds, Series 2015/C130-5.</u></a>	8-K(1)	001-35758	4.4	December 14, 2015	
4.058	<a href="#"><u>One Hundred-and-Sixty-Third Supplemental Indenture, dated as of December 14, 2015, by and between SolarCity and the Trustee, related to SolarCity's 4.70% Solar Bonds, Series 2015/C131-10.</u></a>	8-K(1)	001-35758	4.5	December 14, 2015	
4.109	<a href="#"><u>One Hundred-and-Sixty-Fourth Supplemental Indenture, dated as of December 14, 2015, by and between SolarCity and the Trustee, related to SolarCity's 5.45% Solar Bonds, Series 2015/C132-15.</u></a>	8-K(1)	001-35758	4.6	December 14, 2015	
4.110	<a href="#"><u>One Hundred-and-Sixty-Seventh Supplemental Indenture, dated as of December 28, 2015, by and between SolarCity and the Trustee, related to SolarCity's 3.60% Solar Bonds, Series 2015/C135-5.</u></a>	8-K(1)	001-35758	4.4	December 28, 2015	
4.111	<a href="#"><u>One Hundred-and-Sixty-Eighth Supplemental Indenture, dated as of December 28, 2015, by and between SolarCity and the Trustee, related to SolarCity's 4.70% Solar Bonds, Series 2015/C136-10.</u></a>	8-K(1)	001-35758	4.5	December 28, 2015	
4.112	<a href="#"><u>One Hundred-and-Sixty-Ninth Supplemental Indenture, dated as of December 28, 2015, by and between SolarCity and the Trustee, related to SolarCity's 5.45% Solar Bonds, Series 2015/C137-15.</u></a>	8-K(1)	001-35758	4.6	December 28, 2015	
4.113	<a href="#"><u>One Hundred-and-Seventy-Second Supplemental Indenture, dated as of January 29, 2016, by and between SolarCity and the Trustee, related to SolarCity's 4.00% Solar Bonds, Series 2016/3-5.</u></a>	8-K(1)	001-35758	4.4	January 29, 2016	

Exhibit Number	Exhibit Description	Incorporated by Reference				Filed Herewith
		Form	File No.	Exhibit	Filing Date	
4.114	<a href="#">One Hundred-and-Seventy-Third Supplemental Indenture, dated as of January 29, 2016, by and between SolarCity and the Trustee, related to SolarCity's 5.00% Solar Bonds, Series 2016/4-10.</a>	8-K(1)	001-35758	4.5	January 29, 2016	
4.115	<a href="#">One Hundred-and-Seventy-Fourth Supplemental Indenture, dated as of January 29, 2016, by and between SolarCity and the Trustee, related to SolarCity's 5.75% Solar Bonds, Series 2016/5-15.</a>	8-K(1)	001-35758	4.6	January 29, 2016	
4.116	<a href="#">One Hundred-and-Seventy-Seventh Supplemental Indenture, dated as of February 26, 2016, by and between SolarCity and the Trustee, related to SolarCity's 5.25% Solar Bonds, Series 2016/8-5.</a>	8-K(1)	001-35758	4.4	February 26, 2016	
4.117	<a href="#">One Hundred-and-Seventy-Ninth Supplemental Indenture, dated as of March 21, 2016, by and between SolarCity and the Trustee, related to SolarCity's 5.25% Solar Bonds, Series 2016/10-5.</a>	8-K(1)	001-35758	4.3	March 21, 2016	
4.118	<a href="#">One Hundred-and-Eighty-First Supplemental Indenture, dated as of June 10, 2016, by and between SolarCity and the Trustee, related to SolarCity's 5.25% Solar Bonds, Series 2016/12-5.</a>	8-K(1)	001-35758	4.3	June 10, 2016	
4.119	<a href="#">Description of Registrant's Securities</a>	—	—	—	—	X
10.1**	<a href="#">Form of Indemnification Agreement between the Registrant and its directors and officers.</a>	S-1/A	333-164593	10.1	June 15, 2010	
10.2**	<a href="#">2003 Equity Incentive Plan.</a>	S-1/A	333-164593	10.2	May 27, 2010	
10.3**	<a href="#">Form of Stock Option Agreement under 2003 Equity Incentive Plan.</a>	S-1	333-164593	10.3	January 29, 2010	
10.4**	<a href="#">Amended and Restated 2010 Equity Incentive Plan.</a>	10-K	001-34756	10.4	February 23, 2018	
10.5**	<a href="#">Form of Stock Option Agreement under 2010 Equity Incentive Plan.</a>	10-K	001-34756	10.6	March 1, 2017	
10.6**	<a href="#">Form of Restricted Stock Unit Award Agreement under 2010 Equity Incentive Plan.</a>	10-K	001-34756	10.7	March 1, 2017	
10.7**	<a href="#">Amended and Restated 2010 Employee Stock Purchase Plan, effective as of February 1, 2017.</a>	10-K	001-34756	10.8	March 1, 2017	
10.8**	<a href="#">2019 Equity Incentive Plan.</a>	S-8	333-232079	4.2	June 12, 2019	

Exhibit Number	Exhibit Description	Incorporated by Reference				Filed Herewith
		Form	File No.	Exhibit	Filing Date	
10.9**	<a href="#">Form of Stock Option Agreement under 2019 Equity Incentive Plan.</a>	S-8	333-232079	4.3	June 12, 2019	
10.10**	<a href="#">Form of Restricted Stock Unit Award Agreement under 2019 Equity Incentive Plan.</a>	S-8	333-232079	4.4	June 12, 2019	
10.11**	<a href="#">Employee Stock Purchase Plan, effective as of June 12, 2019.</a>	S-8	333-232079	4.5	June 12, 2019	
10.12**	<a href="#">2007 SolarCity Stock Plan and form of agreements used thereunder.</a>	S-1(1)	333-184317	10.2	October 5, 2012	
10.13**	<a href="#">2012 SolarCity Equity Incentive Plan and form of agreements used thereunder.</a>	S-1(1)	333-184317	10.3	October 5, 2012	
10.14**	<a href="#">2010 Zep Solar, Inc. Equity Incentive Plan and form of agreements used thereunder.</a>	S-8(1)	333-192996	4.5	December 20, 2013	
10.15**	<a href="#">Offer Letter between the Registrant and Elon Musk dated October 13, 2008.</a>	S-1	333-164593	10.9	January 29, 2010	
10.16**	<a href="#">Performance Stock Option Agreement between the Registrant and Elon Musk dated January 21, 2018.</a>	DEF 14A	001-34756	Appendix A	February 8, 2018	
10.17	<a href="#">Indemnification Agreement, dated as of February 27, 2014, by and between the Registrant and J.P. Morgan Securities LLC.</a>	8-K	001-34756	10.1	March 5, 2014	
10.18	<a href="#">Form of Call Option Confirmation relating to 0.25% Convertible Senior Notes Due March 1, 2019.</a>	8-K	001-34756	10.2	March 5, 2014	
10.19	<a href="#">Form of Call Option Confirmation relating to 1.25% Convertible Senior Notes Due March 1, 2021.</a>	8-K	001-34756	10.3	March 5, 2014	
10.20	<a href="#">Form of Warrant Confirmation relating to 0.25% Convertible Senior Notes Due March 1, 2019.</a>	8-K	001-34756	10.4	March 5, 2014	
10.21	<a href="#">Form of Warrant Confirmation relating to 1.25% Convertible Senior Notes Due March 1, 2021.</a>	8-K	001-34756	10.5	March 5, 2014	
10.22	<a href="#">Form of Call Option Confirmation relating to 2.375% Convertible Notes due March 15, 2022.</a>	8-K	001-34756	10.1	March 22, 2017	
10.23	<a href="#">Form of Warrant Confirmation relating to 2.375% Convertible Notes due March 15, 2022.</a>	8-K	001-34756	10.2	March 22, 2017	
10.24	<a href="#">Form of Call Option Confirmation relating to 2.00% Convertible Senior Notes due May 15, 2024.</a>	8-K	001-34756	10.1	May 3, 2019	

Exhibit Number	Exhibit Description	Incorporated by Reference				Filed Herewith
		Form	File No.	Exhibit	Filing Date	
10.25	<a href="#">Form of Warrant Confirmation relating to 2.00% Convertible Senior Notes due May 15, 2024.</a>	8-K	001-34756	10.2	May 3, 2019	
10.26†	<a href="#">Supply Agreement between Panasonic Corporation and the Registrant dated October 5, 2011.</a>	10-K	-001-34756	10.50	February 27, 2012	
10.27†	<a href="#">Amendment No. 1 to Supply Agreement between Panasonic Corporation and the Registrant dated October 29, 2013.</a>	10-K	001-34756	10.35A	February 26, 2014	
10.28	<a href="#">Agreement between Panasonic Corporation and the Registrant dated July 31, 2014.</a>	10-Q	001-34756	10.1	November 7, 2014	
10.29†	<a href="#">General Terms and Conditions between Panasonic Corporation and the Registrant dated October 1, 2014.</a>	8-K	001-34756	10.2	October 11, 2016	
10.30	<a href="#">Letter Agreement, dated as of February 24, 2015, regarding addition of co-party to General Terms and Conditions, Production Pricing Agreement and Investment Letter Agreement between Panasonic Corporation and the Registrant.</a>	10-K	001-34756	10.25A	February 24, 2016	
10.31†	<a href="#">Amendment to Gigafactory General Terms, dated March 1, 2016, by and among the Registrant, Panasonic Corporation and Panasonic Energy Corporation of North America.</a>	8-K	001-34756	10.1	October 11, 2016	
10.32†	<a href="#">Production Pricing Agreement between Panasonic Corporation and the Registrant dated October 1, 2014.</a>	10-Q	001-34756	10.3	November 7, 2014	
10.33†	<a href="#">Investment Letter Agreement between Panasonic Corporation and the Registrant dated October 1, 2014.</a>	10-Q	001-34756	10.4	November 7, 2014	
10.34	<a href="#">Amendment to Gigafactory Documents, dated April 5, 2016, by and among the Registrant, Panasonic Corporation, Panasonic Corporation of North America and Panasonic Energy Corporation of North America.</a>	10-Q	001-34756	10.2	May 10, 2016	
10.35††	<a href="#">2019 Pricing Agreement (2170 Cells) with respect to 2014 Gigafactory Agreements, executed September 20, 2019, by and among the Registrant, Tesla Motors Netherlands B.V., Panasonic Corporation and Panasonic Corporation of North America, on behalf of its division Panasonic Energy Corporation of North America.</a>	10-Q	001-34756	10.5	October 29, 2019	

Exhibit Number	Exhibit Description	Incorporated by Reference				Filed Herewith
		Form	File No.	Exhibit	Filing Date	
10.36††	<a href="#"><u>2019 Pricing Agreement (Japan Cells) with respect to 2011 Supply Agreement, executed September 20, 2019, by and among the Registrant, Tesla Motors Netherlands B.V., Panasonic Corporation and SANYO Electric Co., Ltd.</u></a>	10-Q	001-34756	10.6	October 29, 2019	
10.37††	<a href="#"><u>Amended and Restated Factory Lease, executed as of March 26, 10'9, by and between Tesla, Inc. and Panasonic Energy North America, a division of Panasonic Corporation of North America, as tenant.</u></a>	10-Q	001-34756	10.3	July 29, 2019	
10.38††	<a href="#"><u>Lease Amendment, executed September 20, 2019, by and among the Registrant, Panasonic Corporation of North America, on behalf of its division Panasonic Energy of North America, with respect to the Amended and Restated Factory Lease, executed as of March 26, 2019.</u></a>	10-Q	001-34756	10.7	October 29, 2019	
10.39	<a href="#"><u>ABL Credit Agreement, dated as of June 10, 2015, by and among the Registrant, Tesla Motors Netherlands B.V., certain of the Registrant's and Tesla Motors Netherlands B.V.'s direct or indirect subsidiaries from time to time party thereto, as borrowers, Wells Fargo Bank, National Association, as documentation agent, JPMorgan Chase Bank, N.A., Goldman Sachs Bank USA, Morgan Stanley Senior Funding Inc. and Bank of America, N.A., as syndication agents, the lenders from time to time party thereto, and Deutsche Bank AG New York Branch, as administrative agent and collateral agent.</u></a>	8-K	001-34756	10.1	June 12, 2015	
10.40	<a href="#"><u>First Amendment, dated as of November 3, 2015, to ABL Credit Agreement, dated as of June 10, 2015, by and among the Registrant, Tesla Motors Netherlands B.V., certain of the Registrant's and Tesla Motors Netherlands B.V.'s direct or indirect subsidiaries from time to time party thereto, as borrowers, and the documentation agent, syndication agents, administrative agent, collateral agent and lenders from time to time party thereto.</u></a>	10-Q	001-34756	10.1	November 5, 2015	

Exhibit Number	Exhibit Description	Incorporated by Reference				Filed Herewith
		Form	File No.	Exhibit	Filing Date	
10.41	<a href="#"><u>Second Amendment, dated as of December 31, 2015, to ABL Credit Agreement, dated as of June 10, 2015, by and among the Registrant, Tesla Motors Netherlands B.V., certain of the Registrant's and Tesla Motors Netherlands B.V.'s direct or indirect subsidiaries from time to time party thereto, as borrowers, and the documentation agent, syndication agents, administrative agent, collateral agent and lenders from time to time party thereto.</u></a>	10-K	001-34756	10.28B	February 24, 2016	
10.42	<a href="#"><u>Third Amendment, dated as of February 9, 2016, to ABL Credit Agreement, dated as of June 10, 2015, by and among the Registrant, Tesla Motors Netherlands B.V., certain of the Registrant's and Tesla Motors Netherlands B.V.'s direct or indirect subsidiaries from time to time party thereto, as borrowers, and the documentation agent, syndication agents, administrative agent, collateral agent and lenders from time to time party thereto.</u></a>	10-K	001-34756	10.28C	February 24, 2016	
10.43	<a href="#"><u>Fourth Amendment to Credit Agreement, dated as of July 31, 2016, by and among the Registrant, Tesla Motors Netherlands B.V., the lenders party thereto and Deutsche Bank AG New York Branch, as administrative agent and collateral agent.</u></a>	8-K	001-34756	10.1	August 1, 2016	
10.44	<a href="#"><u>Fifth Amendment to Credit Agreement, dated as of December 15, 2016, among the Registrant, Tesla Motors Netherlands B.V., the lenders party thereto and Deutsche Bank AG, New York Branch, as administrative agent and collateral agent.</u></a>	8-K	001-34756	10.1	December 20, 2016	
10.45	<a href="#"><u>Sixth Amendment to Credit Agreement, dated as of June 19, 2017, among the Registrant, Tesla Motors Netherlands B.V., the lenders party thereto and Deutsche Bank AG, New York Branch, as administrative agent and collateral agent.</u></a>	10-Q	001-34756	10.1	August 4, 2017	
10.46	<a href="#"><u>Seventh Amendment to the ABL Credit Agreement, dated as of August 11, 2017, by and among the Registrant, Tesla Motors Netherlands B.V., Deutsche Bank AG New York Branch, as administrative agent and collateral agent, and the other agents party thereto.</u></a>	8-K	001-34756	10.2	August 23, 2017	

Exhibit Number	Exhibit Description	Incorporated by Reference				Filed Herewith
		Form	File No.	Exhibit	Filing Date	
10.47	<a href="#"><u>Eighth Amendment to the ABL Credit Agreement, dated as of March 12, 2018, by and among the Registrant, Tesla Motors Netherlands B.V., Deutsche Bank AG New York Branch, as administrative agent and collateral agent, and the other agents party thereto.</u></a>	10-Q	001-34756	10.2	May 7, 2018	
10.48	<a href="#"><u>Ninth Amendment to the ABL Credit Agreement, dated as of May 3, 2018, by and among the Registrant, Tesla Motors Netherlands B.V., Deutsche Bank AG New York Branch, as administrative agent and collateral agent, and the other agents party thereto.</u></a>	10-Q	001-34756	10.3	May 7, 2018	
10.49	<a href="#"><u>Tenth Amendment to the ABL Credit Agreement, dated as of December 10, 2018, by and among the Registrant, Tesla Motors Netherlands B.V., Deutsche Bank AG New York Branch, as administrative agent and collateral agent, and the other agents party thereto.</u></a>	10-K	001-34756	10.41	February 19, 2019	
10.50	<a href="#"><u>Amendment and Restatement in respect of ABL Credit Agreement, dated as of March 6, 2019, by and among certain of the Registrant's and Tesla Motors Netherlands B.V.'s direct or indirect subsidiaries from time to time party thereto, as borrowers, Wells Fargo Bank, National Association, as documentation agent, JPMorgan Chase Bank, N.A., Goldman Sachs Bank USA, Morgan Stanley Senior Funding Inc. and Bank of America, N.A., as syndication agents, the lenders from time to time party thereto, and Deutsche Bank AG New York Branch, as administrative agent and collateral agent.</u></a>	S-4/A	3 33-229749	10.68	April 3, 2019	
10.51	<a href="#"><u>Eleventh Amendment to Credit Agreement, dated as of February 1, 2019, in respect of the ABL Credit Agreement, dated as of June 10, 2015, among Tesla, Inc., Tesla Motors Netherlands B.V., the lenders from time to time party thereto, Deutsche Bank AG New York Branch, as administrative agent and collateral agent and as Collateral Agent, and the other agent parties thereto.</u></a>	10-Q	001-34756	10.1	April 29, 2019	



Exhibit Number	Exhibit Description	Incorporated by Reference				Filed Herewith
		Form	File No.	Exhibit	Filing Date	
10.52†	<a href="#"><u>Agreement for Tax Abatement and Incentives, dated as of May 7, 2015, by and between Tesla Motors, Inc. and the State of Nevada, acting by and through the Nevada Governor's Office of Economic Development.</u></a>	10-Q	001-34756	10.1	August 7, 2015	
10.53†	<a href="#"><u>Amended and Restated Loan and Security Agreement, dated as of August 17, 2017, by and among Tesla 2014 Warehouse SPV LLC, Tesla Finance LLC, the Lenders and Group Agents from time to time party thereto, and Deutsche Bank AG, New York Branch, as Administrative Agent.</u></a>	10-Q	001-34756	10.3	November 3, 2017	
10.54†	<a href="#"><u>Amendment No. 1 to Amended and Restated Loan and Security Agreement, dated as of October 18, 2017, by and among Tesla 2014 Warehouse SPV LLC, Tesla Finance LLC, the Lenders and Group Agents from time to time party thereto, Deutsche Bank AG, New York Branch, as Administrative Agent, and Deutsche Bank Trust Company Americas, as Paying Agent.</u></a>	10-K	001-34756	10.44	February 23, 2018	
10.55	<a href="#"><u>Amendment No. 2 to Amended and Restated Loan and Security Agreement, dated as of March 23, 2018, by and among Tesla 2014 Warehouse SPV LLC, Tesla Finance LLC, the Lenders and Group Agents from time to time party thereto, Deutsche Bank AG, New York Branch, as Administrative Agent, and Deutsche Bank Trust Company Americas, as Paying Agent.</u></a>	10-Q	001-34756	10.4	May 7, 2018	
10.56	<a href="#"><u>Amendment No. 3 to Amended and Restated Loan and Security Agreement, dated as of May 4, 2018, by and among Tesla 2014 Warehouse SPV LLC, Tesla Finance LLC, the Lenders and Group Agents from time to time party thereto, Deutsche Bank AG, New York Branch as Administrative Agent, and Deutsche Bank Trust Company Americas, as Paying Agent.</u></a>	10-Q	001-34756	10.1	November 2, 2018	

Exhibit Number	Exhibit Description	Incorporated by Reference				Filed Herewith
		Form	File No.	Exhibit	Filing Date	
10.57†	<u>Amendment No. 4 to Amended and Restated Loan and Security Agreement, dated as of August 16, 2018, by and among Tesla 2014 Warehouse SPV LLC, Tesla Finance LLC, the Lenders and Group Agents from time to time party thereto, Deutsche Bank AG, New York Branch as Administrative Agent and Deutsche Bank Trust Company Americas, as Paying Agent.</u>	10-Q	001-34756	10.3	November 2, 2018	
10.58†	<u>Amendment No. 5 to Amended and Restated Loan and Security Agreement, executed on December 28, 2018, by and among Tesla 2014 Warehouse SPV LLC, Tesla Finance LLC, the Lenders and Group Agents from time to time party thereto, Deutsche Bank AG, New York Branch as Administrative Agent and Deutsche Bank Trust Company Americas, as Paying Agent.</u>	10-K	001-34756	10.48	February 19, 2019	
10.59††	<u>Amendment No. 6 to Amended and Restated Loan and Security Agreement, dated as of August 16, 2019, by and among Tesla 2014 Warehouse SPV LLC, Deutsche Bank Trust Company Americas, New York Branch, as Administrative Agent, and the Lenders and Group Agents from time to time party thereto.</u>	10-Q	001-34756	10.1	October 29, 2019	
10.60†	<u>Loan and Security Agreement, dated as of August 17, 2017, by and among LML Warehouse SPV, LLC, Tesla Finance LLC, the Lenders and Group Agents from time to time party thereto, and Deutsche Bank AG, New York Branch, as Administrative Agent.</u>	10-Q	001-34756	10.4	November 3, 2017	
10.61†	<u>Amendment No. 1 to Loan and Security Agreement, dated as of October 18, 2017, by and among LML Warehouse SPV, LLC, Tesla Finance LLC, the Lenders and Group Agents from time to time party thereto, Deutsche Bank AG, New York Branch, as Administrative Agent, and Deutsche Bank Trust Company Americas, as Paying Agent.</u>	10-K	001-34756	10.46	February 23, 2018	

Exhibit Number	Exhibit Description	Incorporated by Reference				Filed Herewith
		Form	File No.	Exhibit	Filing Date	
10.62	<a href="#"><u>Amendment No. 2 to Loan and Security Agreement, dated as of March 23, 2018, by and among LML Warehouse SPV, LLC, Tesla Finance LLC, the Lenders and Group Agents from time to time party thereto, Deutsche Bank AG, New York Branch, as Administrative Agent, and Deutsche Bank Trust Company Americas, as Paying Agent.</u></a>	10-Q	001-34756	10.5	May 7, 2018	
10.63	<a href="#"><u>Amendment No. 3 to Loan and Security Agreement, dated as of May 4, 2018, by and among LML Warehouse SPV, LLC, the Lenders and Group Agents from time to time party thereto, and Deutsche Bank AG, New York Branch, as Administrative Agent.</u></a>	10-Q	001-34756	10.2	November 2, 2018	
10.64†	<a href="#"><u>Amendment No. 4 to Loan and Security Agreement, dated as of August 16, 2018, by and among LML Warehouse SPV, LLC, the Lenders and Group Agents from time to time party thereto, and Deutsche Bank AG, New York Branch, as Administrative Agent.</u></a>	10-Q	001-34756	10.4	November 2, 2018	
10.65†	<a href="#"><u>Payoff and Termination Letter, executed on December 28, 2018, by and among LML Warehouse SPV, LLC, the Lenders and Group Agents from time to time party thereto, and Deutsche Bank AG, New York Branch, as Administrative Agent, relating to Loan and Security Agreement.</u></a>	10-K	001-34756	10.54	February 19, 2019	
10.66†	<a href="#"><u>Loan and Security Agreement, executed on December 28, 2018, by and among LML 2018 Warehouse SPV, LLC, Tesla Finance LLC, the Lenders and Group Agents from time to time party thereto, Deutsche Bank Trust Company Americas, as Paying Agent, and Deutsche Bank AG, New York Branch, as Administrative Agent.</u></a>	10-K	001-34756	10.55	February 19, 2019	

Exhibit Number	Exhibit Description	Incorporated by Reference				Filed Herewith
		Form	File No.	Exhibit	Filing Date	
10.67††	<a href="#"><u>Letter of Consent, dated as of June 14, 2019, by and among LML 2018 Warehouse SPV, LLC, Deutsche Bank AG, New York Branch, as Administrative Agent, and the Group Agents party thereto, in respect of the Loan and Security Agreement, dated as of August 17, 2017 and as amended from time to time, by and among LML Warehouse SPV, LLC, Tesla Finance LLC, and the Lenders, Group Agents and Administrative Agent from time to time party thereto.</u></a>	10-Q	001-34756	10.1	July 29, 2019	
10.68††	<a href="#"><u>Amendment No. 1 to Loan and Security Agreement, dated as of August 16, 2019, by and among LML 2018 Warehouse SPV, LLC, Deutsche Bank Trust Company Americas, as Paying Agent, and Deutsche Bank AG, New York Branch, as Administrative Agent, and the Lenders and Group Agents from time to time party thereto.</u></a>	10-Q	001-34756	10.2	October 29, 2019	
10.69	<a href="#"><u>Amendment No. 2 to Loan and Security Agreement, dated as of December 13, 2019, by and among LML 2018 Warehouse SPV, LLC, Deutsche Bank Trust Company Americas, as Paying Agent, and Deutsche Bank AG, New York Branch, as Administrative Agent, and the Lenders and Group Agents from time to time party thereto.</u></a>	—	—	—	—	X
10.70	<a href="#"><u>Purchase Agreement, dated as of August 11, 2017, by and among the Registrant, SolarCity and Goldman Sachs &amp; Co. LLC and Morgan Stanley &amp; Co. LLC as representatives of the several initial purchasers named therein.</u></a>	8-K	001-34756	10.1	August 23, 2017	
10.71	<a href="#"><u>Amended and Restated Agreement For Research &amp; Development Alliance on Triex Module Technology, effective as of September 2, 2014, by and between The Research Foundation For The State University of New York, on behalf of the College of Nanoscale Science and Engineering of the State University of New York, and Silevo, Inc.</u></a>	10-Q(1)	001-35758	10.16	November 6, 2014	

Exhibit Number	Exhibit Description	Incorporated by Reference				Filed Herewith
		Form	File No.	Exhibit	Filing Date	
10.72	<a href="#"><u>First Amendment to Amended and Restated Agreement For Research &amp; Development Alliance on Triex Module Technology, effective as of October 31, 2014, by and between The Research Foundation For The State University of New York, on behalf of the College of Nanoscale Science and Engineering of the State University of New York, and Silevo, Inc.</u></a>	10-K(1)	001-35758	10.16a	February 24, 2015	
10.73	<a href="#"><u>Second Amendment to Amended and Restated Agreement For Research &amp; Development Alliance on Triex Module Technology, effective as of December 15, 2014, by and between The Research Foundation For The State University of New York, on behalf of the College of Nanoscale Science and Engineering of the State University of New York, and Silevo, Inc.</u></a>	10-K(1)	001-35758	10.16b	February 24, 2015	
10.74	<a href="#"><u>Third Amendment to Amended and Restated Agreement For Research &amp; Development Alliance on Triex Module Technology, effective as of February 12, 2015, by and between The Research Foundation For The State University of New York, on behalf of the College of Nanoscale Science and Engineering of the State University of New York, and Silevo, Inc.</u></a>	10-Q(1)	001-35758	10.16c	May 6, 2015	
10.75	<a href="#"><u>Fourth Amendment to Amended and Restated Agreement For Research &amp; Development Alliance on Triex Module Technology, effective as of March 30, 2015, by and between The Research Foundation For The State University of New York, on behalf of the College of Nanoscale Science and Engineering of the State University of New York, and Silevo, Inc.</u></a>	10-Q(1)	001-35758	10.16d	May 6, 2015	
10.76	<a href="#"><u>Fifth Amendment to Amended and Restated Agreement For Research &amp; Development Alliance on Triex Module Technology, effective as of June 30, 2015, by and between The Research Foundation For The State University of New York, on behalf of the College of Nanoscale Science and Engineering of the State University of New York, and Silevo, LLC.</u></a>	10-Q(1)	001-35758	10.16e	July 30, 2015	

Exhibit Number	Exhibit Description	Incorporated by Reference				Filed Herewith
		Form	File No.	Exhibit	Filing Date	
10.77	<a href="#"><u>Sixth Amendment to Amended and Restated Agreement For Research &amp; Development Alliance on Triex Module Technology, effective as of September 1, 2015, by and between The Research Foundation For The State University of New York, on behalf of the College of Nanoscale Science and Engineering of the State University of New York, and Silevo, LLC.</u></a>	10-Q(1)	001-35758	10.16f	October 30, 2015	
10.78	<a href="#"><u>Seventh Amendment to Amended and Restated Agreement For Research &amp; Development Alliance on Triex Module Technology, effective as of October 9, 2015, by and between The Research Foundation For The State University of New York, on behalf of the College of Nanoscale Science and Engineering of the State University of New York, and Silevo, LLC.</u></a>	10-Q(1)	001-35758	10.16g	October 30, 2015	
10.79	<a href="#"><u>Eighth Amendment to Amended and Restated Agreement For Research &amp; Development Alliance on Triex Module Technology, effective as of October 26, 2015, by and between The Research Foundation For The State University of New York, on behalf of the College of Nanoscale Science and Engineering of the State University of New York, and Silevo, LLC.</u></a>	10-Q(1)	001-35758	10.16h	October 30, 2015	
10.80	<a href="#"><u>Ninth Amendment to Amended and Restated Agreement For Research &amp; Development Alliance on Triex Module Technology, effective as of December 9, 2015, by and between The Research Foundation For The State University of New York, on behalf of the College of Nanoscale Science and Engineering of the State University of New York, and Silevo, LLC.</u></a>	10-K(1)	001-35758	10.16i	February 10, 2016	
10.81	<a href="#"><u>Tenth Amendment to Amended and Restated Agreement For Research &amp; Development Alliance on Triex Module Technology, effective as of March 31, 2017, by and between The Research Foundation For The State University of New York, on behalf of the Colleges of Nanoscale Science and Engineering of the State University of New York, and Silevo, LLC.</u></a>	10-Q	001-34756	10.8	May 10, 2017	

Exhibit Number	Exhibit Description	Incorporated by Reference				Filed Herewith
		Form	File No.	Exhibit	Filing Date	
10.82††	<a href="#"><u>Grant Contract for State-Owned Construction Land Use Right, dated as of October 17, 2018, by and between Shanghai Planning and Land Resource Administration Bureau, as grantor, and Tesla (Shanghai) Co., Ltd., as grantee (English translation).</u></a>	10-Q	001-34756	10.2	July 29, 2019	
10.83††	<a href="#"><u>Facility Agreement, dated as of September 26, 2019, by and between China Merchants Bank Co., Ltd. Beijing Branch and Tesla Automobile (Beijing) Co., Ltd. (English translation).</u></a>	10-Q	001-34756	10.3	October 29, 2019	
10.84††	<a href="#"><u>Statement Letter to China Merchants Bank Co., Ltd. Beijing Branch from Tesla Automobile (Beijing) Co., Ltd., dated as of September 26, 2019 (English translation).</u></a>	10-Q	001-34756	10.4	October 29, 2019	
10.85††	<a href="#"><u>Fixed Asset Syndication Loan Agreement, dated as of December 18, 2019, by and among Tesla (Shanghai) Co., Ltd., China Construction Bank Corporation, China (Shanghai) Pilot Free Trade Zone Special Area Branch, Agricultural Bank of China Shanghai Changning Sub-branch, Shanghai Pudong Development Bank Co., Ltd., Shanghai Branch, and Industrial and Commercial Bank of China Limited, China (Shanghai) Pilot Free Trade Zone Special Area Branch (English translation).</u></a>	—	—	—	—	X
10.86††	<a href="#"><u>Fixed Asset Syndication Loan Agreement and Supplemental Agreement, dated as of December 18, 2019, by and among Tesla (Shanghai) Co., Ltd., China Construction Bank Corporation, China (Shanghai) Pilot Free Trade Zone Special Area Branch, Agricultural Bank of China Shanghai Changning Sub-branch, Shanghai Pudong Development Bank Co., Ltd., Shanghai Branch, and Industrial and Commercial Bank of China Limited, China (Shanghai) Pilot Free Trade Zone Special Area Branch (English translation).</u></a>	—	—	—	—	X

Exhibit Number	Exhibit Description	Incorporated by Reference				Filed Herewith
		Form	File No.	Exhibit	Filing Date	
10.87††	<a href="#">Syndication Revolving Loan Agreement, dated as of December 18, 2019, by and among Tesla (Shanghai) Co., Ltd. China Construction Bank Corporation, China (Shanghai) Pilot Free Trade Zone Special Area Branch, Agricultural Bank of China Shanghai Changning Sub-branch, Shanghai Pudong Development Bank Co., Ltd., Shanghai Branch, and Industrial and Commercial Bank of China Limited, China (Shanghai) Pilot Free Trade Zone Special Area Branch (English translation).</a>	—	—	—	—	X
21.1	<a href="#">List of Subsidiaries of the Registrant</a>	—	—	—	—	X
23.1	<a href="#">Consent of PricewaterhouseCoopers LLP, Independent Registered Public Accounting Firm</a>	—	—	—	—	X
31.1	<a href="#">Rule 13a-14(a) / 15(d)-14(a) Certification of Principal Executive Officer</a>	—	—	—	—	X
31.2	<a href="#">Rule 13a-14(a) / 15(d)-14(a) Certification of Principal Financial Officer</a>	—	—	—	—	X
32.1*	<a href="#">Section 1350 Certifications</a>	—	—	—	—	X
101.INS	Inline XBRL Instance Document	—	—	—	—	X
101.SCH	Inline XBRL Taxonomy Extension Schema Document	—	—	—	—	X
101.CAL	Inline XBRL Taxonomy Extension Calculation Linkbase Document.	—	—	—	—	X
101.DEF	Inline XBRL Taxonomy Extension Definition Linkbase Document	—	—	—	—	X
101.LAB	Inline XBRL Taxonomy Extension Label Linkbase Document	—	—	—	—	X
101.PRE	Inline XBRL Taxonomy Extension Presentation Linkbase Document	—	—	—	—	X
104	Cover Page Interactive Data File (formatted as inline XBRL with applicable taxonomy extension information contained in Exhibits 101)					

\* Furnished herewith

\*\* Indicates a management contract or compensatory plan or arrangement

† Confidential treatment has been requested for portions of this exhibit

†† Portions of this exhibit have been redacted in compliance with Regulation S-K Item 601(b)(10).

(1) Indicates a filing of SolarCity

## ITEM 16. SUMMARY

None



## SIGNATURES

Pursuant to the requirements of Section 13 or 15(d) the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned, thereunto duly authorized.

Tesla, Inc.

Date: February 13, 2020

/s/ Elon Musk

Elon Musk  
Chief Executive Officer  
(Principal Executive Officer)

Pursuant to the requirements of the Securities Exchange Act of 1934, this report has been signed below by the following persons on behalf of the registrant and in the capacities and on the dates indicated.

Signature	Title	Date
/s/ Elon Musk Elon Musk	Chief Executive Officer and Director (Principal Executive Officer)	February 13, 2020
/s/ Zachary J. Kirkhorn Zachary J. Kirkhorn	Chief Financial Officer (Principal Financial Officer)	February 13, 2020
/s/ Vaibhav Taneja Vaibhav Taneja	Chief Accounting Officer (Principal Accounting Officer)	February 13, 2020
/s/ Robyn Denholm Robyn Denholm	Director	February 13, 2020
/s/ Ira Ehrenpreis Ira Ehrenpreis	Director	February 13, 2020
/s/ Lawrence J. Ellison Lawrence J. Ellison	Director	February 13, 2020
/s/ Antonio J. Gracias Antonio J. Gracias	Director	February 13, 2020
/s/ Stephen T. Jurvetson Stephen T. Jurvetson	Director	February 13, 2020
/s/ James Murdoch James Murdoch	Director	February 13, 2020
/s/ Kimbal Musk Kimbal Musk	Director	February 13, 2020
/s/ Kathleen Wilson-Thompson Kathleen Wilson-Thompson	Director	February 13, 2020

# FORM 10-K

(Mark One)

☒ **ANNUAL REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934**

For the fiscal year ended December 31, 2018

OR

☐ **TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934**

For the transition period from \_\_\_\_\_ to \_\_\_\_\_

Commission File Number: 001-34756

## Tesla, Inc.

(Exact name of registrant as specified in its charter)

Delaware  
(State or other jurisdiction of  
incorporation or organization)

3500 Deer Creek Road  
Palo Alto, California  
(Address of principal executive offices)

91-2197729  
(I.R.S. Employer  
Identification No.)

94304  
(Zip Code)

(650) 681-5000

(Registrant's telephone number, including area code)

Securities registered pursuant to Section 12(b) of the Act:

Title of each class	Name of each exchange on which registered
Common Stock, \$0.001 par value	The NASDAQ Stock Market LLC

Securities registered pursuant to Section 12(g) of the Act:

None

Indicate by check mark whether the registrant is a well-known seasoned issuer, as defined in Rule 405 of the Securities Act. Yes ☒ No ☐

Indicate by check mark if the registrant is not required to file reports pursuant to Section 13 or 15(d) of the Act. Yes ☐ No ☒

Indicate by check mark whether the registrant (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 ("Exchange Act") during the preceding 12 months (or for such shorter period that the registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days. Yes ☒ No ☐

Indicate by check mark whether the registrant has submitted electronically every Interactive Data File required to be submitted pursuant to Rule 405 of Regulation S-T (§ 232.405 of this chapter) during the preceding 12 months (or for such shorter period that the registrant was required to submit such files). Yes ☒ No ☐

Indicate by check mark if disclosure of delinquent filers pursuant to Item 405 of Regulation S-K (§229.405 of this chapter) is not contained herein, and will not be contained, to the best of registrant's knowledge, in definitive proxy or information statements incorporated by reference in Part III of this Form 10-K or any amendment to this Form 10-K. ☐

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, a smaller reporting company or an emerging growth company. See the definitions of "large accelerated filer," "accelerated filer," "smaller reporting company" and "emerging growth company" in Rule 12b-2 of the Exchange Act:

Large accelerated filer	<input checked="" type="checkbox"/>	Accelerated filer	<input type="checkbox"/>
Non-accelerated filer	<input type="checkbox"/>	Smaller reporting company	<input type="checkbox"/>
Emerging growth company	<input type="checkbox"/>		

If an emerging growth company, indicate by check mark if the registrant has elected not to use the extended transition period for complying with any new or revised financial accounting standards provided pursuant to Section 13(a) of the Exchange Act. ☐

Indicate by check mark whether the registrant is a shell company (as defined in Rule 12b-2 of the Exchange Act). Yes ☐ No ☒

The aggregate market value of voting stock held by non-affiliates of the registrant, as of June 30, 2018, the last day of the registrant's most recently completed second fiscal quarter, was \$46.57 billion (based on the closing price for shares of the registrant's Common Stock as reported by the NASDAQ Global Select Market on June 30, 2018). Shares of Common Stock held by each executive officer, director, and holder of 5% or more of the outstanding Common Stock have been excluded in that such persons may be deemed to be affiliates. This determination of affiliate status is not necessarily a conclusive determination for other purposes.

As of February 12, 2019, there were 172,721,487 shares of the registrant's Common Stock outstanding.

### DOCUMENTS INCORPORATED BY REFERENCE

Portions of the registrant's Proxy Statement for the 2019 Annual Meeting of Stockholders are incorporated herein by reference in Part III of this Annual Report on Form 10-K to the extent stated herein. Such proxy statement will be filed with the Securities and Exchange Commission within 120 days of the registrant's fiscal year ended December 31, 2018.

TESLA, INC.

ANNUAL REPORT ON FORM 10-K FOR THE YEAR ENDED DECEMBER 31, 2018

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## Forward-Looking Statements

*The discussions in this Annual Report on Form 10-K contain forward-looking statements reflecting our current expectations that involve risks and uncertainties. These forward-looking statements include, but are not limited to, statements concerning our strategy, future operations, future financial position, future revenues, projected costs, profitability, expected cost reductions, capital adequacy, expectations regarding demand and acceptance for our technologies, growth opportunities and trends in the market in which we operate, prospects and plans and objectives of management. The words “anticipates,” “believes,” “could,” “estimates,” “expects,” “intends,” “may,” “plans,” “projects,” “will,” “would” and similar expressions are intended to identify forward-looking statements, although not all forward-looking statements contain these identifying words. We may not actually achieve the plans, intentions or expectations disclosed in our forward-looking statements and you should not place undue reliance on our forward-looking statements. Actual results or events could differ materially from the plans, intentions and expectations disclosed in the forward-looking statements that we make. These forward-looking statements involve risks and uncertainties that could cause our actual results to differ materially from those in the forward-looking statements, including, without limitation, the risks set forth in Part I, Item 1A, “Risk Factors” in this Annual Report on Form 10-K and in our other filings with the Securities and Exchange Commission. We do not assume any obligation to update any forward-looking statements.*

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## PART I

### ITEM 1. BUSINESS

#### Overview

We design, develop, manufacture and sell high-performance fully electric vehicles (“EVs”) and energy generation and storage systems, and also install and maintain such energy systems and sell solar electricity. We are the world’s first vertically integrated sustainable energy company, offering end-to-end clean energy products, including generation, storage and consumption. We have established and continue to grow a global network of stores, galleries, vehicle service centers, Mobile Service technicians, body shops, Supercharger stations and Destination Chargers to accelerate the widespread adoption of our products, and we continue to develop self-driving capability in order to improve vehicle safety. Our sustainable energy products, engineering expertise, intense focus to accelerate the world’s transition to sustainable energy, and business model differentiate us from other companies.

We currently produce and sell three fully electric vehicles: the Model S sedan, the Model X sport utility vehicle (“SUV”) and the Model 3 sedan. All of our vehicles offer high performance and functionality as well as attractive styling.

We commenced deliveries of Model S in June 2012 and have continued to improve Model S by introducing performance, all-wheel drive dual motor, and Autopilot options, as well as free over-the-air software updates. We commenced deliveries of Model X in September 2015. Model X offers seating for up to seven people, all-wheel drive, and our Autopilot functionality. We commenced deliveries of Model 3, a lower-priced sedan designed for the mass market, in July 2017, and we have significantly ramped its production. We are now embarking on the delivery of Model 3 in international markets and are focusing on lowering manufacturing costs while continuing to increase its production rate.

We also intend to bring additional all-electric vehicles to market in the future, including Model Y, the Tesla Semi truck, a pickup truck and a new version of the Tesla Roadster. The production of fully electric vehicles that meet consumers’ range and performance expectations requires substantial design, engineering, and integration work on almost every system of our vehicles. Our design and vehicle engineering capabilities, combined with the technical advancements of our powertrain system, have enabled us to design and develop electric vehicles that we believe overcome the design, styling, and performance issues that have historically limited broad adoption of electric vehicles. As a result, our customers enjoy several benefits, including:

- *Long Range and Recharging Flexibility.* Our vehicles offer ranges that significantly exceed those of any other commercially available electric vehicle. In addition, our vehicles incorporate our proprietary on-board charging system, permitting recharging from almost any available electrical outlet, and also offer fast charging capability from our proprietary Supercharger network.
- *High-Performance Without Compromised Design or Functionality.* Our vehicles deliver instantaneous and sustained acceleration, an advanced Autopilot system with active safety and convenience features, and over-the-air software updates.
- *Energy Efficiency and Cost of Ownership.* Our vehicles offer an attractive cost of ownership compared to internal combustion engine or hybrid electric vehicles. Using only an electric powertrain enables us to create more energy-efficient vehicles that are mechanically simpler than currently available hybrid or internal combustion engine vehicles. The cost to charge our vehicles is less compared to fueling internal combustion vehicles. We also expect our electric vehicles will have lower relative maintenance costs than other vehicles due to fewer moving parts and the absence of certain components, including oil, oil filters, spark plugs and engine valves.

We sell our vehicles through our own sales and service network which we are continuing to grow globally. The benefits we receive from distribution ownership enable us to improve the overall customer experience, the speed of product development and the capital efficiency of our business. We are also continuing to build our network of Superchargers and Destination Chargers in North America, Europe and Asia to provide alternative convenient options for fast charging.

In addition, we are leveraging our technological expertise in batteries, power electronics, and integrated systems to manufacture and sell energy storage products. In late 2016, we began production and deliveries of our latest generation energy storage products, Powerwall 2 and Powerpack 2. Powerwall 2 is a 14 kilowatt hour (“kWh”) home battery with an integrated inverter. Powerpack 2 is an infinitely scalable energy storage system for commercial, industrial and utility applications, comprised of up to 210 kWh (AC) battery packs and up to 650 kVa (at 480V) inverters. Similar to our electric vehicles, our energy storage products have been developed to receive over-the-air firmware and software updates that enable additional features over time.

Finally, we sell and lease solar energy systems (with or without accompanying energy storage systems) to residential and commercial customers and sell renewable energy to residential and commercial customers at prices that are typically below utility rates. Since 2006, we have installed solar energy systems for hundreds of thousands of customers. However, the electricity produced by our solar installations represents a very small fraction of total U.S. electricity generation. With tens of millions of single-family homes and businesses in our primary service territories, and many more in other locations, we have a large opportunity to expand and grow this business. We believe that residential solar energy generation is gaining momentum, as exemplified in part by the state of California recently requiring that new homes be built with solar generation starting in 2020. We also intend to ramp production of our innovative Solar Roof product.

We manufacture our vehicle products primarily at our facilities in Fremont, California, Lathrop, California, Tilburg, Netherlands and at our Gigafactory 1 near Reno, Nevada. We manufacture our energy storage products at Gigafactory 1 and Tesla solar products at our U.S. facilities including in Buffalo, New York (Gigafactory 2). In January 2019, we began construction of our Gigafactory Shanghai in China, where we intend to commence production of certain trims of Model 3 for the local market by the end of 2019.

## **Our Products and Services**

### **Vehicles**

#### ***Model S***

Model S is a fully electric, four-door, five-adult passenger sedan that offers compelling range and high performance and our all-wheel drive dual motor system, which we also offer in a performance version. Model S 100D is the longest range all-electric production sedan in the world, and the performance version with the Ludicrous speed upgrade is the quickest accelerating production vehicle available.

Model S introduced a 17 inch touch screen driver interface, our advanced Autopilot hardware to enable both active safety and convenience features, and over-the-air software updates. We believe the combination of performance, safety, styling, convenience and energy efficiency of Model S positions it as a compelling alternative to other vehicles in the luxury and performance segments.

#### ***Model X***

Model X is the longest range all-electric production sport utility vehicle in the world, and offers high performance features such as our fully electric, all-wheel drive dual motor system and our Autopilot system. Model X can seat up to seven adults and incorporates a unique falcon wing door system for easy access to the second and third seating rows. Model X is sold in all markets where Model S is available.

#### ***Model 3***

Model 3 is our third generation electric vehicle, which we began delivering in July 2017. Model 3 and its drive units are currently produced at high volumes at the Tesla Factory in Fremont, California and at Gigafactory 1, respectively, and we intend to begin production of certain vehicle trims for China at our Gigafactory Shanghai by the end of 2019. We have offered a number of variants of Model 3, including performance, dual motor, single motor, long-range and medium-range, and intend to offer in the future a variant of Model 3 at a starting price of \$35,000. We are now embarking on the delivery of Model 3 in international markets and are focusing on lowering manufacturing costs while continuing to increase its production rate.

### ***Future Consumer and Commercial EVs***

In addition to our volume-produced consumer EVs, including future vehicles such as Model Y and a pickup truck, we are planning to introduce additional types of vehicles to address a broader cross-section of the vehicle market, including commercial EVs such as the Tesla Semi truck, and a new version of the Tesla Roadster. We have started to accept reservations for the Tesla Semi truck and the new Tesla Roadster.

### **Energy Storage**

Using the energy management technologies and manufacturing processes developed for our vehicle powertrain systems, we developed energy storage products for use in homes, commercial facilities and on the utility grid. Advances in battery architecture, thermal management and power electronics that were originally commercialized in our vehicles are now being leveraged in our energy storage products. Our energy storage systems are used for numerous applications including backup power, grid independence, peak demand reduction, demand response, reducing intermittency of renewable generation, replacement of fossil fuel generation and wholesale electric market services.

Our energy product portfolio includes systems with a wide range of applications, from residential to large grid-scale projects. Powerwall 2 is a 14 kWh rechargeable lithium-ion battery designed to store energy at a home or small commercial facility and can be used to provide seamless backup power in a grid outage and to maximize self-consumption of solar power generation. In addition, we offer the Powerpack 2 system, a fully integrated energy storage solution comprised of up to 210kWh (AC) battery packs and up to 650 kVa (at 480V) inverters that can be grouped together to form megawatt hour (“MWh”) and gigawatt hour (“GWh”) sized installations. The Powerpack 2 system can be used by commercial and industrial customers for peak shaving, load shifting, self-consumption of solar generation and demand response, as well as to provide backup power during grid outages, and by utilities and independent power producers to smooth and firm the output of renewable power generation sources, provide dynamic energy capacity to the grid, defer or eliminate the need to upgrade transmission or distribution infrastructure, and provide a variety of other grid services such as frequency regulation and voltage control. Powerpack 2 can also be combined with renewable energy generation sources to create microgrids that provide communities with clean, resilient and affordable power.

Along with designing and manufacturing energy storage products, we continue to develop and advance our software capabilities for the control and optimal dispatch of energy storage systems across a wide range of markets and applications.

### **Solar Energy Systems**

The major components of our solar energy systems include solar panels that convert sunlight into electrical current, inverters that convert the electrical output from the panels to a usable current compatible with the electric grid, racking that attaches the solar panels to the roof or ground, electrical hardware that connects the solar energy system to the electric grid, and our monitoring device. While we have recently started manufacturing solar panels at Gigafactory 2 in collaboration with Panasonic, we currently purchase the majority of system components from vendors, maintaining multiple sources for each major component to ensure competitive pricing and an adequate supply of materials. We also design and manufacture other system components.

The residential solar energy systems that we sell enable our customers to take direct advantage of federal tax credits to reduce their electricity costs. Our solar loan offering enables customers to own their solar energy systems with little upfront cost. We also continue to offer lease and power purchase agreement (“PPA”) options to both residential and commercial customers. Our current standard leases and PPAs have a 20-year term, and we typically offer customers the opportunity to renew their agreements.

In October 2016, we unveiled Solar Roof, which integrates solar energy production with aesthetically pleasing and durable glass roofing tiles and is designed to complement the architecture of homes and commercial buildings while turning sunlight into electricity. We have been installing this product at a slow pace to gather learnings about our design and installation processes, and plan to ramp the production of Solar Roof with significantly improved manufacturing capabilities during 2019.

## **Technology**

### **Vehicles**

Our core competencies are powertrain engineering, vehicle engineering, innovative manufacturing and energy storage. Our core intellectual property includes our electric powertrain, our ability to design vehicles that utilize the unique advantages of an electric powertrain and our development of self-driving technologies. Our powertrain consists of our battery pack, power electronics, motor, gearbox and control software. We offer several powertrain variants for our vehicles that incorporate years of research and development. In addition, we have designed our vehicles to incorporate the latest advances in consumer technologies, such as mobile computing, sensing, displays, and connectivity.

#### ***Battery Pack***

We design our battery packs to achieve high energy density at a low cost while also maintaining safety, reliability and long life. Our proprietary technology includes systems for high density energy storage, cooling, safety, charge balancing, structural durability, and electronics management. We have also pioneered advanced manufacturing techniques to manufacture large volumes of battery packs with high quality at low cost.

We have significant expertise in the safety and management systems needed to use lithium-ion cells in the automotive environment, and have further optimized cell designs to increase overall performance. These advancements have enabled us to improve over time the cost and performance of our batteries.

Our engineering and manufacturing efforts have been performed with a longer-term goal of building a foundation for further development. For instance, we have designed our battery pack to permit flexibility with respect to battery cell chemistry and form factor. We maintain extensive testing and R&D capabilities at the individual cell level, the full battery-pack level and on other critical battery pack systems, and have built an expansive body of knowledge on lithium-ion cell vendors, chemistry types, and performance characteristics. We believe that the flexibility of our designs, combined with our research and real-world performance data, will enable us to continue to evaluate new battery cells and optimize battery pack system performance and cost for our current and future vehicles.

#### ***Power Electronics***

The power electronics in our electric vehicle powertrain govern the flow of high voltage electrical current throughout our vehicles and serve to power our electric motor to generate torque while driving and deliver energy into the battery pack while charging.

The drive inverter converts direct current from the battery pack into alternating current to drive our induction and permanent magnet motors and provides “regenerative braking” functionality, which captures energy from the wheels to charge the battery pack. The primary technological advantages to our designs include the ability to drive large amounts of current in a small physical package with high efficiency and low cost.

The charger charges the battery pack by converting alternating current (usually from a wall outlet or other electricity source) into direct current that can be accepted by the battery. Tesla vehicles can recharge on a wide variety of electricity sources due to the design of this charger, from a common household outlet to high power circuits meant for more industrial uses.

#### ***Dual Motor Powertrain***

We offer dual motor powertrain vehicles, which use two electric motors to maximize traction and performance in an all-wheel drive configuration. Tesla’s dual motor powertrain digitally and independently controls torque to the front and rear wheels. The near-instantaneous response of the motors, combined with low centers of gravity, provides drivers with controlled performance and increased traction control.



### ***Vehicle Control and Infotainment Software***

The performance and safety systems of our vehicles and their battery packs require sophisticated control software. There are numerous processors in our vehicles to control these functions, and we write custom firmware for many of these processors. Software algorithms control traction, vehicle stability, the acceleration and regenerative braking of the vehicle, climate control and thermal management, and are also used extensively to monitor the charge state of the battery pack and to manage all of its safety systems. Drivers use the information and control systems in our vehicles to optimize performance, customize vehicle behavior, manage charging modes and times and control all infotainment functions. We develop almost all of this software, including most of the user interfaces, internally.

### ***Self-Driving Development***

We have expertise in developing self-driving systems, and currently offer in our vehicles an advanced driver assist system that we refer to as Autopilot, including auto-steering, traffic aware cruise control, automated lane changing, automated parking, Summon and driver warning systems. In October 2016, we began equipping all Tesla vehicles with hardware needed for full self-driving capability, including cameras that provide 360 degree visibility, updated ultrasonic sensors for object detection, a forward-facing radar with enhanced processing, and a powerful new onboard computer. Our Autopilot systems relieve our drivers of the most tedious and potentially dangerous aspects of road travel. Although, at present, the driver is ultimately responsible for controlling the vehicle, our system provides safety and convenience functionality that allows our customers to rely on it much like the system that airplane pilots use when conditions permit. This hardware suite, along with over-the-air firmware updates and field data feedback loops from the onboard camera, radar, ultrasonics, and GPS, enables the system to continually learn and improve its performance.

Additionally, we continue to make significant advancements in the development of fully self-driving technologies.

### **Energy Storage**

We are leveraging many of the component-level technologies from our vehicles to advance our energy storage products, including high density energy storage, cooling, safety, charge balancing, structural durability, and electronics management. By taking a modular approach to the design of battery systems, we are able to maximize manufacturing capacity to produce both Powerwall and Powerpack products. Additionally, we are making significant strides in the area of bi-directional, grid-tied power electronics that enable us to interconnect our battery systems seamlessly with global electricity grids while providing fast-acting systems for power injection and absorption.

### **Solar Energy Systems**

We are continually innovating and developing new technologies to facilitate the growth of our solar energy systems business. For example, Solar Roof is being designed to work seamlessly with Tesla Powerwall 2 and we have developed proprietary software to reduce system design and installation timelines and costs.

### **Design and Engineering**

#### **Vehicles**

In addition to the design, development and production of the powertrain, we have created significant in-house capabilities in the design and engineering of electric vehicles and their components and systems. We design and engineer bodies, chassis, interiors, heating and cooling and low voltage electrical systems in-house, and to a lesser extent, in conjunction with our suppliers. Our team has core competencies in computer aided design and crash test simulations, which reduces the product development time of new models.

Additionally, our team has expertise in lightweight materials, a very important characteristic for electric vehicles given the impact of mass on range. Model S and Model X are built with a lightweight aluminum body and chassis which incorporate a variety of materials and production methods that help optimize the weight of the vehicle. Moreover, we have designed Model 3 with a mix of materials to be lightweight and safe while also increasing cost-effectiveness for this mass-market vehicle. We are designing Model Y on the Model 3 platform and expect that Model Y will share about 75% of its components with Model 3, which we expect will reduce the cost and time to ramp production of Model Y.

## **Energy Storage**

We have an in-house engineering team that both designs our energy storage products themselves, and works with our residential, commercial and utility customers to design bespoke systems incorporating our products. Our team's expertise in electrical, mechanical, civil and software engineering enables us to create integrated energy storage solutions that meet the particular needs of all customer types.

## **Solar Energy Systems**

We also have an in-house engineering team that designs a customized solar energy system or Solar Roof for each of our customers, and which works closely with our energy storage engineering teams to integrate an energy storage system when requested by the customer. We have developed software that simplifies and expedites the design process and optimizes the design to maximize the energy production of each system. Our engineers complete a structural analysis of each building and produce a full set of structural design and electrical blueprints that contain the specifications for all system components. Additionally, we design complementary mounting and grounding hardware where required.

## **Sales and Marketing**

### **Vehicles**

#### ***Company-Owned Stores and Galleries***

We market and sell our vehicles directly to consumers through an international network of company-owned stores and galleries, which we believe enables us to better control costs of inventory, manage warranty service and pricing, maintain and strengthen the Tesla brand, and obtain rapid customer feedback. Our Tesla stores and galleries are highly visible, premium outlets in major metropolitan markets, some of which combine retail sales and service. We have also found that opening a service center in a new geographic area can increase demand. As a result, we have complemented our store strategy with sales facilities and personnel in service centers to more rapidly expand our retail footprint. We refer to these as "Service Plus" locations.

#### ***Used Car Sales***

Our used car business supports new car sales by integrating the sale of a new Tesla vehicle with a customer's trade-in needs for their existing Tesla and non-Tesla vehicles. The Tesla and non-Tesla vehicles we acquire through trade-ins are subsequently remarketed, either directly by us or through third-party auto auctions. We also receive used Tesla vehicles to resell through lease returns and other sources.

#### ***Charging***

When not charging at home or at work, Tesla customers can also charge using our Supercharger and Destination Charging networks. In addition, our vehicles can charge at a variety of public charging stations around the world, either natively or through a suite of adapters. This flexibility provides our customers with many charging options to suit various situations.

We continue to build out our Tesla Supercharger network throughout North America, Europe, Asia and other markets for our customers' convenience, including to enable long-distance travel and urban ownership. Our Supercharger network is a strategic corporate initiative designed to provide publicly accessible fast charging solutions, and remove a barrier to the broader adoption of electric vehicles caused by the perception of limited vehicle range. The Tesla Supercharger is an industrial grade, high speed charger designed to recharge a Tesla vehicle significantly more quickly than other charging options, and we continue to evolve our technology to allow for even faster charging times at lower cost to us. To satisfy growing demand, Supercharger stations typically have between six and thirty Superchargers and are strategically placed along well-traveled routes and in dense city centers to allow Tesla vehicle owners the ability to enjoy quick, reliable and ubiquitous charging with convenient, minimal stops. Use of the Supercharger network is either free or requires a competitive fee.

We work with a wide variety of hospitality, retail, and public destinations, as well as businesses with commuting employees, to offer additional charging options for our customers. These Destination Charging and workplace locations deploy Tesla Wall Connectors to provide charging to Tesla vehicle owners who patronize or are employed at their businesses. We also work with single-family homeowners and multi-family residential entities to deploy home charging solutions in our communities.

Where possible, we are co-locating Superchargers with our solar and energy storage systems to reduce the cost of electricity and promote the use of renewable electricity by Tesla vehicle owners.

### ***Orders***

We offer our customers the flexibility to order vehicles with their desired trims and options by visiting us online at our website or in person at our Tesla stores.

### ***Marketing***

Historically, we have been able to generate significant media coverage of our company and our vehicles, and we believe we will continue to do so. To date, media coverage and word of mouth have been the primary drivers of our vehicle sales leads and have helped us achieve sales without traditional advertising and at relatively low marketing costs.

### **Solar and Energy Storage**

We market and sell our solar and energy storage products to individuals, commercial and industrial customers and utilities through a variety of channels.

In the U.S., we have been transitioning the direct sales channel for residential solar and energy storage products from former partners to our stores and galleries. We are also continuing to sell residential energy storage products through our network of channel partners. Outside of the U.S., we use our international sales organization and a network of channel partners to market and sell residential energy storage products, and we have recently launched pilot programs for the sale of residential solar in certain countries. We also sell Powerwall 2 directly to utilities, who then deploy the product in customer homes.

We sell Powerpack 2 systems to commercial and utility customers through our international sales organization, which consists of experienced energy industry professionals in all of our target markets, as well as through our channel partner network. In the U.S and Mexico, we also sell installed solar energy systems (with or without energy storage) to commercial customers through cash, lease and PPA transactions.

### **Service and Warranty**

#### **Vehicles**

##### ***Service***

We provide service for our electric vehicles at our company-owned service centers, at our Service Plus locations or through an expanding fleet of Tesla Mobile Service technicians who provide services that do not require a vehicle lift. Performing vehicle service ourselves allows us to identify problems, find solutions, and incorporate improvements faster than incumbent automobile manufacturers.

Our vehicles are designed with the capability to wirelessly upload data to us via an on-board system with cellular connectivity, allowing us to diagnose and remedy many problems before ever looking at the vehicle. When maintenance or service is required, a customer can schedule service by contacting one of our Tesla service centers or our Mobile Service technicians can perform an array of services from a customer's home or other remote location.

#### ***New Vehicle Limited Warranty, Maintenance and Extended Service Plans***

We provide a four year or 50,000 mile New Vehicle Limited Warranty with every new vehicle, subject to separate limited warranties for the supplemental restraint system and battery and drive unit. For the battery and drive unit on our current new Model S and Model X vehicles, we offer an eight year, infinite mile limited warranty, although the battery's charging capacity is not covered. For the battery and drive unit on our current new Model 3 vehicles, we offer an eight year or 100,000 mile limited warranty for our standard or mid-range battery and an eight year or 120,000 mile limited warranty for our long range battery, with minimum 70% retention of battery capacity over the warranty period.

In addition to the New Vehicle Limited Warranty, we currently offer for Model S and Model X a comprehensive maintenance program for every new vehicle, which includes plans covering prepaid maintenance for up to four years or up to 50,000 miles and an Extended Service plan. The maintenance plans cover annual inspections and the replacement of certain wear and tear parts, excluding tires and the battery. The Extended Service plan covers the repair or replacement of vehicle parts for up to an additional four years or up to an additional 50,000 miles after the New Vehicle Limited Warranty.

#### **Energy Storage**

We generally provide a 10 year "no defect" and "energy retention" warranty with every Powerwall 2 and a 15 year "no defect" and "energy retention" warranty with every Powerpack 2 system. For Powerwall 2, the energy retention warranty involves us guaranteeing that the energy capacity of the product will be 70% or 80% (depending on the region of installation) of its nameplate capacity after 10 years of use. For Powerpack 2, the energy retention warranty involves us guaranteeing a minimum energy capacity in each of its first 15 years of use. For both products, our warranty is subject to specified use restrictions or kWh throughput caps. In addition, we offer certain extended warranties, which customers are able to purchase from us at the time they purchase an energy storage system, including a 20 year extended protection plan for Powerwall 2 and a selection of 10 or 20 year performance guarantees for Powerpack 2. We agree to repair or replace our energy storage products in the event of a valid warranty claim. In circumstances where we install a Powerwall 2 or Powerpack 2 system, we also provide warranties of up to 20 years on our installation workmanship. All of the warranties for our energy storage systems are subject to customary limitations and exclusions.

#### **Solar Energy Systems**

For traditional solar energy systems, we provide a workmanship warranty for up to 20 years from installation and a separate warranty against roof leaks. We also pass-through the inverter and module manufacturer warranties (typically 12 years and 25 years respectively). When we lease a traditional solar energy system, we compensate the customer if their system produces less energy than guaranteed over a specified period. For Solar Roof, we provide a warranty against glass tile chipping or cracking for the lifetime of the home, a 30 year installation warranty, a 30 year weatherization warranty and a power output warranty. For all systems (traditional and Solar Roof) we also provide service and repair (either under warranty or for a fee) during the entire term of the customer relationship.

#### **Financial Services**

##### **Vehicles**

We offer financing arrangements for our vehicles in North America, Europe and Asia primarily through various financial institutions. We also currently offer Model S and Model X leasing directly through our local subsidiaries in the U.S. and Canada. We intend to broaden our financial services offerings during the next few years.

Certain of our current financing programs outside of North America provide customers with a resale value guarantee under which those customers have the option of selling their vehicle back to us at a preset future date, generally at the end of the term of the applicable loan or financing program, for a pre-determined resale value. In certain markets, we also offer vehicle buyback guarantees to financial institutions, which may obligate us to repurchase the vehicles for a pre-determined price.

### **Solar Energy Systems**

We are an industry leader in offering innovative financing alternatives that allow our customers to take direct advantage of available tax credits and incentives to reduce the cost of owning a solar energy system through a solar loan, or to make the switch to solar energy with little to no upfront costs under a lease or PPA. Our solar loan offers third-party financing directly to a qualified customer to enable the customer to purchase and own a solar energy system. We are not a party to the loan agreement between the customer and the third-party lender, and the third-party lender has no recourse against us with respect to the loan. Our solar lease offers customers a fixed monthly fee, at rates that typically translate into lower monthly utility bills, and an electricity production guarantee. Our solar PPA charges customers a fee per kWh based on the amount of electricity produced by our solar energy systems. We monetize the customer payments we receive from our leases and PPAs through funds we have formed with investors. We also intend to introduce financial services offerings for our Solar Roof customers in the future.

### **Energy Storage**

We currently offer a loan product to residential customers who purchase Powerwall 2 together with a new solar energy system, and lease and PPAs to commercial customers who purchase a Powerpack 2 system together with a new solar energy system. We intend to introduce financial services offerings for customers who purchase standalone energy storage products in the future.

### **Manufacturing**

#### **Vehicles**

We conduct vehicle manufacturing and assembly operations at our facilities in Fremont, California; Lathrop, California; and Tilburg, Netherlands. We have also built and continue to expand Gigafactory 1, a manufacturing facility for battery cells, modules, packs and storage products and vehicle components, outside of Reno, Nevada. We are also constructing Gigafactory Shanghai, a manufacturing facility in China, for the production of Model 3 vehicles for the local market.

#### ***Manufacturing Facilities in Fremont, CA and Lathrop, CA***

We manufacture our vehicles, and certain parts and components that are critical to our intellectual property and quality standards, at our manufacturing facilities in Fremont, CA, including the Tesla Factory, and our manufacturing facility in Lathrop, CA. Our Fremont facilities contain several manufacturing operations, including stamping, machining, casting, plastics, body assembly, paint operations, drive unit production, seat assembly, final vehicle assembly and end-of-line testing. In addition, we manufacture lithium-ion battery packs, electric motors, gearboxes and components for Model S and Model X at the Tesla Factory. Some major vehicle component systems are purchased from suppliers; however, we have a high level of vertical integration in our manufacturing processes at the Tesla Factory.

#### ***The Netherlands***

Our European headquarters and manufacturing facilities are located in Amsterdam and Tilburg. Our operations in Tilburg include final assembly, testing and quality control for Model S and Model X vehicles delivered within the European Union, a parts distribution warehouse for service centers throughout Europe, a center for remanufacturing work and a customer service center.

#### ***Gigafactory 1 outside of Reno, Nevada***

Gigafactory 1 is a facility where we work together with our suppliers to integrate battery material, cell, module and battery pack production in one location. We use the battery packs manufactured at Gigafactory 1 for our vehicles, including Model 3, and energy storage products. We also manufacture Model 3 drive units at Gigafactory 1.

Gigafactory 1 is being built in phases. Tesla, Panasonic and other partners are currently manufacturing inside the finished sections. Our present plan is to continue expanding Gigafactory 1 over the next few years so that its capacity significantly exceeds the approximately 500,000 vehicle per year capacity that we announced when we first started developing it, and we have additionally added capacity for manufacturing our energy storage products. We have also announced that we will likely manufacture Model Y, which we intend to produce at high volumes by the end of 2020, at Gigafactory 1.

We believe that Gigafactory 1 will allow us to achieve a significant reduction in the cost of our battery packs with our volume production of Model 3. We have an agreement with Panasonic to partner with us on Gigafactory 1 with investments in production equipment that it is using to manufacture and supply us with battery cells. Through our ownership of Gigafactory 1 and our partnership with Panasonic, we own sole access to a facility designed to be the highest-volume and lowest-cost source of lithium-ion batteries in the world.

### ***Gigafactory Shanghai***

We are constructing Gigafactory Shanghai in order to significantly increase the affordability of Model 3 for customers in China by reducing transportation and manufacturing costs and eliminating certain tariffs on vehicles imported from the U.S. We broke ground in January 2019, and subject to a number of uncertainties, including regulatory approval, supply chain constraints, and the pace of installing production equipment and bringing the factory online, we expect to begin production of certain trims of Model 3 at Gigafactory Shanghai by the end of 2019. We expect much of the investment in Gigafactory Shanghai to be provided through local debt financing, supported by limited direct capital expenditures by us. Moreover, we are targeting the capital expenditures per unit of production capacity at this factory to be less than that of our Model 3 production at the Tesla Factory, from which we have drawn learnings that should allow us to simplify our manufacturing layout and processes at Gigafactory Shanghai.

### ***Supply Chain***

Our vehicles use thousands of purchased parts which we source globally from hundreds of suppliers. We have developed close relationships with several key suppliers particularly in the procurement of cells and certain other key system parts. While we obtain components from multiple sources in some cases, similar to other automobile manufacturers, many of the components used in our vehicles are purchased by us from a single source. In addition, while several sources of the battery cell we have selected for our battery packs are available, we have currently fully qualified only one cell supplier for the battery packs we use in our production vehicles. We are working to fully qualify additional cells from other manufacturers.

We use various raw materials in our business including aluminum, steel, cobalt, lithium, nickel and copper. The prices for these raw materials fluctuate depending on market conditions and global demand for these materials. We believe that we have adequate supplies or sources of availability of the raw materials necessary to meet our manufacturing and supply requirements.

### ***Energy Storage***

Our energy storage products are manufactured at Gigafactory 1. We leverage the same supply chain process and infrastructure as we use for our vehicles. The battery architecture and many of the components used in our energy storage products are the same or similar to those used in our vehicles' battery pack, enabling us to take advantage of manufacturing efficiencies and supply chain economies of scale. The power electronics and inverters for the Powerwall and Powerpack systems are also manufactured at Gigafactory 1, allowing us to ship deployment-ready systems directly to customers.

## **Solar Energy Systems**

We currently purchase major components such as solar panels and inverters directly from multiple manufacturers. We typically purchase solar panels and inverters on an as-needed basis from our suppliers at then-prevailing prices pursuant to purchase orders issued under our master contractual arrangements. In December 2016, we entered into a long-term agreement with Panasonic to manufacture photovoltaic (“PV”) cells and modules with negotiated pricing provisions at our Gigafactory 2 in Buffalo, New York with the intended capacity to manufacture at least 1.0 gigawatt (“GW”) of solar products annually. We have recently started manufacturing solar panels at this facility in collaboration with Panasonic.

## **Governmental Programs, Incentives and Regulations**

### **Vehicles**

#### ***California Alternative Energy and Advanced Transportation Financing Authority Tax Incentives***

We have entered into multiple agreements over the past few years with the California Alternative Energy and Advanced Transportation Financing Authority (“CAEATFA”) that provide multi-year sales tax exclusions on purchases of manufacturing equipment that will be used for specific purposes, including the expansion and ongoing development of Model S, Model X, Model 3 and future electric vehicles and the expansion of electric vehicle powertrain production in California.

#### ***Nevada Tax Incentives***

In connection with the construction of Gigafactory 1, we have entered into agreements with the State of Nevada and Storey County in Nevada that provide abatements for sales, use, real property, personal property and employer excise taxes, discounts to the base tariff energy rates and transferable tax credits. These incentives are available for the applicable periods beginning on October 17, 2014 and ending on either June 30, 2024 or June 30, 2034 (depending on the incentive). Under these agreements, we were eligible for a maximum of \$195.0 million of transferable tax credits, subject to capital investments by us and our partners for Gigafactory 1 of at least \$3.50 billion, which we exceeded during 2017, and specified hiring targets for Gigafactory 1, which we exceeded during 2018. As a result, as of December 31, 2018, we had earned the maximum amount of credits.

#### ***Tesla Regulatory Credits***

In connection with the production, delivery, placement into service and ongoing operation of our zero emission vehicles, charging infrastructure and solar systems in global markets, we have earned and will continue to earn various tradable regulatory credits. We have sold these credits, and will continue to sell future credits, to automotive companies and other regulated entities who can use the credits to comply with emission standards and other regulatory requirements. For example, under California’s Zero Emission Vehicle Regulation and those of states that have adopted California’s standard, vehicle manufacturers are required to earn or purchase credits, referred to as ZEV credits, for compliance with their annual regulatory requirements. These laws provide that automakers may bank or sell to other regulated parties their excess credits if they earn more credits than the minimum quantity required by those laws. Tesla also earns other types of salable regulatory credits in the United States and abroad, including greenhouse gas, fuel economy and clean fuels credits. Likewise, several U.S. states have adopted procurement requirements for renewable energy production. These requirements enable companies deploying solar energy to earn tradable credits known as Solar Renewable Energy Certificates (“SRECs”).

#### ***Regulation—Vehicle Safety and Testing***

Our vehicles are subject to, and comply with or are otherwise exempt from, numerous regulatory requirements established by the National Highway Traffic Safety Administration (“NHTSA”), including all applicable United States Federal Motor Vehicle Safety Standards (“FMVSS”). Our vehicles fully comply with all applicable FMVSSs without the need for any exemptions, and we expect future Tesla vehicles to either fully comply or comply with limited exemptions related to new technologies. Additionally, there are regulatory changes being considered for several FMVSS, and while we anticipate compliance, there is no assurance until final regulation changes are enacted.

As a manufacturer, we must self-certify that our vehicles meet all applicable FMVSS, as well as the NHTSA bumper standard, or otherwise are exempt, before the vehicles can be imported or sold in the U.S. Numerous FMVSS apply to our vehicles, such as crash-worthiness requirements, crash avoidance requirements, and electric vehicle requirements. We are also required to comply with other federal laws administered by NHTSA, including the CAFE standards, Theft Prevention Act requirements, consumer information labeling requirements, Early Warning Reporting requirements regarding warranty claims, field reports, death and injury reports and foreign recalls, and owner's manual requirements.

The Automobile Information and Disclosure Act requires manufacturers of motor vehicles to disclose certain information regarding the manufacturer's suggested retail price, optional equipment and pricing. In addition, this law allows inclusion of city and highway fuel economy ratings, as determined by EPA, as well as crash test ratings as determined by NHTSA if such tests are conducted.

Our vehicles sold outside of the U.S. are subject to similar foreign safety, environmental and other regulations. Many of those regulations are different from those applicable in the U.S. and may require redesign and/or retesting. The European Union has established new rules regarding additional compliance oversight that are scheduled to commence in 2020, and there is also regulatory uncertainty related to the United Kingdom's impending withdrawal from the European Union. These changes could impact the rollout of new vehicle features in Europe.

### ***Regulation – Self Driving***

There are no federal U.S. regulations pertaining to the safety of self-driving vehicles; however, NHTSA has established recommended guidelines. Certain U.S. states have legal restrictions on self-driving vehicles, and many other states are considering them. This patchwork increases the legal complexity for our vehicles. In Europe, certain vehicle safety regulations apply to self-driving braking and steering systems, and certain treaties also restrict the legality of certain higher levels of self-driving vehicles. Self-driving laws and regulations are expected to continue to evolve in numerous jurisdictions in the U.S. and foreign countries, and may create restrictions on self-driving features that we develop.

### ***Regulation—Battery Safety and Testing***

Our battery pack conforms to mandatory regulations that govern transport of "dangerous goods," defined to include lithium-ion batteries, which may present a risk in transportation. The regulations vary by mode of shipping transportation, such as by ocean vessel, rail, truck, or air. We have completed the applicable transportation tests for our battery packs, demonstrating our compliance with applicable regulations.

We use lithium-ion cells in our high voltage battery packs. The use, storage, and disposal of our battery packs is regulated under federal law. We have agreements with third party battery recycling companies to recycle our battery packs.

### ***Automobile Manufacturer and Dealer Regulation***

State laws regulate the manufacture, distribution, and sale of automobiles, and generally require motor vehicle manufacturers and dealers to be licensed in order to sell vehicles directly to consumers in the state. As we open additional Tesla stores and service centers, we secure dealer licenses (or their equivalent) and engage in sales activities to sell our vehicles directly to consumers. A few states, such as Michigan and Connecticut, do not permit automobile manufacturers to be licensed as dealers or to act in the capacity of a dealer, or otherwise restrict a manufacturer's ability to deliver or service vehicles. To sell vehicles to residents of states where we are not licensed as a dealer, we generally conduct the sale out of the state via the Internet, phone or mail. In such states, we have opened "galleries" that serve an educational purpose and are not sales locations.

As we expand our retail footprint in the U.S., some automobile dealer trade associations have both challenged the legality of our operations in court and used administrative and legislative processes to attempt to prohibit or limit our ability to operate existing stores or expand to new locations. We expect that the dealer associations will continue to mount challenges to our business model. In addition, we expect the dealer associations to actively lobby state licensing agencies and legislators to interpret existing laws or enact new laws in ways not favorable to Tesla's ownership and operation of its own retail and service locations, and we intend to actively fight any such efforts to limit our ability to sell our own vehicles.



## **Energy Storage**

The regulatory regime for energy storage projects is still under development. Nevertheless, there are various policies, incentives and financial mechanisms at the federal, state and local levels that support the adoption of energy storage. For example, energy storage systems that are charged using solar energy are eligible for the 30% tax credit under Section 48(a)(3) of the Internal Revenue Code, or the IRC, as described below. In addition, California and a number of other states have adopted procurement targets for energy storage, and behind the meter energy storage systems qualify for funding under the California Self Generation Incentive Program.

The Federal Energy Regulatory Commission (“FERC”) has also taken steps to enable the participation of energy storage in wholesale energy markets. In 2011 and 2013, FERC removed many barriers for systems like energy storage to provide frequency regulation service, thus increasing the value these systems can obtain in wholesale energy markets. More recently, in late 2016, FERC released a Notice of Proposed Rulemaking that, if it becomes a final rule, would further break down barriers preventing energy storage from fully participating in wholesale energy markets. Finally, in January 2017, FERC issued a statement supporting the use of energy storage as both electric transmission and as electric generation concurrently, thus enabling energy storage systems to provide greater value to the electric grid.

## **Solar Energy Systems**

### ***Government and Utility Programs and Incentives***

U.S. federal, state and local governments have established various policies, incentives and financial mechanisms to reduce the cost of solar energy and to accelerate the adoption of solar energy. These incentives include tax credits, cash grants, tax abatements and rebates.

The federal government currently provides an uncapped investment tax credit (“ITC”) under two sections of the IRC: Section 48 and Section 25D. Section 48(a)(3) of the IRC allows a taxpayer to claim a credit of 30% of qualified expenditures for a commercial solar energy system that commences construction by December 31, 2019. The credit then declines to 26% in 2020, 22% in 2021, and a permanent 10% thereafter. We claim the Section 48 commercial credit when available for both our residential and commercial projects, based on ownership of the solar energy system. The federal government also provides accelerated depreciation for eligible commercial solar energy systems. Section 25D of the IRC allows a homeowner-taxpayer to claim a credit of 30% of qualified expenditures for a residential solar energy system owned by the homeowner that is placed in service by December 31, 2019. The credit then declines to 26% in 2020 and 22% in 2021, and is scheduled to expire thereafter. Customers who purchase their solar energy systems for cash or through our solar loan offering are eligible to claim the Section 25D investment tax credit.

In addition to the federal ITC, many U.S. states offer personal and corporate tax credits and incentives for solar energy systems.

### ***Regulation – General***

We are not a “regulated utility” in the U.S. To operate our systems, we obtain interconnection agreements from the utilities. In most cases, interconnection agreements are standard form agreements that have been pre-approved by the public utility commission or other regulatory body.

Sales of electricity and non-sale equipment leases by third parties, such as our leases and PPAs, face regulatory challenges in some states and jurisdictions.

### ***Regulation – Net Metering***

Most states in the U.S. have a regulatory policy known as net energy metering, or net metering, available to solar customers. Net metering typically allows solar customers to interconnect their on-site solar energy systems to the utility grid and offset their utility electricity purchases by receiving a bill credit for excess energy generated by their solar energy system that is exported to the grid. In certain jurisdictions, regulators or utilities have reduced or eliminated the benefit available under net metering, or have proposed to do so.

### ***Regulation – Mandated Renewable Capacity***

Many states also have adopted procurement requirements for renewable energy production, such as an enforceable renewable portfolio standard, or RPS, or other policies that require covered entities to procure a specified percentage of total electricity delivered to customers in the state from eligible renewable energy sources, such as solar energy systems. In SREC state markets, the RPS requires electricity suppliers to secure a portion of their electricity from solar generators. The SREC program provides a means for SRECs to be created. A SREC represents the renewable energy associated with 1,000 kWhs of electricity produced from a solar energy system. When a solar energy system generates 1,000 kWhs of electricity, one SREC is issued by a government agency, which can then be sold separately from the energy produced to covered entities who surrender the SRECs to the state to prove compliance with the state's renewable energy mandate.

### **Competition**

#### **Vehicles**

The worldwide automotive market is highly competitive and we expect it will become even more competitive in the future as we introduce additional vehicles in a broader cross-section of the passenger and commercial vehicle market.

We believe that our vehicles compete in the market both based on their traditional segment classification as well as based on their propulsion technology. For example, Model S and Model X compete primarily with premium sedans and premium SUVs and Model 3 competes with small to medium-sized sedans, which are extremely competitive markets with internal combustion vehicles from more established automobile manufacturers.

Moreover, many established and new automobile manufacturers have entered or have announced plans to enter the alternative fuel vehicle market. Overall, we believe these announcements and vehicle introductions promote the development of the alternative fuel vehicle market by highlighting the attractiveness of alternative fuel vehicles, particularly those fueled by electricity, relative to the internal combustion vehicle. Many major automobile manufacturers have electric vehicles available today, and other current and prospective automobile manufacturers are also developing electric vehicles. Electric vehicles have also already been brought to market in China and other foreign countries and we expect a number of those manufacturers to enter the U.S. market as well. In addition, several manufacturers offer hybrid vehicles, including plug-in versions.

#### **Energy Storage**

The market for energy storage products is also highly competitive. Established companies, such as AES Energy Storage, Siemens, LG Chem and Samsung, as well as various emerging companies, have introduced products that are similar to our product portfolio. There are several companies providing individual components of energy storage systems (such as cells, battery modules, and power electronics) as well as others providing integrated systems. We compete with these companies based on price, energy density and efficiency. We believe that the specifications of our products, our strong brand, and the modular, scalable nature of our Powerpack 2 product give us a competitive advantage when marketing our products.

#### **Solar Energy Systems**

The primary competitors to our solar energy business are the traditional local utility companies that supply energy to our potential customers. We compete with these traditional utility companies primarily based on price, predictability of price and the ease by which customers can switch to electricity generated by our solar energy systems. We also compete with solar energy companies that provide products and services similar to ours. Many solar energy companies only install solar energy systems, while others only provide financing for these installations. In the residential solar energy system installation market, our primary competitors include Vivint Solar Inc., Sunrun Inc., Trinity Solar, SunPower Corporation, and many smaller local solar companies.

## **Intellectual Property**

As part of our business, we seek to protect our intellectual property rights such as with respect to patents, trademarks, copyrights, trade secrets, including through employee and third party nondisclosure agreements, and other contractual arrangements. Additionally, we previously announced a patent policy in which we irrevocably pledged that we will not initiate a lawsuit against any party for infringing our patents through activity relating to electric vehicles or related equipment for so long as such party is acting in good faith. We made this pledge in order to encourage the advancement of a common, rapidly-evolving platform for electric vehicles, thereby benefiting ourselves, other companies making electric vehicles, and the world.

## **Segment Information**

We operate as two reportable segments: automotive and energy generation and storage.

The automotive segment includes the design, development, manufacturing, sales, and leasing of electric vehicles as well as sales of automotive regulatory credits. Additionally, the automotive segment is also comprised of services and other, which includes non-warranty after-sales vehicle services, sales of used vehicles, sales of electric vehicle components and systems to other manufacturers, retail merchandise, and sales by our acquired subsidiaries to third party customers. The energy generation and storage segment includes the design, manufacture, installation, and sale or leasing of stationary energy storage products and solar energy systems, and sale of electricity generated by our solar energy systems to customers.

## **Employees**

As of December 31, 2018, Tesla, Inc. had 48,817 full-time employees. To date, we have not experienced any work stoppages, and we consider our relationship with our employees to be good.

## **Available Information**

We file or furnish periodic reports and amendments thereto, including our Annual Reports on Form 10-K, our Quarterly Reports on Form 10-Q and Current Reports on Form 8-K, proxy statements and other information with the Securities and Exchange Commission ("SEC"). In addition, the SEC maintains a website ([www.sec.gov](http://www.sec.gov)) that contains reports, proxy and information statements, and other information regarding issuers that file electronically. Our website is located at [www.tesla.com](http://www.tesla.com), and our reports, amendments thereto, proxy statements and other information are also made available, free of charge, on our investor relations website at [ir.tesla.com](http://ir.tesla.com) as soon as reasonably practicable after we electronically file or furnish such information with the SEC. The information posted on our website is not incorporated by reference into this Annual Report on Form 10-K.

## ITEM 1A. RISK FACTORS

*You should carefully consider the risks described below together with the other information set forth in this report, which could materially affect our business, financial condition and future results. The risks described below are not the only risks facing our company. Risks and uncertainties not currently known to us or that we currently deem to be immaterial also may materially adversely affect our business, financial condition and operating results.*

### **Risks Related to Our Business and Industry**

***We have experienced in the past, and may experience in the future, delays or other complications in the design, manufacture, launch, production, delivery and servicing ramp of new vehicles and other products such as Model 3, Model Y, our energy storage products and Solar Roof, which could harm our brand, business, prospects, financial condition and operating results.***

We have previously experienced launch, manufacturing, production and delivery ramp delays or other complications in connection with new vehicle models such as Model S, Model X and Model 3, new vehicle features such as the all-wheel drive dual motor drivetrain on Model S and the second version of Autopilot hardware, and a significant increase in automation introduced in the manufacture of Model 3. For example, we encountered unanticipated challenges, such as certain supply chain constraints, that led to initial delays in producing Model X. Similarly, we experienced certain challenges in the production of Model 3 that led to delays in its ramp. Moreover, in the areas of Model 3 production where we had challenges ramping fully automated processes, such as portions of the battery module assembly line, material flow system and the general assembly line, we reduced the levels of automation and introduced semi-automated or manual processes. If issues like these arise or recur, if our remediation measures and process changes do not continue to be successful, if we experience issues with transitioning to full automation in certain production lines or to other planned manufacturing improvements, or if we experience issues or delays in building our Gigafactory Shanghai in China or commencing and ramping Model 3 production there, we could experience issues in sustaining the Model 3 ramp or delays in increasing Model 3 production further. Also, if we encounter difficulties in scaling our delivery or servicing capabilities for Model 3 or future vehicles and products to high volumes in the U.S. or internationally, our financial condition and operating results could suffer. In addition, because our vehicle models share certain production facilities with other vehicle models, the volume or efficiency of production with respect to one model may impact the production of other models or lead to bottlenecks that impact the production of all models.

We may also experience similar future delays or other complications in bringing to market and ramping production of new vehicles, such as Model Y, the Tesla Semi, our planned pickup truck and new Tesla Roadster, our energy storage products and Solar Roof. Any significant additional delay or other complication in the production of and delivery capabilities for our current products or the development, manufacture, launch, production and delivery and servicing capability ramp of our future products, including complications associated with expanding our production capacity, supply chain and delivery systems or obtaining or maintaining regulatory approvals, could materially damage our brand, business, prospects, financial condition and operating results.

***We have experienced in the past, and may experience in the future, delays in realizing our projected timelines and cost and volume targets for the production and ramp of Model 3, which could harm our business, prospects, financial condition and operating results.***

Our future business depends in large part on our ability to execute on our plans to manufacture, market and sell the Model 3 vehicle, which we are offering at a lower price point and which we are producing at significantly higher volumes than the Model S or Model X vehicles. We commenced production and initial customer deliveries of Model 3 in July 2017, and since then have achieved a stabilized production rate. At the Tesla Factory, we expect to continue to increase our Model 3 production rate to approximately 7,000 units per week on a sustained basis by the end of 2019. Moreover, in China, we expect to commence production of certain trims of Model 3 for the local market in China in the initial phase of our Gigafactory Shanghai by the end of 2019, and then progressively increase levels of localization through local sourcing and manufacturing. Inclusive of Gigafactory Shanghai, our goal is to be able to produce 10,000 Model 3 vehicles per week on a sustained basis, and an annualized output rate in excess of 500,000 Model 3 vehicles sometime between the fourth quarter of 2019 and the second quarter of 2020. However, the timeframe for commencing Model 3 production at Gigafactory Shanghai is subject to a number of uncertainties, including regulatory approval, supply chain constraints, and the pace of installing production equipment and bringing the factory online.

We have limited experience to date in manufacturing vehicles at the high volumes that we recently achieved and to which we anticipate ramping further for Model 3, and to be successful, we will need to complete the implementation and ramp of efficient and cost-effective manufacturing capabilities, processes and supply chains necessary to support such volumes, including at Gigafactory Shanghai. We are employing a higher degree of automation in the manufacturing processes for Model 3 than we have previously employed and to continue to implement additional automation. In some cases, we have temporarily reduced the levels of automation and introduced semi-automated or manual processes, at additional labor cost. Additional bottlenecks may also arise as we continue to ramp production at the Tesla Factory and commence the initial phase of Model 3 production at Gigafactory Shanghai, and it will be important that we address them promptly and in a cost-effective manner. Moreover, our Model 3 production plan has generally required to date significant investments of cash and management resources, and we expect to deploy some level of additional resources as we further progress our ramp and begin production in new locations in the future, such as China.

Our production plan for Model 3 is based on many key assumptions, including:

- that we will be able to sustain and further expand our high-volume production of Model 3 at the Tesla Factory without exceeding our projected costs and on our projected timeline;  
that we will be able to continue to expand Gigafactory 1 in a timely manner to produce high volumes of quality lithium-ion cells to be integrated into battery modules and finished battery packs and drive unit components for Model 3, including in part to support production in China as the level of local sourcing and manufacturing there progressively increases, all at costs that allow us to sell Model 3 at our target gross margins;
- that we will be able to build and commence production at additional future facilities, such as at Gigafactory Shanghai, to support our international ramp for Model 3 in accordance with our projected costs and timeline;
- that the equipment and processes which we have selected for Model 3 production will be able to accurately manufacture high volumes of Model 3 vehicles within specified design tolerances and with high quality;
- that we will be able to maintain suppliers for the necessary components on terms and conditions that are acceptable to us and that we will be able to obtain high-quality components on a timely basis and in the necessary quantities to support high-volume production; and
- that we will be able to attract, recruit, hire, train and retain skilled employees to operate our planned high-volume production facilities to support Model 3, including at the Tesla Factory, Gigafactory 1 and Gigafactory Shanghai.

If one or more of the foregoing assumptions turns out to be incorrect, our ability to meet our Model 3 projections on time and at volumes and prices that are profitable, the demand for and deliveries of Model 3, as well as our business, prospects, operating results and financial condition, may be materially and adversely impacted.

***We may be unable to meet our growing vehicle production, sales and delivery plans and servicing needs, any of which could harm our business and prospects.***

Our plans call for sustaining and further ramping from our significant increases in vehicle production and deliveries, particularly for Model 3. Our ability to achieve these plans will depend upon a number of factors, including our ability to utilize installed manufacturing capacity to achieve the planned production yield, further install and increase capacity in accordance with our planned timelines and costs, maintain our desired quality levels and optimize design and production changes, as well as our suppliers' ability to support our needs. In addition, we have used and may use in the future a number of new manufacturing technologies, techniques and processes for our vehicles, which we must successfully introduce and scale for high-volume production. For example, we have introduced highly automated production lines, aluminum spot welding systems and high-speed blow forming of certain difficult to stamp vehicle parts. We have also introduced unique design features in our vehicles with different manufacturing challenges, such as large display screens, dual motor drivetrain, Autopilot hardware and falcon-wing doors. We have limited experience developing, manufacturing, selling and servicing, and allocating our available resources among, multiple products simultaneously. If we are unable to realize our plans, our brand, business, prospects, financial condition and operating results could be materially damaged.

Concurrent with our increasing vehicle production levels, we will also need to continue to significantly increase sales and deliveries of our vehicles. Although we have a plan for selling and delivering increased volumes of vehicles, we have limited experience in marketing, selling and delivering vehicles at the higher volumes at which we are manufacturing Model 3, and we may face difficulties meeting our sales and delivery goals in both existing markets as well as new markets into which we expand, such as Europe and China where we are beginning to deliver Model 3 for the first time in the first quarter of 2019. In particular, we are targeting for the first time with Model 3 a mass demographic with a broad range of potential customers, in which we have limited experience projecting demand and pricing our products. While we are producing numerous variants (including regional versions) of Model 3 in accordance with the demand that we expect for them, if our projections are inaccurate, we may not be able to generate sales matched to the specific vehicles that we have the capacity to produce, based on vehicle production line constraints and long lead times for procuring certain parts.

Moreover, because we do not have independent dealer networks, we are responsible for delivering all of our vehicles to our customers and meeting their vehicle servicing needs. To date, we have limited experience with such deliveries and servicing at the scale to which we expect to grow, particularly in international markets. To accommodate our volumes, we have deployed a number of delivery models, such as deliveries to customers' homes and workplaces, some of which have not been previously tested at scale and in different geographies. Moreover, significant transit time may be required to transport vehicles such as Model 3 in volume into new markets for the first time. To the extent that such factors lead to delays in our deliveries, our results may be negatively impacted. Finally, because of our unique expertise with our vehicles, we recommend that our vehicles be serviced by our service centers, Mobile Service technicians or certain authorized professionals that we have specifically trained and equipped. If we experience delays in adding such servicing capacity or experience unforeseen issues with the reliability of Model 3, which we recently commenced producing at volume, it could overburden our servicing capabilities. If we are unable to ramp up to meet our sales, delivery and servicing targets globally, or our projections on which such targets are based are inaccurate, this could result in negative publicity and damage to our brand and have a material adverse effect on our business, prospects, financial condition and operating results.

***Our future growth and success is dependent upon consumers' willingness to adopt electric vehicles and specifically our vehicles, especially in the mass market demographic which we are targeting with Model 3.***

Our growth is highly dependent upon the adoption by consumers of alternative fuel vehicles in general and electric vehicles in particular. Although we have successfully grown demand for our vehicles thus far, there is no guarantee of such future demand, or that our vehicles will not compete with one another in the market. Moreover, the Model 3 mass market demographic is larger, but more competitive, than the demographic for Model S and Model X, and additional electric vehicles are entering the market.

If the market for electric vehicles in general and Tesla vehicles in particular does not develop as we expect, or develops more slowly than we expect, or if demand for our vehicles decreases in our markets, our business, prospects, financial condition and operating results could be harmed. We have only recently begun high volume production of vehicles, are still at an earlier stage and have limited resources relative to our competitors, and the market for alternative fuel vehicles is rapidly evolving. As a result, the market for our vehicles could be affected by numerous factors, such as:

- perceptions about electric vehicle features, quality, safety, performance and cost;
- perceptions about the limited range over which electric vehicles may be driven on a single battery charge;
- competition, including from other types of alternative fuel vehicles, plug-in hybrid electric vehicles and high fuel-economy internal combustion engine vehicles;
- volatility in the cost of oil and gasoline;
- government regulations and economic incentives;
- access to charging facilities; and
- concerns about our future viability.

***We are dependent on our suppliers, the majority of which are single-source suppliers, and the inability of these suppliers to deliver necessary components of our products according to our schedule and at prices, quality levels and volumes acceptable to us, or our inability to efficiently manage these components, could have a material adverse effect on our financial condition and operating results.***

Our products contain numerous purchased parts which we source globally from hundreds of direct suppliers, the majority of whom are currently single-source suppliers, although we attempt to qualify and obtain components from multiple sources whenever feasible. Any significant increases in our production may require us to procure additional components in a short amount of time, and in the past we have also replaced certain suppliers because of their failure to provide components that met our quality control standards. While we believe that we will be able to secure additional or alternate sources of supply for most of our components in a relatively short time frame, there is no assurance that we will be able to do so or develop our own replacements for certain highly customized components of our products. Moreover, we have signed long-term agreements with Panasonic to be our manufacturing partner and supplier for lithium-ion cells at Gigafactory 1 in Nevada and PV cells and panels at Gigafactory 2 in Buffalo, New York. If we encounter unexpected difficulties with key suppliers such as Panasonic, and if we are unable to fill these needs from other suppliers, we could experience production delays and potential loss of access to important technology and parts for producing, servicing and supporting our products.

This limited, and in many cases single source, supply chain exposes us to multiple potential sources of delivery failure or component shortages for the production of our products, such as those which we experienced in 2012 and 2016 in connection with our slower-than-planned Model S and Model X ramps. Furthermore, unexpected changes in business conditions, materials pricing, labor issues, wars, governmental changes, natural disasters such as the March 2011 earthquakes in Japan and other factors beyond our and our suppliers' control, could also affect our suppliers' ability to deliver components to us on a timely basis. The loss of any single or limited source supplier or the disruption in the supply of components from these suppliers could lead to product design changes and delays in product deliveries to our customers, which could hurt our relationships with our customers and result in negative publicity, damage to our brand and a material and adverse effect on our business, prospects, financial condition and operating results.

Changes in our supply chain have also resulted in the past, and may result in the future, in increased cost. We have also experienced cost increases from certain of our suppliers in order to meet our quality targets and development timelines as well as due to our design changes, and we may experience similar cost increases in the future. Certain suppliers have sought to renegotiate the terms of supply arrangements. Additionally, we are negotiating with existing suppliers for cost reductions, seeking new and less expensive suppliers for certain parts, and attempting to redesign certain parts to make them less expensive to produce. If we are unsuccessful in our efforts to control and reduce supplier costs, our operating results will suffer.

In particular, because we are producing Model 3 at significantly higher volumes than any of our other products to date, the negative impact of any delays or other constraints with respect to our suppliers for Model 3 could be substantially greater than any supply chain-related issues experienced with respect to our other products. We need our Model 3 suppliers to sustainably ramp in accordance with our ongoing ramp of Model 3 and deliver according to our schedule. There is no assurance that these suppliers will ultimately be able to sustainably and timely meet our cost, quality and volume needs. For example, we may experience issues or delays increasing the level of localization in China through local sourcing and manufacturing at our Gigafactory Shanghai. Furthermore, as the scale of our vehicle production increases, we will need to accurately forecast, purchase, warehouse and transport to our manufacturing facilities components at much higher volumes. If we are unable to accurately match the timing and quantities of component purchases to our actual needs, or successfully implement automation, inventory management and other systems to accommodate the increased complexity in our supply chain, we may incur unexpected production disruption, storage, transportation and write-off costs, which could have a material adverse effect on our financial condition and operating results.

***Future problems or delays in expanding Gigafactory 1 or ramping operations there could negatively affect the production and profitability of our products, such as Model 3 and our energy storage products.***

To lower the cost of cell production and produce cells in high volume, we have vertically integrated the production of lithium-ion cells and finished battery packs for Model 3 and energy storage products at Gigafactory 1. While Gigafactory 1 began producing lithium-ion cells for energy storage products in January 2017 and has since begun producing lithium-ion cells for Model 3, we have no other direct experience in the production of lithium-ion cells. Given the size and complexity of this undertaking, it is possible that future events could result in issues or delays in further ramping and expanding production at Gigafactory 1. Moreover, we expect that we will need additional production at Gigafactory 1 to support vehicle production at Gigafactory Shanghai in part when we commence Model 3 production there. In order to achieve our volume and gross margin targets for Model 3 and the anticipated ramp in production of energy storage products, we must continue to sustain and ramp significant cell production at Gigafactory 1, which, among other things, requires Panasonic to successfully operate and further ramp its cell production lines at significant volumes. Although Panasonic has a long track record of producing high-quality cells at significant volume at its factories in Japan, it has limited experience with cell production at Gigafactory 1. In addition, we produce several components for Model 3, such as battery modules incorporating the lithium-ion cells produced by Panasonic, and drive units, at Gigafactory 1. Some of the manufacturing lines for such components took longer than anticipated to ramp to their full capacity. While we have largely overcome this bottleneck after deploying multiple semi-automated lines and improving our original lines, additional bottlenecks may arise as we continue to increase the production rate. Finally, we have announced that we will likely manufacture Model Y at Gigafactory 1. If we are unable to maintain Gigafactory 1 production, ramp additionally over time as needed, and do so cost-effectively, or if we or Panasonic are unable to attract, hire and retain a substantial number of highly skilled personnel, our ability to supply battery packs or other components for Model 3 and our other products could be negatively impacted, which could negatively affect our brand and harm our business, prospects, financial condition and operating results.

***If our vehicles or other products that we sell or install fail to perform as expected, our ability to develop, market and sell our products and services could be harmed.***

If our vehicles or our energy products contain defects in design and manufacture that cause them not to perform as expected or that require repair, or certain features of our vehicles, such as full self-driving, take longer than expected to become enabled or are legally restricted, our ability to develop, market and sell our products and services could be harmed. For example, the operation of our vehicles is highly dependent on software, which is inherently complex and may contain latent defects and errors or be subject to external attacks. Issues experienced by vehicle customers have included those related to the software for the 17 inch display screen, the panoramic roof and the 12-volt battery in the Model S and the seats and doors in the Model X. Although we attempt to remedy any issues we observe in our products as effectively and rapidly as possible, such efforts may not be timely, may hamper production or may not be to the satisfaction of our customers. While we have performed extensive internal testing on the products we manufacture, we currently have a limited frame of reference by which to evaluate detailed long-term quality, reliability, durability and performance characteristics of our battery packs, powertrains, vehicles and energy storage products. There can be no assurance that we will be able to detect and fix any defects in our products prior to their sale to or installation for consumers.

Any product defects, delays or legal restrictions on product features, or other failure of our products to perform as expected, could harm our reputation and result in delivery delays, product recalls, product liability claims, and significant warranty and other expenses, and could have a material adverse impact on our business, financial condition, operating results and prospects.



***If we fail to scale our business operations and otherwise manage future growth and adapt to new conditions effectively as we rapidly grow our company, including internationally, we may not be able to produce, market, sell and service our products successfully.***

Any failure to manage our growth effectively could materially and adversely affect our business, prospects, operating results and financial condition. We expect to continue to expand our operations significantly, including internationally and with our increasing production of Model 3, and the worldwide sales, delivery and servicing of a significantly higher number of vehicles than our current vehicle fleet in the coming years. Furthermore, we are developing and growing our energy storage product and solar business worldwide, including in countries where we have limited or no previous operating experience. Our future operating results depend to a large extent on our ability to manage our expansion and growth successfully. We may not be successful in undertaking this global expansion if we are unable to control expenses and avoid cost overruns and other unexpected operating costs, establish sufficient worldwide automobile sales, delivery, service and Supercharger facilities in a timely manner, adapt our products and conduct our operations to meet local requirements, implement required local infrastructure, systems and processes, and find and hire a significant number of additional manufacturing, engineering, service, electrical installation, construction and administrative personnel.

In particular, we plan to expand our manufacturing capabilities outside of the U.S., where we have limited experience operating a factory or managing related regulatory, financing and other challenges. For example, as part of our continuing work to increase Model 3 production to 10,000 vehicles per week on a sustained basis and make Model 3 affordable in the markets where we plan to offer it, we expect to commence the initial phase of Model 3 production at Gigafactory Shanghai for the local market in China by the end of 2019, although the timeframe for that is subject to a number of uncertainties, including regulatory approval, supply chain constraints, and the pace of installing production equipment and bringing the factory online. As we expect to commence our manufacturing activities in China using progressively increased levels of localization through local sourcing and manufacturing, we expect that we will need to initially support manufacturing activities there with production processes at our existing manufacturing facilities, such as Gigafactory 1. Moreover, local manufacturing is critical to our expansion and sales in China, which is the largest market for electric vehicles in the world. Our sales of Model S and Model X in China have been negatively impacted by certain tariffs on automobiles manufactured in the U.S., such as our vehicles, and our costs for producing our vehicles in the U.S. have also been affected by import duties on certain components sourced from China. If we are not able to establish manufacturing activities in China and other jurisdictions to minimize the impact of such unfavorable tariffs, duties or costs, or ramp our production capabilities at Gigafactory 1 or other facilities to support such vehicle manufacturing activities, our ability to compete in such jurisdictions, and our operating results, business and prospects, will be harmed.

***If we are unable to achieve our targeted manufacturing costs for our vehicles, including Model 3, our financial condition and operating results will suffer.***

While we are continuing to and expect in the future to realize cost reductions by both us and our suppliers, there is no guarantee we will be able to achieve sufficient cost savings to reach our gross margin and profitability goals, including for the least expensive variant of Model 3 that we ultimately expect to produce, or our other financial targets. We incur significant costs related to procuring the materials required to manufacture our vehicles, assembling vehicles and compensating our personnel. If our efforts to continue to decrease manufacturing costs are not successful, we may incur substantial costs or cost overruns in utilizing and increasing the production capability of our vehicle manufacturing facilities, such as for Model 3 both in the U.S. and internationally. Many of the factors that impact our manufacturing costs are beyond our control, such as potential increases in the costs of our materials and components, such as lithium, nickel and other components of our battery cells or aluminum used to produce body panels. If we are unable to continue to control and reduce our manufacturing costs, our operating results, business and prospects will be harmed.

***Increases in costs, disruption of supply or shortage of materials, in particular for lithium-ion cells, could harm our business.***

We may experience increases in the cost or a sustained interruption in the supply or shortage of materials. Any such increase, supply interruption or shortage could materially and negatively impact our business, prospects, financial condition and operating results. We use various materials in our business including aluminum, steel, lithium, nickel, copper and cobalt, as well as lithium-ion cells from suppliers. The prices for these materials fluctuate, and their available supply may be unstable, depending on market conditions and global demand for these materials, including as a result of increased production of electric vehicles and energy storage products by our competitors, and could adversely affect our business and operating results. For instance, we are exposed to multiple risks relating to lithium-ion cells. These risks include:

- an increase in the cost, or decrease in the available supply, of materials used in the cells;
- disruption in the supply of cells due to quality issues or recalls by battery cell manufacturers or any issues that may arise with respect to cells manufactured at our own facilities; and
- fluctuations in the value of the Japanese yen against the U.S. dollar as our battery-cell purchases for Model S and Model X and some raw materials for cells used in Model 3 and energy storage products are currently denominated in Japanese yen.

Our business is dependent on the continued supply of battery cells for the battery packs used in our vehicles and energy storage products. While we believe several sources of the battery cells are available for such battery packs, and expect to eventually rely substantially on battery cells manufactured at our own facilities, we have to date fully qualified only a very limited number of suppliers for the cells used in such battery packs and have very limited flexibility in changing cell suppliers. Any disruption in the supply of battery cells from such suppliers could disrupt production of our vehicles and of the battery packs we produce for energy products until such time as a different supplier is fully qualified. Furthermore, fluctuations or shortages in petroleum and other economic conditions may cause us to experience significant increases in freight charges and material costs. Substantial increases in the prices for our materials or prices charged to us, such as those charged by battery cell suppliers, would increase our operating costs, and could reduce our margins if we cannot recoup the increased costs through increased vehicle prices. Any attempts to increase vehicle prices in response to increased material costs could result in cancellations of vehicle orders and reservations and therefore materially and adversely affect our brand, image, business, prospects and operating results.

***We may become subject to product liability claims, which could harm our financial condition and liquidity if we are not able to successfully defend or insure against such claims.***

Although we design our vehicles to be the safest vehicles on the road, product liability claims, even those without merit, could harm our business, prospects, operating results and financial condition. The automobile industry in particular experiences significant product liability claims and we face inherent risk of exposure to claims in the event our vehicles do not perform or are claimed to not have performed as expected. As is true for other automakers, our cars have been involved and we expect in the future will be involved in crashes resulting in death or personal injury, and such crashes where Autopilot is engaged are the subject of significant public attention. We have experienced and we expect to continue to face claims arising from or related to misuse or claimed failures of new technologies that we are pioneering, including Autopilot in our vehicles. Moreover, as our solar energy systems and energy storage products generate and store electricity, they have the potential to cause injury to people or property. A successful product liability claim against us could require us to pay a substantial monetary award. Our risks in this area are particularly pronounced given the relatively limited number of vehicles and energy storage products delivered to date and limited field experience of our products. Moreover, a product liability claim could generate substantial negative publicity about our products and business and could have a material adverse effect on our brand, business, prospects and operating results. In most jurisdictions, we generally self-insure against the risk of product liability claims for vehicle exposure, meaning that any product liability claims will likely have to be paid from company funds, not by insurance.

***The markets in which we operate are highly competitive, and we may not be successful in competing in these industries. We currently face competition from new and established domestic and international competitors and expect to face competition from others in the future, including competition from companies with new technology.***

The worldwide automotive market, particularly for alternative fuel vehicles, is highly competitive today and we expect it will become even more so in the future. There is no assurance that our vehicles will be successful in the respective markets in which they compete. A significant and growing number of established and new automobile manufacturers, as well as other companies, have entered or are reported to have plans to enter the alternative fuel vehicle market, including hybrid, plug-in hybrid and fully electric vehicles, as well as the market for self-driving technology and applications. In some cases, such competitors have announced an intention to produce electric vehicles exclusively at some point in the future. Most of our current and potential competitors have significantly greater financial, technical, manufacturing, marketing, vehicle sales resources and networks than we do and may be able to devote greater resources to the design, development, manufacturing, distribution, promotion, sale and support of their products. In particular, some competitors have also announced plans to compete with us in important and large markets for electric vehicles, such as China. Increased competition could result in lower vehicle unit sales, price reductions, revenue shortfalls, loss of customers and loss of market share, which could harm our business, prospects, financial condition and operating results. In addition, our Model 3 vehicle faces competition from existing and future automobile manufacturers in the extremely competitive entry-level premium sedan market, including Audi, BMW, Lexus and Mercedes.

The solar and energy storage industries are highly competitive. We face competition from other manufacturers, developers and installers of solar and energy storage systems, as well as from large utilities. Decreases in the retail prices of electricity from utilities or other renewable energy sources could make our products less attractive to customers and lead to an increased rate of customer defaults under our existing long-term leases and PPAs. Moreover, solar panel and lithium-ion battery prices have declined and are continuing to decline. As we increase our battery and solar manufacturing capabilities, including at Gigafactory 1 and Gigafactory 2, future price declines may harm our ability to produce energy storage systems and solar systems at competitive prices.

***If we are unable to establish and maintain confidence in our long-term business prospects among consumers, analysts and within our industries, then our financial condition, operating results, business prospects and stock price may suffer materially.***

Consumers may be less likely to purchase our products if they are not convinced that our business will succeed or that our service and support and other operations will continue in the long term. Similarly, suppliers and other third parties will be less likely to invest time and resources in developing business relationships with us if they are not convinced that our business will succeed. Accordingly, in order to build and maintain our business, we must maintain confidence among customers, suppliers, analysts, ratings agencies and other parties in our long-term financial viability and business prospects. Maintaining such confidence may be particularly complicated by certain factors, such as our limited operating history, negative press, customer unfamiliarity with our products, any delays in scaling manufacturing, delivery and service operations to meet demand, competition and uncertainty regarding the future of electric vehicles or our other products and services, our quarterly production and sales performance compared with market expectations, and any other negative publicity related to us. Many of these factors are largely outside our control, and any negative perceptions about our long-term business prospects, even if exaggerated or unfounded, such as speculation regarding the sufficiency or stability of our management team, could harm our business and make it more difficult to raise additional funds if needed.

***Our plan to generate ongoing growth and demand, including by expanding and optimizing our retail, service and vehicle charging operations, will require significant cash investments and management resources and may not meet expectations with respect to additional sales, installations or servicing of our products or availability of public charging solutions.***

We plan to generate ongoing growth and demand, including by globally expanding and optimizing our retail, service and vehicle charging operations. These plans require significant cash investments and management resources and may not meet our expectations with respect to additional sales or installations of our products. This ongoing global expansion, which includes planned entry into markets in which we have limited or no experience selling, delivering, installing and/or servicing our products at scale, and which may pose legal, regulatory, labor, cultural and political challenges that we have not previously encountered, may not have the desired effect of increasing sales and installations and expanding our brand presence to the degree we are anticipating. Furthermore, the increasing number of Tesla vehicles will require us to continue to increase the number of our Supercharger stations and connectors significantly in locations throughout the world. If we fail to do so in a timely manner, our customers could become dissatisfied, which could adversely affect sales of our vehicles. We will also need to ensure we are in compliance with any regulatory requirements applicable to the sale, installation and service of our products, the sale of electricity generated through our solar energy systems and operation of Superchargers in those jurisdictions, which could take considerable time and expense. If we experience any delays or cannot meet customer expectations in expanding our customer infrastructure network, or our expansion plans are not successful in continuing to grow demand, this could lead to a decrease or stagnation in sales or installations of our products and could negatively impact our business, prospects, financial condition and operating results.

***We face risks associated with our global operations and expansion, including unfavorable regulatory, political, economic, tax and labor conditions, and with establishing ourselves in new markets, all of which could harm our business.***

We currently have a global footprint, with domestic and international operations and subsidiaries in various countries and jurisdictions, and we continue to expand and optimize our retail, service and Supercharger capabilities internationally. Accordingly, we are subject to a variety of legal, political and regulatory requirements and social and economic conditions over which we have little control. For example, we may be impacted by trade policies, political uncertainty and economic cycles involving geographic regions where we have significant operations. Sales of vehicles in the automotive industry also tend to be cyclical in many markets, which may expose us to increased volatility as we expand and adjust our operations and retail strategies.

We are subject to a number of risks associated in particular with international business activities that may increase our costs, impact our ability to sell our products and require significant management attention. These risks include conforming our products to various international regulatory and safety requirements as well as charging and other electric infrastructures, organizing local operating entities, difficulty in establishing, staffing and managing foreign operations, challenges in attracting customers, foreign government taxes, regulations and permit requirements, our ability to enforce our contractual rights; trade restrictions, customs regulations, tariffs and price or exchange controls, and preferences of foreign nations for domestically manufactured products. For example, in China, which is a key market for us, certain products such as automobiles manufactured in the U.S. have become subject to a recently increased tariff imposed by the government. While such increase has been temporarily suspended, the tariff could remain in place for an undetermined length of time, be further increased in the future and/or lead consumers to postpone or choose another vehicle brand subject to lower tariffs or no tariffs. Moreover, recently increased import duties on certain components used in our products that are sourced from China may increase our costs and negatively impact our operating results.

***Our vehicles and energy storage products make use of lithium-ion battery cells, which have been observed to catch fire or vent smoke and flame, and such events have raised concerns, and future events may lead to additional concerns, about the batteries used in automotive applications.***

The battery packs that we produce make use of lithium-ion cells. On rare occasions, lithium-ion cells can rapidly release the energy they contain by venting smoke and flames in a manner that can ignite nearby materials as well as other lithium-ion cells. While we have designed the battery pack to passively contain any single cell's release of energy without spreading to neighboring cells, there can be no assurance that a field or testing failure of our vehicles or other battery packs that we produce will not occur, which could subject us to lawsuits, product recalls or redesign efforts, all of which would be time consuming and expensive. Also, negative public perceptions regarding the suitability of lithium-ion cells for automotive applications or any future incident involving lithium-ion cells such as a vehicle or other fire, even if such incident does not involve our vehicles or energy storage products, could seriously harm our business.

In addition, we store a significant number of lithium-ion cells at our facilities and are producing high volumes of cells and battery modules and packs at Gigafactory 1. Any mishandling of battery cells may cause disruption to the operation of our facilities. While we have implemented safety procedures related to the handling of the cells, there can be no assurance that a safety issue or fire related to the cells would not disrupt our operations. Such damage or injury could lead to adverse publicity and potentially a safety recall. Moreover, any failure of a competitor's electric vehicle or energy storage product may cause indirect adverse publicity for us and our products. Such adverse publicity could negatively affect our brand and harm our business, prospects, financial condition and operating results.

***If we fail to effectively grow and manage the residual, financing and credit risks related to our vehicle financing programs, our business may suffer.***

We offer financing arrangements for our vehicles in North America, Europe and Asia primarily through various financial institutions. We also currently offer Model S and Model X leasing directly through our local subsidiaries in the U.S. and Canada. Under a lease held directly by us, we typically receive only a very small portion of the total vehicle purchase price at the time of lease, followed by a stream of payments over the term of the lease. The profitability of any vehicles returned to us at the end of their leases depends on our ability to accurately project our vehicles' residual values at the outset of the leases, and such values may fluctuate prior to the end of their terms depending on various factors such as supply and demand of our used vehicles, economic cycles and the pricing of new vehicles. The leasing program also relies on our ability to secure adequate financing and/or business partners to fund and grow this program, and screen for and manage customer credit risk. We expect the availability of leasing and other financing options will be important for our vehicle customers. If we are unable to adequately fund our leasing program with internal funds, or partners or other external financing sources, and compelling alternative financing programs are not available for our customers, we may be unable to grow our sales. Furthermore, if our leasing business grows substantially, our business may suffer if we cannot effectively manage the greater levels of residual and credit risks resulting from growth. Finally, if we do not successfully monitor and comply with applicable national, state and/or local financial regulations and consumer protection laws governing lease transactions, we may become subject to enforcement actions or penalties, either of which may harm our business.

Moreover, we have provided resale value guarantees to customers and partners for certain financing programs, under which such counterparties may sell their vehicles back to us at certain points in time at pre-determined amounts. However, actual resale values, as with residual values for leased vehicles, are subject to similar fluctuations over the term of the financing arrangements. If the actual resale values of any vehicles resold or returned to us pursuant to these programs are materially lower than the pre-determined amounts we have offered, our operating results, profitability and/or liquidity could be negatively impacted.

***The unavailability, reduction or elimination of, or unfavorable determinations with respect to, government and economic incentives in the U.S. and abroad supporting the development and adoption of electric vehicles, energy storage products or solar energy could have some impact on demand for our products and services.***

We and our customers currently benefit from certain government and economic incentives supporting the development and adoption of electric vehicles. In the U.S. and abroad, such incentives include, among other things, tax credits or rebates that encourage the purchase of electric vehicles. In Norway, for example, the purchase of electric vehicles is not currently subject to import taxes, the 25% value added tax, or the carbon dioxide and weight-based purchase taxes that apply to the purchase of gas-powered vehicles. Notably, the quantum of incentive programs promoting electric vehicles is a tiny fraction of the amount of subsidies that are provided to gas-powered vehicles through the oil and gas industries. Nevertheless, even the limited benefits from such programs could be reduced, eliminated or exhausted. For example, under current regulations, a \$7,500 federal tax credit that was available in the U.S. for the purchase of our vehicles is being reduced in phases during, and will sunset at the end of, 2019. We believe the first reduction in this tax credit may have pulled forward some near-term demand in the U.S. into 2018, and could create similar pull-forwards in 2019 before each further step reduction in the federal tax credit. Moreover, in July 2018, a previously available incentive for purchases of Model 3 in Ontario, Canada was cancelled and Tesla buyers in Germany lost access to electric vehicle incentives for a short period of time beginning late 2017. In April 2017 and January 2016, respectively, previously available incentives in Hong Kong and Denmark that favored the purchase of electric vehicles expired, negatively impacting sales. Effective March 2016, California implemented regulations phasing out a \$2,500 cash rebate on qualified electric vehicles for high-income consumers. Such developments could have some negative impact on demand for our vehicles, and we and our customers may have to adjust to them.

In addition, certain governmental rebates, tax credits and other financial incentives that are currently available with respect to our solar and energy storage product businesses allow us to lower our installation costs and cost of capital and encourage customers to buy our products and investors to invest in our solar financing funds. However, these incentives may expire on a particular date when the allocated funding is exhausted, reduced or terminated as renewable energy adoption rates increase, often without warning. For example, the U.S. federal government currently offers a 30% ITC for the installation of solar power facilities and energy storage systems that are charged from a co-sited solar power facility. The ITC is currently scheduled to decline in phases, ultimately to 10% for commercial and utility systems and to 0% for customer-owned residential systems by January 2022. Likewise, in jurisdictions where net energy metering is currently available, our customers receive bill credits from utilities for energy that their solar energy systems generate and export to the grid in excess of the electric load they use. Several jurisdictions have reduced or eliminated the benefit available under net energy metering, or have proposed to do so. Such reductions in or termination of governmental incentives could adversely impact our results by making our products less competitive for potential customers, increasing our cost of capital and adversely impacting our ability to attract investment partners and to form new financing funds for our solar and energy storage assets. Additionally, the enactment of the Tax Cuts and Jobs Act in the U.S. could potentially increase the cost, and decrease the availability, of renewable energy financing, by reducing the value of depreciation benefits associated with, and the overall investor tax capacity needed to monetize, renewable energy projects. Such changes could lower the overall investment willingness and capacity for such projects available in the market.

Moreover, we and our fund investors claim the ITC and certain state incentives in amounts based on the fair market value of our solar and energy storage systems. Although we obtain independent appraisals to support the claimed fair market values, the relevant governmental authorities have audited such values and in certain cases have determined that they should be lower, and they may do so again in the future. Such determinations may result in adverse tax consequences and/or our obligation to make indemnification or other payments to our funds or fund investors.

***Any failure by us to realize the expected benefits of our substantial investments and commitments with respect to the manufacture of PV cells and modules, including if we are unable to comply with the terms of our agreement with the Research Foundation for the State University of New York relating to our Gigafactory 2, could result in negative consequences for our business.***

We own certain PV cell and module manufacturing and technology assets, and a build-to-suit lease arrangement with the Research Foundation for the State University of New York (the “SUNY Foundation”). This agreement with the SUNY Foundation provides for the construction of Gigafactory 2 in Buffalo, New York with the intended capacity to produce at least 1.0 GW of solar products annually. Under this agreement, we are obligated to, among other things, employ specified minimum numbers of personnel in the State of New York and spend or incur \$5.0 billion in combined capital, operational expenses, costs of goods sold and other costs in the State of New York during the 10-year period following the completion of all construction and related infrastructure, the arrival of manufacturing equipment, and the receipt of certain permits and other specified items at Gigafactory 2. If we fail in any year over the course of the term of the agreement to meet these obligations, we would be obligated to pay a “program payment” of \$41.2 million to the SUNY Foundation in such year. Any inability on our part to comply with the requirements of this agreement may result in the payment of significant amounts to the SUNY Foundation, the termination of our lease at Gigafactory 2, and/or the need to secure an alternative supply of PV cells and modules for our solar products. Moreover, if we are unable to utilize our manufacturing and technology assets in accordance with our expectations, we may have to recognize accounting charges pertaining to the write-off of such assets. Any of the foregoing events could have a material adverse effect on our business, prospects, financial condition and operating results.

***If we are unable to attract and/or retain key employees and hire qualified personnel, our ability to compete could be harmed.***

The loss of the services of any of our key employees could disrupt our operations, delay the development and introduction of our vehicles and services, and negatively impact our business, prospects and operating results. In particular, we are highly dependent on the services of Elon Musk, our Chief Executive Officer, and Jeffrey B. Straubel, our Chief Technology Officer.

None of our key employees is bound by an employment agreement for any specific term and we may not be able to successfully attract and retain senior leadership necessary to grow our business. Our future success depends upon our ability to attract and retain executive officers and other key technology, sales, marketing, engineering, manufacturing and support personnel, especially to support our high-volume manufacture of vehicles and expansion plans, and any failure or delay in doing so could adversely impact our business, prospects, financial condition and operating results.

Key talent may leave Tesla due to various factors, such as a very competitive labor market for talented individuals with automotive or technology experience, or any negative publicity related to us. In California, Nevada and other regions where we have operations, there is increasing competition for individuals with skillsets needed for our business, including specialized knowledge of electric vehicles, software engineering, manufacturing engineering, and other skills such as electrical and building construction expertise. This competition affects both our ability to retain key employees and hire new ones. Moreover, we have in the past conducted reductions in force in order to optimize our organizational structure and reduce costs, and certain senior personnel have also departed for various reasons. Our continued success depends upon our continued ability to hire new employees in a timely manner, especially to support our expansion plans, and to retain current employees or replace departed senior employees with qualified and experienced individuals, which is typically a time-consuming process. Additionally, we compete with both mature and prosperous companies that have far greater financial resources than we do and start-ups and emerging companies that promise short-term growth opportunities. Difficulties in retaining current employees or recruiting new ones could have an adverse effect on our performance and results.

Finally, our compensation philosophy for all of our personnel reflects our startup origins, with an emphasis on equity-based awards and benefits in order to closely align their incentives with the long-term interests of our stockholders. Each of our current equity incentive plan and employee stock purchase plan provides for an “evergreen” provision that permits our board of directors to increase on an annual basis, subject to specified limits, the number of equity-based awards that may be granted to, and shares of our common stock that may be purchased by, our personnel thereunder. These plans are currently scheduled to expire in December 2019, and we will need to extend them or establish new plans in order to continue to compensate our employees following their expiration, which will require the approval of our stockholders. Moreover, there is no assurance that these plans as extended or any future plans will contain evergreen provisions, which would mean that we would have to periodically seek and obtain approval from our stockholders for future increases to the number of awards that may be granted and shares that may be purchased under such plans. If we are unable to obtain such stockholder approvals and compensate our personnel in accordance with our compensation philosophy, our ability to retain and hire qualified personnel would be negatively impacted.

***We are highly dependent on the services of Elon Musk, our Chief Executive Officer.***

We are highly dependent on the services of Elon Musk, our Chief Executive Officer and largest stockholder. Although Mr. Musk spends significant time with Tesla and is highly active in our management, he does not devote his full time and attention to Tesla. Mr. Musk also currently serves as Chief Executive Officer and Chief Technical Officer of Space Exploration Technologies Corp., a developer and manufacturer of space launch vehicles, and is involved in other emerging technology ventures.

***We are continuously expanding and improving our information technology systems and use security measures designed to protect our systems against breaches and cyber-attacks. If these efforts are not successful, our business and operations could be disrupted and our operating results and reputation could be harmed.***

We are continuously expanding and improving our information technology systems, including implementing new internally developed systems, to assist us in the management of our business. In particular, our volume production of multiple vehicles necessitates continued development, maintenance and improvement of our information technology systems in the U.S. and abroad, which include product data management, procurement, inventory management, production planning and execution, sales, service and logistics, dealer management, financial, tax and regulatory compliance systems. We also maintain information technology measures designed to protect us against intellectual property theft, data breaches and other cyber-attacks. The implementation, maintenance and improvement of these systems require significant management time, support and cost. Moreover, there are inherent risks associated with developing, improving and expanding our core systems as well as implementing new systems, including the disruption of our data management, procurement, manufacturing execution, finance, supply chain and sales and service processes. These risks may affect our ability to manage our data and inventory, procure parts or supplies or manufacture, sell, deliver and service vehicles, or achieve and maintain compliance with, or realize available benefits under, tax laws and other applicable regulations.

We cannot be sure that these systems or their required functionality will be effectively implemented, maintained or expanded as planned. If we do not successfully implement, maintain or expand these systems as planned, our operations may be disrupted, our ability to accurately and/or timely report our financial results could be impaired, and deficiencies may arise in our internal control over financial reporting, which may impact our ability to certify our financial results. Moreover, our proprietary information could be compromised or misappropriated and our reputation may be adversely affected. If these systems or their functionality do not operate as we expect them to, we may be required to expend significant resources to make corrections or find alternative sources for performing these functions.



***Any unauthorized control or manipulation of our products' systems could result in loss of confidence in us and our products and harm our business.***

Our products contain complex information technology systems. For example, our vehicles and energy storage products are designed with built-in data connectivity to accept and install periodic remote updates from us to improve or update their functionality. We have designed, implemented and tested security measures intended to prevent unauthorized access to our information technology networks, our products and their systems. However, hackers have reportedly attempted, and may attempt in the future, to gain unauthorized access to modify, alter and use such networks, products and systems to gain control of, or to change, our products' functionality, user interface and performance characteristics, or to gain access to data stored in or generated by our products. We encourage reporting of potential vulnerabilities in the security of our products via our security vulnerability reporting policy, and we aim to remedy any reported and verified vulnerability. Accordingly, we have received reports of potential vulnerabilities in the past and have attempted to remedy them. However, there can be no assurance that vulnerabilities will not be exploited in the future before they can be identified, or that our remediation efforts are or will be successful.

Any unauthorized access to or control of our products or their systems or any loss of data could result in legal claims or proceedings. In addition, regardless of their veracity, reports of unauthorized access to our products, their systems or data, as well as other factors that may result in the perception that our products, their systems or data are capable of being "hacked," could negatively affect our brand and harm our business, prospects, financial condition and operating results. We have been the subject of such reports in the past.

***We are subject to various environmental and safety laws and regulations that could impose substantial costs upon us and negatively impact our ability to operate our manufacturing facilities.***

As a manufacturing company, including with respect to facilities such as the Tesla Factory, Gigafactory 1 and Gigafactory 2, we are subject to complex environmental, health and safety laws and regulations at numerous jurisdictional levels in the U.S. and abroad, including laws relating to the use, handling, storage, disposal and human exposure to hazardous materials. The costs of compliance, including remediating contamination if any is found on our properties and any changes to our operations mandated by new or amended laws, may be significant. We may also face unexpected delays in obtaining permits and approvals required by such laws in connection with our manufacturing facilities, which would hinder our operation of these facilities. Such costs and delays may adversely impact our business prospects and operating results. Furthermore, any violations of these laws may result in substantial fines and penalties, remediation costs, third party damages, or a suspension or cessation of our operations.

***Our business may be adversely affected by any disruptions caused by union activities.***

It is common for employees at companies with significant manufacturing operations such as us to belong to a union, which can result in higher employee costs and increased risk of work stoppages. Moreover, regulations in some jurisdictions outside of the U.S. mandate employee participation in industrial collective bargaining agreements and work councils with certain consultation rights with respect to the relevant companies' operations. Although we work diligently to provide the best possible work environment for our employees, they may still decide to join or seek recognition to form a labor union, or we may be required to become a union signatory. The United Automobile Workers ("UAW") has been engaged in a campaign to organize manufacturing operations at Tesla. As part of that campaign, the UAW has filed with the National Labor Relations Board ("NLRB") a series of unfair labor practice charges against Tesla on which a hearing recently concluded. We cannot predict the timing of the NLRB's decision, and an unfavorable outcome for Tesla may have a negative impact on the perception of Tesla's treatment of our employees. Furthermore, we are directly or indirectly dependent upon companies with unionized work forces, such as parts suppliers and trucking and freight companies, and work stoppages or strikes organized by such unions could have a material adverse impact on our business, financial condition or operating results. If a work stoppage occurs, it could delay the manufacture and sale of our products and have a material adverse effect on our business, prospects, operating results or financial condition.

***Our products and services are subject to substantial regulations, which are evolving, and unfavorable changes or failure by us to comply with these regulations could substantially harm our business and operating results.***

Motor vehicles are subject to substantial regulation under international, federal, state and local laws. We incur significant costs in complying with these regulations and may be required to incur additional costs to comply with any changes to such regulations, and any failures to comply could result in significant expenses, delays or fines. We are subject to laws and regulations applicable to the supply, manufacture, import, sale and service of automobiles internationally. For example, in countries outside of the U.S., we are required to meet standards relating to vehicle safety, fuel economy and emissions, among other things, that are often materially different from requirements in the U.S., thus resulting in additional investment into the vehicles and systems to ensure regulatory compliance in those countries. This process may include official review and certification of our vehicles by foreign regulatory agencies prior to market entry, as well as compliance with foreign reporting and recall management systems requirements.

Additionally, our vehicles are equipped with a suite of driver-assistance features called Autopilot, which help assist drivers with certain tedious and potentially dangerous aspects of road travel, but require drivers to remain engaged. There is a variety of international, federal and state regulations that may apply to self-driving vehicles, which include many existing vehicle standards that were not originally intended to apply to vehicles that may not have a driver. Such regulations continue to rapidly change, which increases the likelihood of a patchwork of complex or conflicting regulations, or may delay products or restrict self-driving features and availability, any of which could adversely affect our business.

Moreover, as a manufacturer and installer of solar generation and energy storage systems and a supplier of electricity generated and stored by the solar energy and energy storage systems we install for customers, we are impacted by federal, state and local regulations and policies concerning electricity pricing, the interconnection of electricity generation and storage equipment with the electric grid, and the sale of electricity generated by third-party owned systems. For example, existing or proposed regulations and policies would permit utilities to limit the amount of electricity generated by our customers with their solar energy systems, charge fees and penalties to our customers relating to the purchase of energy other than from the grid, adjust electricity rate designs such that the price of our solar products may not be competitive with that of electricity from the grid, restrict us and our customers from transacting under our PPAs or qualifying for government incentives and benefits that apply to solar power, and limit or eliminate net energy metering. If such regulations and policies remain in effect or are adopted in other jurisdictions, or if other regulations and policies that adversely impact the interconnection or use of our solar and energy storage systems are introduced, they could deter potential customers from purchasing our solar and energy storage products, threaten the economics of our existing contracts and cause us to cease solar and energy storage system sales and operations in the relevant jurisdictions, which could harm our business, prospects, financial condition and results of operations.

***Failure to comply with various privacy and consumer protection laws to which we are subject could harm the Company.***

Our privacy policy is posted on our website, and any failure by us or our vendor or other business partners to comply with it or with federal, state or international privacy, data protection or security laws or regulations could result in regulatory or litigation-related actions against us, legal liability, fines, damages and other costs. Substantial expenses and operational changes may be required in connection with maintaining compliance with such laws, and in particular certain emerging privacy laws are still subject to a high degree of uncertainty as to their interpretation and application. For example, in May 2018, the General Data Protection Regulation (the “GDPR”) began to fully apply to the processing of personal information collected from individuals located in the European Union. The GDPR has created new compliance obligations and has significantly increased fines for noncompliance. Although we take steps to protect the security of our customers’ personal information, we may be required to expend significant resources to comply with data breach requirements if third parties improperly obtain and use the personal information of our customers or we otherwise experience a data loss with respect to customers’ personal information. A major breach of our network security and systems could have negative consequences for our business and future prospects, including possible fines, penalties and damages, reduced customer demand for our vehicles and harm to our reputation and brand.

***We may choose to or be compelled to undertake product recalls or take other similar actions, which could adversely affect our brand image and financial performance.***

Any product recall with respect to our products may result in adverse publicity, damage our brand and adversely affect our business, prospects, operating results and financial condition. For example, certain vehicle recalls that we initiated have resulted from various causes, including a component that could prevent the parking brake from releasing once engaged, a concern with the firmware in the restraints control module in certain right-hand-drive vehicles, industry-wide issues with airbags from a particular supplier, Model X seat components that could cause unintended seat movement during a collision, and concerns of corrosion in Model S power steering assist motor bolts. Furthermore, testing of our products by government regulators or industry groups may require us to initiate product recalls or may result in negative public perceptions about the safety of our products. In the future, we may at various times, voluntarily or involuntarily, initiate a recall if any of our products or our electric vehicle powertrain components that we have provided to other vehicle OEMs, including any systems or parts sourced from our suppliers, prove to be defective or noncompliant with applicable laws and regulations, such as federal motor vehicle safety standards. Such recalls, whether voluntary or involuntary or caused by systems or components engineered or manufactured by us or our suppliers, could involve significant expense and could adversely affect our brand image in our target markets, as well as our business, prospects, financial condition and results of operations.

***Our current and future warranty reserves may be insufficient to cover future warranty claims which could adversely affect our financial performance.***

Subject to separate limited warranties for the supplemental restraint system, battery and drive unit, we provide four-year or 50,000-mile limited warranties for the purchasers of new Model 3, Model S and Model X vehicles and either a four-year or 50,000-mile limited warranty or a two-year or 100,000-mile maximum odometer limited warranty for the purchasers of used Model S or Model X vehicles certified and sold by us. The limited warranty for the battery and drive unit for new Model S and Model X vehicles covers the drive unit for eight years, as well as the battery for a period of eight years (or for certain older vehicles, 125,000 miles if reached sooner than eight years), although the battery's charging capacity is not covered under any of our warranties or Extended Service plans; the limited warranty for used Model S and Model X vehicles does not extend or otherwise alter the terms of the original battery and drive unit limited warranty for such used vehicles specified in their original New Vehicle Limited Warranty. For the battery and drive unit on our current new Model 3 vehicles, we offer an eight-year or 100,000-mile limited warranty for our standard or mid-range battery and an eight-year or 120,000-mile limited warranty for our long-range battery, with minimum 70% retention of battery capacity over the warranty period. In addition, customers of new Model S and Model X vehicles have the opportunity to purchase an Extended Service plan for the period after the end of the limited warranty for their new vehicles to cover additional services for up to an additional four years or 50,000 miles.

For energy storage products, we provide limited warranties against defects and to guarantee minimum energy retention levels. For example, we currently guarantee that each Powerwall 2 product will maintain at least 70 or 80% (depending on the region of installation) of its stated energy capacity after 10 years, and that each Powerpack 2 product will retain specified minimum energy capacities in each of its first 15 years of use. For our Solar Roof, we currently offer a warranty on the glass tiles for the lifetime of a customer's home and a separate warranty for the energy generation capability of the solar tiles. We also offer extended warranties, availability guarantees and capacity guarantees for periods of up to 20 years at an additional cost at the time of purchase, as well as workmanship warranties to customers who elect to have us install their systems.

Finally, customers who lease solar energy system leases or buy energy from us under PPAs are covered by warranties equal to the length of the agreement term, which is typically 20 years. Systems purchased for cash are covered by a workmanship warranty of up to 20 years. In addition, we pass through to our customers the inverter and panel manufacturers' warranties, which generally range from 10 to 25 years. Finally, we provide a performance guarantee with our leased solar energy systems that compensates a customer on an annual basis if their system does not meet the electricity production guarantees set forth in their lease. Under these performance guarantees, we bear the risk of production shortfalls resulting from an inverter or panel failure. These risks are exacerbated in the event the panel or inverter manufacturers cease operations or fail to honor their warranties.

If our warranty reserves are inadequate to cover future warranty claims on our products, our business, prospects, financial condition and operating results could be materially and adversely affected. Warranty reserves include our management's best estimate of the projected costs to repair or to replace items under warranty. These estimates are based on actual claims incurred to-date and an estimate of the nature, frequency and costs of future claims. Such estimates are inherently uncertain and changes to our historical or projected experience, especially with respect to products such as Model 3 and Solar Roof that we have recently introduced and/or that we expect to produce at significantly greater volumes than our past products, may cause material changes to our warranty reserves in the future.

***Our insurance strategy may not be adequate to protect us from all business risks.***

We may be subject, in the ordinary course of business, to losses resulting from products liability, accidents, acts of God and other claims against us, for which we may have no insurance coverage. As a general matter, we do not maintain as much insurance coverage as many other companies do, and in some cases, we do not maintain any at all. Additionally, the policies that we do have may include significant deductibles or self-insured retentions, and we cannot be certain that our insurance coverage will be sufficient to cover all future losses or claims against us. A loss that is uninsured or which exceeds policy limits may require us to pay substantial amounts, which could adversely affect our financial condition and operating results.

***Our financial results may vary significantly from period-to-period due to fluctuations in our operating costs and other factors.***

We expect our period-to-period financial results to vary based on our operating costs, which we anticipate will fluctuate as the pace at which we continue to design, develop and manufacture new products and increase production capacity by expanding our current manufacturing facilities and adding future facilities such as Gigafactory Shanghai may not be consistent or linear between periods. Additionally, our revenues from period-to-period may fluctuate as we introduce existing products to new markets for the first time and as we develop and introduce new products. As a result of these factors, we believe that quarter-to-quarter comparisons of our financial results, especially in the short term, are not necessarily meaningful and that these comparisons cannot be relied upon as indicators of future performance. Moreover, our financial results may not meet expectations of equity research analysts, ratings agencies or investors, who may be focused only on quarterly financial results. If any of this occurs, the trading price of our stock could fall substantially, either suddenly or over time.

***Servicing our indebtedness requires a significant amount of cash, and there is no guarantee that we will have sufficient cash flow from our business to pay our substantial indebtedness.***

As of December 31, 2018, we and our subsidiaries had outstanding \$11.00 billion in aggregate principal amount of indebtedness (see Note 13, *Long-Term Debt Obligations*, to the consolidated financial statements included elsewhere in this Annual Report on Form 10-K). Our substantial consolidated indebtedness may increase our vulnerability to any generally adverse economic and industry conditions. We and our subsidiaries may, subject to the limitations in the terms of our existing and future indebtedness, incur additional debt, secure existing or future debt or recapitalize our debt.

Pursuant to their terms, holders of our 0.25% Convertible Senior Notes due 2019, 1.25% Convertible Senior Notes due 2021 and 2.375% Convertible Senior Notes due 2022 (collectively, the "Tesla Convertible Notes") may convert their respective Tesla Convertible Notes at their option prior to the scheduled maturities of the respective Tesla Convertible Notes under certain circumstances. Upon conversion of the applicable Tesla Convertible Notes, we will be obligated to deliver cash and/or shares in respect of the principal amounts thereof and the conversion value in excess of such principal amounts on such Tesla Convertible Notes. Moreover, our subsidiary's 1.625% Convertible Senior Notes due 2019 and Zero-Coupon Convertible Senior Notes due 2020 (together, the "Subsidiary Convertible Notes") are convertible into shares of our common stock at conversion prices ranging from \$300.00 to \$759.36 per share. Finally, holders of the Tesla Convertible Notes and the Subsidiary Convertible Notes will have the right to require us to repurchase their notes upon the occurrence of a fundamental change at a purchase price equal to 100% of the principal amount of the notes, plus accrued and unpaid interest, if any, to, but not including, the fundamental change purchase date.

Our ability to make scheduled payments of the principal and interest on our indebtedness when due or to make payments upon conversion or repurchase demands with respect to our convertible notes, or to refinance our indebtedness as we may need or desire, depends on our future performance, which is subject to economic, financial, competitive and other factors beyond our control. Our business may not continue to generate cash flow from operations in the future sufficient to satisfy our obligations under our existing indebtedness, and any future indebtedness we may incur, and to make necessary capital expenditures. If we are unable to generate such cash flow, we may be required to adopt one or more alternatives, such as reducing or delaying investments or capital expenditures, selling assets, refinancing or obtaining additional equity capital on terms that may be onerous or highly dilutive. Our ability to refinance existing or future indebtedness will depend on the capital markets and our financial condition at such time. In addition, our ability to make payments may be limited by law, by regulatory authority or by agreements governing our future indebtedness. We may not be able to engage in any of these activities or engage in these activities on desirable terms or at all, which could result in a default on our existing or future indebtedness and have a material adverse effect on our business, results of operations and financial condition.

***Our debt agreements contain covenant restrictions that may limit our ability to operate our business.***

The terms of certain of our credit facilities, including our senior secured asset based revolving credit agreement, contain, and any of our other future debt agreements may contain, covenant restrictions that limit our ability to operate our business, including restrictions on our ability to, among other things, incur additional debt or issue guarantees, create liens, repurchase stock or make other restricted payments, and make certain voluntary prepayments of specified debt. In addition, under certain circumstances we are required to comply with a fixed charge coverage ratio. As a result of these covenants, our ability to respond to changes in business and economic conditions and engage in beneficial transactions, including to obtain additional financing as needed, may be restricted. Furthermore, our failure to comply with our debt covenants could result in a default under our debt agreements, which could permit the holders to accelerate our obligation to repay the debt. If any of our debt is accelerated, we may not have sufficient funds available to repay it.

***We may need or want to raise additional funds and these funds may not be available to us when we need them. If we cannot raise additional funds when we need or want them, our operations and prospects could be negatively affected.***

The design, manufacture, sale, installation and/or servicing of automobiles, energy storage products and solar products is a capital intensive business, and the specific timing of cash inflows and outflows may fluctuate substantially from period to period. Until we are consistently generating positive free cash flows, we may need or want to raise additional funds through the issuance of equity, equity-related or debt securities or through obtaining credit from financial institutions to fund, together with our principal sources of liquidity, the costs of developing and manufacturing our current or future vehicles, energy storage products and/or solar products, to pay any significant unplanned or accelerated expenses or for new significant strategic investments, or to refinance our significant consolidated indebtedness, even if not required to do so by the terms of such indebtedness. We need sufficient capital to fund our ongoing operations, ramp vehicle production, continue research and development projects, establish sales, delivery and service centers, build and deploy Superchargers, expand Gigafactory 1, ramp production at Gigafactory 2, build and commence Model 3 production at Gigafactory Shanghai and to make the investments in tooling and manufacturing capital required to introduce new vehicles, energy storage products and solar products. We cannot be certain that additional funds will be available to us on favorable terms when required, or at all. If we cannot raise additional funds when we need them, our financial condition, results of operations, business and prospects could be materially and adversely affected.

Additionally, we use capital from third-party investors to enable our customers' access to our solar energy systems with little or no upfront cost. The availability of this financing depends upon many factors, including the confidence of the investors in the solar energy industry, the quality and mix of our customer contracts, any regulatory changes impacting the economics of our existing customer contracts, changes in law (including tax law), risks or government incentives associated with these financings, and our ability to compete with other renewable energy companies for the limited number of potential investors. Moreover, while interest rates remain at low levels, they have risen in recent periods. If the rate of return required by investors rises as a result of a rise in interest rates, it will reduce the present value of the customer payment streams underlying, and therefore the total value of, our financing structures, increasing our cost of capital. If we are unable to establish new financing funds on favorable terms for third-party ownership arrangements, we may be unable to finance the installation of our solar energy systems for our lease or PPA customers' systems, or our cost of capital could increase and our liquidity may be negatively impacted, which would have an adverse effect on our business, financial condition and results of operations.

***We could be subject to liability, penalties and other restrictive sanctions and adverse consequences arising out of certain governmental investigations and proceedings.***

We are cooperating with certain government investigations as discussed in Note 17, *Commitments and Contingencies*, to the consolidated financial statements included elsewhere in this Annual Report on Form 10-K. Aside from the settlement with the SEC discussed below relating to Elon Musk's statement that he was considering taking Tesla private, to our knowledge no government agency in any ongoing investigation has concluded that any wrongdoing occurred. However, we cannot predict the outcome or impact of any ongoing matters, and there exists the possibility that we could be subject to liability, penalties and other restrictive sanctions and adverse consequences if the SEC, the DOJ, or any other government agency were to pursue legal action in the future. Moreover, we expect to incur costs in responding to related requests for information and subpoenas, and if instituted, in defending against any governmental proceedings.

For example, on October 16, 2018, the U.S. District Court for the Southern District of New York entered a final judgment approving the terms of a settlement filed with the Court on September 29, 2018, in connection with the actions taken by the SEC relating to Mr. Musk's statement on August 7, 2018 that he was considering taking Tesla private. Pursuant to the settlement, we, among other things, paid a civil penalty of \$20 million, appointed an independent director as the Chair of the Board, appointed two additional independent directors to the Board, and made further enhancements to our disclosure controls and other corporate governance-related matters. Although we intend to continue to comply with the terms and requirements of the settlement, if there is a lack of compliance, additional enforcement actions or other legal proceedings may be instituted against us.

***If we update or discontinue the use of our manufacturing equipment more quickly than expected, we may have to shorten the useful lives of any equipment to be retired as a result of any such update, and the resulting acceleration in our depreciation could negatively affect our financial results.***

We have invested and expect to continue to invest significantly in what we believe is state of the art tooling, machinery and other manufacturing equipment for our various product lines, and we depreciate the cost of such equipment over their expected useful lives. However, manufacturing technology may evolve rapidly, and we may decide to update our manufacturing process with cutting-edge equipment more quickly than expected. Moreover, we are continually implementing learnings as our engineering and manufacturing expertise and efficiency increase, which may result in our ability to manufacture our products using less of our currently installed equipment. Alternatively, as we ramp production of Model 3 to higher levels, our learnings may cause us to discontinue the use of already installed equipment in favor of different or additional equipment. The useful life of any equipment that would be retired early as a result would be shortened, causing the depreciation on such equipment to be accelerated, and our results of operations could be negatively impacted.

***We are exposed to fluctuations in currency exchange rates, which could negatively affect our financial results.***

Our revenues and costs denominated in foreign currencies are not completely matched. As we have increased vehicle deliveries in markets outside of the U.S., we have much higher revenues than costs denominated in other currencies such as the euro, Canadian dollar, Chinese yuan and Norwegian krone. Any strengthening of the U.S. dollar would tend to reduce our revenues as measured in U.S. dollars, as we have historically experienced. In addition, a portion of our costs and expenses have been, and we anticipate will continue to be, denominated in foreign currencies, including the Japanese yen. If we do not have fully offsetting revenues in these currencies and if the value of the U.S. dollar depreciates significantly against these currencies, our costs as measured in U.S. dollars as a percent of our revenues will correspondingly increase and our margins will suffer. Moreover, while we undertake limited hedging activities intended to offset the impact of currency translation exposure, it is impossible to predict or eliminate such impact. As a result, our operating results could be adversely affected.

***We may face regulatory limitations on our ability to sell vehicles directly which could materially and adversely affect our ability to sell our electric vehicles.***

We sell our vehicles directly to consumers using means that we believe will maximize our reach, currently including through our website and our own stores. While we intend to continue to leverage our most effective sales strategies, we may not be able to sell our vehicles through our own stores in each state in the U.S., as some states have laws that may be interpreted to impose limitations on this direct-to-consumer sales model. In certain states in which we are not able to obtain dealer licenses, we have opened galleries, which are not full sales locations.

The application of these state laws to our operations continues to be difficult to predict. Laws in some states have limited our ability to obtain dealer licenses from state motor vehicle regulators and may continue to do so.

In addition, decisions by regulators permitting us to sell vehicles may be challenged by dealer associations and others as to whether such decisions comply with applicable state motor vehicle industry laws. We have prevailed in many of these lawsuits and such results have reinforced our continuing belief that state laws were not designed to prevent our distribution model. In some states, there have also been regulatory and legislative efforts by dealer associations to propose laws that, if enacted, would prevent us from obtaining dealer licenses in their states given our current sales model. A few states have passed legislation that clarifies our ability to operate, but at the same time limits the number of dealer licenses we can obtain or stores that we can operate. We have also filed a lawsuit in federal court in Michigan challenging the constitutionality of the state's prohibition on direct sales as applied to our business.

Internationally, there may be laws in jurisdictions we have not yet entered or laws we are unaware of in jurisdictions we have entered that may restrict our sales or other business practices. Even for those jurisdictions we have analyzed, the laws in this area can be complex, difficult to interpret and may change over time. Continued regulatory limitations and other obstacles interfering with our ability to sell vehicles directly to consumers could have a negative and material impact our business, prospects, financial condition and results of operations.

***We may need to defend ourselves against intellectual property infringement claims, which may be time-consuming and could cause us to incur substantial costs.***

Others, including our competitors, may hold or obtain patents, copyrights, trademarks or other proprietary rights that could prevent, limit or interfere with our ability to make, use, develop, sell or market our products and services, which could make it more difficult for us to operate our business. From time to time, the holders of such intellectual property rights may assert their rights and urge us to take licenses, and/or may bring suits alleging infringement or misappropriation of such rights. We may consider the entering into licensing agreements with respect to such rights, although no assurance can be given that such licenses can be obtained on acceptable terms or that litigation will not occur, and such licenses could significantly increase our operating expenses. In addition, if we are determined to have infringed upon a third party's intellectual property rights, we may be required to cease making, selling or incorporating certain components or intellectual property into the goods and services we offer, to pay substantial damages and/or license royalties, to redesign our products and services, and/or to establish and maintain alternative branding for our products and services. In the event that we were required to take one or more such actions, our business, prospects, operating results and financial condition could be materially adversely affected. In addition, any litigation or claims, whether or not valid, could result in substantial costs, negative publicity and diversion of resources and management attention.

***Tesla is a highly-visible public company whose products, business, results of operations, statements and actions are often scrutinized by critics whose influence could negatively impact the perception of our brand and the market value of our common stock.***

Tesla is a highly-visible public company whose products, business, results of operations, statements and actions are well-publicized. Such attention includes frequent criticism of us by a range of third-parties. Our continued success depends on our ability to focus on executing on our mission and business plan while maintaining the trust of our current and potential customers, employees, stockholders and business partners. Any negative perceived actions of ours could influence the perception of our brand or our leadership by our customers, suppliers or investors, which could adversely impact our business prospects, operating results and the market value of our common stock.

***Our facilities or operations could be damaged or adversely affected as a result of disasters.***

Our corporate headquarters, the Tesla Factory and Gigafactory 1 are located in seismically active regions in Northern California and Nevada. If major disasters such as earthquakes or other events occur, or our information system or communications network breaks down or operates improperly, our headquarters and production facilities may be seriously damaged, or we may have to stop or delay production and shipment of our products. We may incur expenses relating to such damages, which could have a material adverse impact on our business, operating results and financial condition.

### **Risks Related to the Ownership of Our Common Stock**

***The trading price of our common stock is likely to continue to be volatile.***

The trading price of our common stock has been highly volatile and could continue to be subject to wide fluctuations in response to various factors, some of which are beyond our control. Our common stock has experienced an intra-day trading high of \$387.46 per share and a low of \$244.59 per share over the last 52 weeks. The stock market in general, and the market for technology companies in particular, has experienced extreme price and volume fluctuations that have often been unrelated or disproportionate to the operating performance of those companies. In particular, a large proportion of our common stock has been and may continue to be traded by short sellers which may put pressure on the supply and demand for our common stock, further influencing volatility in its market price. Public perception and other factors outside of our control may additionally impact the stock price of companies like us that garner a disproportionate degree of public attention, regardless of actual operating performance. In addition, in the past, following periods of volatility in the overall market and the market price of a particular company's securities, securities class action litigation has often been instituted against these companies. Moreover, stockholder litigation like this has been filed against us in the past. While we are continuing to defend such actions vigorously, any judgment against us or any future stockholder litigation could result in substantial costs and a diversion of our management's attention and resources.

***We may fail to meet our publicly announced guidance or other expectations about our business, which could cause our stock price to decline.***

We provide guidance regarding our expected financial and business performance, such as projections regarding sales and production, as well as anticipated future revenues, gross margins, profitability and cash flows. Correctly identifying key factors affecting business conditions and predicting future events is inherently an uncertain process and our guidance may not ultimately be accurate. Our guidance is based on certain assumptions such as those relating to anticipated production and sales volumes (which generally are not linear throughout a given period), average sales prices, supplier and commodity costs, and planned cost reductions. If our guidance is not accurate or varies from actual results due to our inability to meet our assumptions or the impact on our financial performance that could occur as a result of various risks and uncertainties, the market value of our common stock could decline significantly.



***Transactions relating to our convertible notes may dilute the ownership interest of existing stockholders, or may otherwise depress the price of our common stock.***

The conversion of some or all of the Tesla Convertible Notes or the Subsidiary Convertible Notes would dilute the ownership interests of existing stockholders to the extent we deliver shares upon conversion of any of such notes. Our Subsidiary Convertible Notes have been historically, and the other Tesla Convertible Notes may become in the future, convertible at the option of their holders prior to their scheduled terms under certain circumstances. If holders elect to convert their convertible notes, we could be required to deliver to them a significant number of shares of our common stock. Any sales in the public market of the common stock issuable upon such conversion could adversely affect prevailing market prices of our common stock. In addition, the existence of the convertible notes may encourage short selling by market participants because the conversion of such notes could be used to satisfy short positions, or anticipated conversion of such notes into shares of our common stock could depress the price of our common stock.

Moreover, in connection with each issuance of the Tesla Convertible Notes, we entered into convertible note hedge transactions, which are expected to reduce the potential dilution and/or offset potential cash payments we are required to make in excess of the principal amount upon conversion of the applicable Tesla Convertible Notes. We also entered into warrant transactions with the hedge counterparties, which could separately have a dilutive effect on our common stock to the extent that the market price per share of our common stock exceeds the applicable strike price of the warrants on the applicable expiration dates. In addition, the hedge counterparties or their affiliates may enter into various transactions with respect to their hedge positions, which could also cause or prevent an increase or a decrease in the market price of our common stock or the convertible notes.

***Elon Musk has pledged shares of our common stock to secure certain bank borrowings. If Mr. Musk were forced to sell these shares pursuant to a margin call that he could not avoid or satisfy, such sales could cause our stock price to decline.***

Certain banking institutions have made extensions of credit to Elon Musk, our Chief Executive Officer, a portion of which was used to purchase shares of common stock in certain of our public offerings and private placements at the same prices offered to third party participants in such offerings and placements. We are not a party to these loans, which are partially secured by pledges of a portion of the Tesla common stock currently owned by Mr. Musk. If the price of our common stock were to decline substantially and Mr. Musk were unable to avoid or satisfy a margin call with respect to his pledged shares, Mr. Musk may be forced by one or more of the banking institutions to sell shares of Tesla common stock in order to remain within the margin limitations imposed under the terms of his loans. Any such sales could cause the price of our common stock to decline further.

***Anti-takeover provisions contained in our governing documents, applicable laws and our convertible notes could impair a takeover attempt.***

Our certificate of incorporation and bylaws afford certain rights and powers to our board of directors that could contribute to the delay or prevention of an acquisition that it deems undesirable. We are also subject to Section 203 of the Delaware General Corporation Law and other provisions of Delaware law that limit the ability of stockholders in certain situations to effect certain business combinations. In addition, the terms of our convertible notes require us to repurchase such notes in the event of a fundamental change, including a takeover of our company. Any of the foregoing provisions and terms that has the effect of delaying or deterring a change in control could limit the opportunity for our stockholders to receive a premium for their shares of our common stock, and could also affect the price that some investors are willing to pay for our common stock.

#### **ITEM 1B. UNRESOLVED STAFF COMMENTS**

None.

## ITEM 2. PROPERTIES

The following table sets forth the location, approximate current occupancy size and primary use of our principal leased and owned facilities:

Location	Approximate Size of Facilities (in Square Feet)		Primary Use	Lease Expiration Date
Fremont, California	5,500,000		Manufacturing, administration, engineering, service, delivery and warehouse	Owned building
Sparks, Nevada	5,024,350	*	Gigafactory 1, production of lithium-ion battery cells and vehicle drive units	Owned building
Tilburg, Netherlands	1,688,217		Manufacturing, administration, engineering and service	November 2023 - June 2028
Fremont, California	1,237,772		Administration, manufacturing and engineering	October 2025 - June 2030
Livermore, California	1,002,703		Warehouse	October 2026
Lathrop, California	885,867		Warehouse and manufacturing	September 2024 - February 2030
Sparks, Nevada	632,445		Warehouse	December 2019 - December 2020
Lathrop, California	496,888		Manufacturing	Owned building
Palo Alto, California	350,000		Administration and engineering	January 2022
Taipei City, Taiwan	283,790		Warehouse, administration and service	February 2022
Elkridge, Maryland	176,651		Warehouse	October 2023
Grand Rapids, Michigan	176,606		Manufacturing	May 2025
Draper, Utah	154,846		Administration	October 2027
Hawthorne, California	132,250		Engineering	December 2022
Bethlehem, Pennsylvania	130,971		Warehouse	April 2022

\* These facilities are currently in construction and the approximate square footage as presented represent the current occupancy as of December 31, 2018.

In addition to the properties included in the table above, we also lease a large number of properties in North America, Europe and Asia for our retail and service locations, Supercharger sites, solar installation and maintenance warehouses and regional administrative and sales offices for our solar business. Our properties are used to support both of our reporting segments.

We will begin leasing a 1.1 million square foot solar manufacturing facility (Gigafactory 2 in Buffalo, New York) for an initial term of 10 years and a 0.9 million square foot warehouse and manufacturing facility in Lathrop, California for an initial term of 11.5 years upon construction completion of the facilities. Additionally, we purchased the land use rights with an initial term of 50 years for Gigafactory Shanghai in December 2018 and began construction of the facility in January 2019. Once construction has completed, we expect the building to have a capacity of 4.5 million square feet.

**ITEM 3. LEGAL PROCEEDINGS**

For a description of our material pending legal proceedings, please see Note 17, *Commitments and Contingencies*, to the consolidated financial statements included elsewhere in this Annual Report on Form 10-K.

**ITEM 4. MINE SAFETY DISCLOSURES**

Not applicable

## PART II

### ITEM 5. MARKET FOR REGISTRANT'S COMMON EQUITY, RELATED STOCKHOLDER MATTERS AND ISSUER PURCHASES OF EQUITY SECURITIES

#### Market Information

Our common stock has traded on The NASDAQ Global Select Market under the symbol "TSLA" since it began trading on June 29, 2010. Our initial public offering was priced at \$17.00 per share on June 28, 2010.

#### Holders

As of January 31, 2018, there were 1,145 holders of record of our common stock. A substantially greater number of holders of our common stock are "street name" or beneficial holders, whose shares are held by banks, brokers and other financial institutions.

#### Dividend Policy

We have never declared or paid cash dividends on our common stock. We currently do not anticipate paying any cash dividends in the foreseeable future. Any future determination to declare cash dividends will be made at the discretion of our board of directors, subject to applicable laws, and will depend on our financial condition, results of operations, capital requirements, general business conditions and other factors that our board of directors may deem relevant.

#### Stock Performance Graph

*This performance graph shall not be deemed "filed" for purposes of Section 18 of the Securities Exchange Act of 1934, as amended (the "Exchange Act"), or incorporated by reference into any filing of Tesla, Inc. under the Securities Act of 1933, as amended (the "Securities Act"), or the Exchange Act, except as shall be expressly set forth by specific reference in such filing.*

The following graph shows a comparison, from January 1, 2014 through December 31, 2018, of the cumulative total return on our common stock, The NASDAQ Composite Index and a group of all public companies sharing the same SIC code as us, which is SIC code 3711, “Motor Vehicles and Passenger Car Bodies” (Motor Vehicles and Passenger Car Bodies Public Company Group). Such returns are based on historical results and are not intended to suggest future performance. Data for The NASDAQ Composite Index and the Motor Vehicles and Passenger Car Bodies Public Company Group assumes an investment of \$100 on January 1, 2014 and reinvestment of dividends. We have never declared or paid cash dividends on our common stock nor do we anticipate paying any such cash dividends in the foreseeable future.

## **Unregistered Sales of Equity Securities**

### *Exercises of Warrants*

In connection with the offering in 2013 of our 1.50% Convertible Senior Notes due 2018, we sold warrants to each of Goldman, Sachs & Co. and Morgan Stanley & Co. LLC (the “Warrantholders”). Between October 1, 2018 and October 31, 2018, we issued an aggregate of 132,977 shares of our common stock to the Warrantholders pursuant to their exercise of such warrants, which were net of the applicable exercise prices. Such shares were issued pursuant to an exemption from registration provided by Rule 3(a)(9) of the Securities Act.

### *Private Placement to CEO*

On November 9, 2018, we sold 56,915 shares of our common stock to our CEO in a private placement pursuant to an exemption from registration provided by Rule 4(a)(2) of the Securities Act, at a per share price equal to the last closing price of our stock prior to the execution of the purchase agreement, and received total cash proceeds of \$20.0 million.

### *Conversion of Convertible Senior Notes*

On December 17, 2018, we issued 10 shares of our common stock to a former holder of the 1.625% Convertible Senior Notes due in 2019 issued by our subsidiary in connection with such holder’s conversion of \$8,000 in principal amount of such notes. Such shares were issued pursuant to an exemption from registration provided by Rule 3(a)(9) of the Securities Act.

## Purchases of Equity Securities by the Issuer and Affiliated Purchasers

None

## ITEM 6. SELECTED CONSOLIDATED FINANCIAL DATA

The following selected consolidated financial data should be read in conjunction with “Management’s Discussion and Analysis of Financial Condition and Results of Operations” and the consolidated financial statements and the related notes included elsewhere in this Annual Report on Form 10-K to fully understand factors that may affect the comparability of the information presented below (in thousands, except per share data).

	Year Ended December 31,				
	2018 (2)	2017	2016 (1)	2015	2014
<b>Consolidated Statements of Operations Data:</b>					
Total revenues	\$21,461,268	\$11,758,751	\$7,000,132	\$4,046,025	\$3,198,356
Gross profit	\$ 4,042,021	\$ 2,222,487	\$1,599,257	\$ 923,503	\$ 881,671
Loss from operations	\$ (388,073)	\$ (1,632,086)	\$ (667,340)	\$ (716,629)	\$ (186,689)
Net loss attributable to common stockholders	\$ (976,091)	\$ (1,961,400)	\$ (674,914)	\$ (888,663)	\$ (294,040)
Net loss per share of common stock attributable to common stockholders, basic and diluted	\$ (5.72)	\$ (11.83)	\$ (4.68)	\$ (6.93)	\$ (2.36)
Weighted average shares used in computing net loss per share of common stock, basic and diluted	170,525	165,758	144,212	128,202	124,539

	As of December 31,				
	2018 (2)	2017	2016 (1)	2015	2014
<b>Consolidated Balance Sheet Data:</b>					
Working (deficit) capital	\$ (1,685,828)	\$ (1,104,150)	\$ 432,791	\$ (29,029)	\$1,072,907
Total assets	29,739,614	28,655,372	22,664,076	8,067,939	5,830,667
Total long-term obligations	13,433,874	15,348,310	10,923,162	4,125,915	2,753,595

- (1) We acquired SolarCity Corporation (“SolarCity”) on November 21, 2016. SolarCity’s financial positions have been included in our financial positions from the acquisition date. See Note 3, *Business Combinations*, of the notes to the consolidated financial statements for additional information regarding this transaction.
- (2) Includes the impact of the adoption of the new revenue recognition accounting standard in 2018. Prior periods have not been revised. See Note 2, *Summary of Significant Accounting Policies*, of the notes to the consolidated financial statements for further details.

## **ITEM 7. MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS**

*The following discussion and analysis should be read in conjunction with the consolidated financial statements and the related notes included elsewhere in this Annual Report on Form 10-K.*

### **Overview and 2018 Highlights**

Our mission is to accelerate the world's transition to sustainable energy. We design, develop, manufacture, lease and sell high-performance fully electric vehicles, solar energy generation systems and energy storage products. We also offer maintenance, installation, operation and other services related to our products.

#### *Automotive*

Our production vehicle fleet includes our Model S premium sedan and our Model X SUV, which are our highest-performance vehicles, and our Model 3, a lower-priced sedan designed for the mass market. We continue to enhance our vehicle offerings with enhanced Autopilot options, internet connectivity and free over-the-air software updates to provide additional safety, convenience and performance features. In addition, we have several future electric vehicles in our product pipeline, including Model Y, Tesla Semi, a pickup truck and a new version of the Tesla Roadster.

In 2018, we continued to scale our automotive operations, particularly our ramp of Model 3, and achieved total production of 254,530 vehicles and delivered 245,506 vehicles, representing year-over-year increases of approximately 152% and 138%, respectively.

#### *Energy Generation and Storage*

We lease and sell retrofit solar energy systems and sell renewable energy and energy storage products to our customers, and are ramping our Solar Roof product that combines solar energy generation with attractive, integrated styling. Our energy storage products, which we manufacture at Gigafactory 1, consist of Powerwall, mostly for residential applications, and Powerpack, for commercial, industrial and utility-scale applications.

During 2018, we deployed 1.04 GWh of energy storage products, nearly tripling our 358 MWh of energy storage deployments during 2017. We also deployed 326 megawatts ("MW") of solar energy generation during 2018.

### **Management Opportunities, Challenges and Risks and 2019 Outlook**

#### *Automotive Demand, Production and Deliveries*

Our goal is to produce the world's highest quality vehicles as quickly and as cost-effectively as possible with a priority on workplace health and safety. The worldwide automotive markets for alternative fuel vehicles and self-driving technology are highly competitive and we expect them to become even more so. A growing number of companies, including established automakers, have announced plans to expand, and in some cases fully transition to, production of electric or environmentally friendly vehicles, and/or to develop self-driving technologies. However, we believe that the unique features of our vehicles, the safety aspects of each of our vehicles, our constant innovation, our growing brand, the increased affordability introduced with Model 3, the innovation and expansion of our global retail, service and charging operations and infrastructure and our future vehicles will continue to generate incremental demand for our vehicles by making our vehicles accessible to larger and previously untapped consumer and commercial markets.

Model 3 was the best-selling premium vehicle in the United States in 2018. Vehicles traded in to us by Model 3 customers continue to suggest the existence of a wider addressable market for this vehicle than existing owners of mid-sized premium sedans. Moreover, as we have offered only the long-range, mid-range and performance variants of Model 3 thus far, we believe that we will see increased demand with the introduction of less expensive variants, such as a version with a base price of \$35,000 that we intend to offer in the future, and additional financing options. We commenced in January 2019 production of Model 3 for Europe and China, each of which we believe has a much larger mid-sized premium sedan market than North America, where we have exclusively delivered Model 3 to date. We also believe that we have an advantage over our competitors with respect to our battery and powertrain technology, as our vehicles' EPA-rated range per kWh is expected to be superior to that of other electric vehicles to be introduced in the near term, and we have the ability to improve our vehicles through over-the-air software updates. We are producing variants (including regional versions) of Model 3 in accordance with the demand that we expect for them, however, and we have finite production capabilities with long lead times associated with procuring certain parts. If our Model 3 demand expectations prove inaccurate or we experience delays in introducing planned additional variants, including as we begin offering Model 3 in new markets, we may not be able to timely generate sales matched to the specific vehicles that we have the capacity to produce. We may also be impacted by trade policies, political uncertainty and economic cycles involving geographic regions where we have significant operations. Sales of vehicles in the automotive industry also tend to be cyclical in many markets, which may expose us to increased volatility as we expand and adjust our operations and retail strategies. In addition, the federal tax credit for the purchase of a qualified electric vehicle in the U.S. was reduced to \$3,750 for any Tesla vehicle delivered during the first or second quarter of 2019, and will be further reduced to \$1,875 for each Tesla vehicle delivered in the third or fourth quarter of 2019 and to \$0 for each Tesla vehicle delivered thereafter. We believe that this phase-out likely pulled forward some vehicle demand into 2018 and could create similar pull-forwards in 2019 before each further step reduction in the federal tax credit. In the long run, we do not expect a meaningful impact to our sales in the U.S., as we believe that each of our vehicle models offers a compelling proposition even without incentives. Globally, we are also working to, and in some cases have already begun to, increase the value proposition and affordability of our offerings to customers and offer other financing arrangements over time. For example, we intend to introduce leasing options for Model 3.

Our Model 3 production ramped dramatically during 2018, and we expect to continue to grow Model 3 production to a sustained rate of 7,000 vehicles per week at our Tesla Factory by the end of 2019 as we ramp international deliveries. We remain focused on further cost improvements and on increasing the affordability of Model 3. Furthermore, in January 2019 we commenced construction of our Gigafactory Shanghai in China. We expect to build a production process that is optimized and simplified for Model 3 production, comprised of stamping, body joining and paint shops and general assembly, at Gigafactory Shanghai to begin production of certain trims of Model 3 for China by the end of 2019. We believe that the efficiencies of local production, as well as avoiding certain tariffs on U.S.-manufactured vehicles, will allow us to offer Model 3 at a lower average selling price in the largest market for electric vehicles in the world. Inclusive of Gigafactory Shanghai, our goal is to be able to produce 10,000 Model 3 vehicles per week on a sustained basis, and an annualized output rate in excess of 500,000 Model 3 vehicles sometime between the fourth quarter of 2019 and the second quarter of 2020. However, the timeframe for Gigafactory Shanghai is subject to a number of uncertainties, including regulatory approval, supply chain constraints, and the pace of installing production equipment and bringing the factory online. Ultimately, achieving increased Model 3 production cost-effectively will require that we timely address any additional bottlenecks that may arise as we continue to ramp, and establish sustained supplier capacity, including locally at Gigafactory Shanghai.

We also recently discontinued new custom orders for the 75 kWh versions of Model S and Model X to focus on longer range versions of our highest-performance flagship vehicles and further differentiate them from Model 3. We have gradually increased the level of option standardization across these models, and this latest step and our increasing production efficiency have allowed us to reduce the production hours for them while preserving the flexibility to increase output as necessary. As Model S and Model X are produced in the U.S., for the foreseeable future we could be impacted by increased import duties on components sourced from China, as well as by tariffs on vehicles exported to China, although we intend to partially divert such deliveries to North America and Europe, if necessary.



Advancing our customer-facing infrastructure remains a top priority. Delivering vehicles to our customers and the related logistics were challenging during 2018, but we continue to improve these processes to maximize customer satisfaction, including by purchasing our own car-hauling trucks. We are also expanding our servicing capabilities for our rapidly growing customer vehicle fleet, including by growing our service locations and Mobile Service fleet, moving to two-shift operations at service centers where needed, and optimizing our parts distribution network. We are also updating the Tesla mobile app for scheduling service appointments in order to increase customer convenience. As sales of Tesla vehicles ramp further, we plan to continue to open new Tesla retail locations, service centers and body shops around the world, and we plan to continue to expand our Mobile Service fleet. We also plan to continue to significantly increase the number of Superchargers and Destination Charging connectors globally, as well as evolve our Supercharger technology to enable faster charging times while reducing our related costs. However, we will have to stabilize and sustain our delivery and logistics model to deliver an increasing number of vehicles, and we have only limited experience with this at scale, particularly in markets outside of North America. Moreover, if our growing fleet of customer vehicles, particularly Model 3, experiences unexpected reliability issues, it could overburden our servicing capabilities.

Finally, we are making progress with our self-driving technology, as well as the Autopilot features in our vehicles. Our neural net and functionality continue to improve, and we frequently release minor software updates and from time to time release key version updates. Recently, we launched a “Navigate on Autopilot” feature that allows enabled Tesla vehicles under appropriate circumstances and driver input to change lanes, transition between freeways and exit freeways. While we are subject to regulatory constraints over which we have no control, our ultimate goal is to achieve full autonomy. Additionally, there is growing competition from other automobile and technology companies in the area of self-driving.

#### *Energy Generation and Storage Demand, Production and Deployment*

We are continuing to reduce customer acquisition costs of our energy generation products, transitioning away from former channel partners and shifting our sales strategy significantly to sell these products in Tesla stores and on our website and through cross-selling opportunities to our expanding base of vehicle owners. As we continue to implement this strategy, we expect that our retrofit solar system deployments will decrease slightly before stabilizing and growing in the second half of the year, including through cross-selling opportunities to our expanding base of vehicle owners. Our emphasis for retrofit solar products remains on executing projects for upfront cash generation and profitability, rather than absolute volume growth, such as by reducing the mix of leased systems and prioritizing residential installations that are combined with our energy storage products.

We are continuing with the design iterations and testing on our Solar Roof product, and we are continuing installations at a slow pace with the expectation that we will ramp production with significantly improved manufacturing capabilities during 2019.

We expect our energy storage products to continue to experience significant growth, and we are targeting to more than double our deployments to over 2 GWh in 2019. We see opportunities in North America as well as in Australia and Europe, where energy storage coupled with solar generation may mitigate typically higher electricity rates, as well as for projects to increase energy grid reliability. We are continuing to ramp production for these products at Gigafactory 1, including through a new production line, and we have seen further manufacturing efficiencies and improvements in our installation processes as we ramp.

#### *Trends in Cash Flow, Capital Expenditures and Operating Expenses*

Capital expenditures in 2019 are projected to be approximately \$2.5 billion, mostly to support increases in Model 3 production capacity at Gigafactory 1 and the Tesla Factory, the establishment of Model 3 production capacity at Gigafactory Shanghai, and the addition of manufacturing capacity for Model Y, which we intend to produce in volume by the end of 2020, as well as the ongoing expansion of our retail locations, service centers, body shops, Mobile Service fleet, and Supercharger stations.

Generally, we expect operating expenses as a percentage of revenue to continue to decrease in the future due to increases in expected revenues and as we focus on increasing operational efficiency. In addition, due to our cost management efforts to maximize operational efficiency, we expect operating expenses in 2019 to grow by less than 10% from 2018.

In March 2018, our stockholders approved a new 10-year CEO performance award for Elon Musk with vesting contingent on achieving market capitalization and operational milestones (the “2018 CEO Performance Award”). Consequently, we may incur significant additional non-cash stock-based compensation expense over the term of the award as each operational milestone becomes probable of vesting.

#### *Automotive Financing Options*

We offer financing arrangements for our vehicles in certain markets in North America, Europe and Asia primarily through various financial institutions. We offer resale value guarantees or similar buy-back terms to certain customers who purchase vehicles and who finance their vehicles through one of our specified commercial banking partners. We also offer resale value guarantees in connection with automotive sales to certain leasing partners. Currently, both programs are available only in certain international markets. Resale value guarantees available for exercise within the 12 months following December 31, 2018 totaled \$149.7 million in value.

We have adopted the new revenue recognition standard ASC 606 effective January 1, 2018. This impacts the way we account for vehicle sales with a resale value guarantee and vehicles leased through our leasing partners, which now generally qualify to be accounted for as sales with a right of return. In addition, for certain vehicles sales with a resale value guarantee and vehicles leased through leasing partners prior to 2018, we have ceased recognizing lease revenue starting in 2018 and record the associated cumulative adjustment to equity under the modified retrospective approach.

Vehicle deliveries with the resale value guarantee do not impact our near-term cash flows and liquidity, since we receive the full amount of cash for the vehicle sales price at delivery. While we do not assume any credit risk related to the customer, if a customer exercises the option to return the vehicle to us, we are exposed to liquidity risk that the resale value of vehicles under these programs may be lower than our guarantee, or the volume of vehicles returned to us may be higher than our estimates or we may be unable to resell the used vehicles in a timely manner, all of which could adversely impact our cash flows. To date, we have only had an insignificant number of customers who exercised their resale value guarantees and returned their vehicles to us. Based on current market demand for our vehicles, we estimate the resale prices for our vehicles will continue to be above our resale value guarantee amounts, but resale prices may inherently fluctuate depending on various factors such as supply and demand of our used vehicles, economic cycles and the pricing of new vehicles. Should market values of our vehicles or customer demand decrease, these estimates may be impacted materially.

We currently offer Model S and Model X leasing directly through our local subsidiaries in the U.S. and Canada. We also offer leasing through leasing partners in certain jurisdictions. Leasing through our captive financing entities and our leasing partners exposes us to residual value risk. In addition, for leases offered directly from our captive financing entities, we assume customer credit risk. We plan to continue expanding our financing offerings, including our lease financing options and the financial sources to support them, and to support the overall financing needs of our customers. To the extent that we are unable to arrange such options for our customers on terms that are attractive, our sales, financial results and cash flows could be negatively impacted.

#### *Energy Generation and Storage Financing Options*

We offer our customers the choice to either purchase and own solar energy systems or to purchase the energy that our solar energy systems produce through various contractual arrangements. These contractual arrangements include long-term leases and PPAs. In both structures, we install our solar energy systems at our customer’s premises and charge the customer a monthly fee. In the lease structure, this monthly payment is fixed with a minimum production guarantee. In the PPA structure, we charge customers a fee per kilowatt-hour, or kWh, based on the amount of electricity the solar energy system actually produces. The leases and PPAs are typically for 20 years with a renewal option, and the specified monthly fees are subject to annual escalations.

For customers who want to purchase and own solar energy systems, we also offer solar loans, whereby a third-party lender provides financing directly to a qualified customer to enable the customer to purchase and own a solar energy system designed, installed and serviced by us. We enter into a standard solar energy system sale and installation agreement with the customer. Separately, the customer enters into a loan agreement with a third-party lender, who finances the full purchase price. We are not a party to the loan agreement between the customer and the third-party lender, and the third-party lender has no recourse against us with respect to the loan.

### *Gigafactory 1*

We continue to develop Gigafactory 1 as a facility where we work together with our suppliers to integrate production of battery material, cells, modules, battery packs and drive units in one location for vehicles and energy storage products. We also continue to invest in the future expansion of Gigafactory 1 and in additional production capacity there. For example, we have announced that we will likely manufacture Model Y at Gigafactory 1.

Panasonic has partnered with us on Gigafactory 1 with investments in the production equipment that it uses to manufacture and supply us with battery cells. Under our arrangement with Panasonic, we plan to purchase the full output from their production equipment at negotiated prices. As these terms convey to us the right to use, as defined in ASC 840, *Leases*, their production equipment, we consider them to be leased assets when production commences. This results in us recording the value of their production equipment within property, plant and equipment, net, on the consolidated balance sheets with a corresponding liability recorded to financing obligations. For all suppliers and partners for which we plan to purchase the full output from their production equipment located at Gigafactory 1, we will apply similar accounting. During the year ended December 31, 2018, we recorded \$766.6 million on the consolidated balance sheet.

While we currently believe that our progress at Gigafactory 1 will allow us to reach our production targets, our ultimate ability to do so will require us to resolve the types of challenges that are typical of a production ramp. For example, we have in the past experienced bottlenecks in the assembly of battery modules at Gigafactory 1, which negatively affected our production of Model 3. While we continue to resolve such issues at Gigafactory 1 as they arise, given the size and complexity of this undertaking, it is possible that future events could result in the cost of building and operating Gigafactory 1 exceeding our current expectations and Gigafactory 1 taking longer to expand than we currently anticipate.

### *Gigafactory 2*

We have an agreement with the SUNY Foundation for the construction of a factory with the intended capacity to produce at least 1.0 GW of solar products annually in Buffalo, New York, referred to as Gigafactory 2. In December 2016, we entered into an agreement with Panasonic under which it manufactures custom PV cells and modules for us, primarily at Gigafactory 2, and we purchase certain quantities of PV cells and modules from Panasonic during the 10-year term.

The terms of our agreement with the SUNY Foundation require us to comply with a number of covenants, and any failure to comply with these covenants could obligate us to pay significant amounts to the SUNY Foundation and result in termination of the agreement. Although we remain on track with our progress at Gigafactory 2, our expectations as to the cost of building the facility, acquiring manufacturing equipment and supporting our manufacturing operations may prove incorrect, which could subject us to significant expenses to achieve the desired benefits.

### *Gigafactory Shanghai*

We are constructing Gigafactory Shanghai in order to significantly increase the affordability of Model 3 for customers in China by reducing transportation and manufacturing costs and eliminating certain tariffs on vehicles imported from the U.S. We broke ground in January 2019, and subject to a number of uncertainties, including regulatory approval, supply chain constraints, and the pace of installing production equipment and bringing the factory online, we expect to begin production of certain trims of Model 3 at Gigafactory Shanghai by the end of 2019. We expect much of the investment in Gigafactory Shanghai to be provided through local debt financing, supported by limited direct capital expenditures by us. Moreover, we are targeting the capital expenditures per unit of production capacity at this factory to be less than that of our Model 3 production at the Tesla Factory, from which we have drawn learnings that should allow us to simplify our manufacturing layout and processes at Gigafactory Shanghai.

### *Other Manufacturing*

We continue to expand production capacity at our existing facilities and construct our planned facilities, and continually explore additional production capacity internationally.

## Critical Accounting Policies and Estimates

The consolidated financial statements are prepared in accordance with accounting principles generally accepted in the U.S. (“GAAP”). The preparation of the consolidated financial statements requires us to make estimates and assumptions that affect the reported amounts of assets, liabilities, revenues, costs and expenses and related disclosures. We base our estimates on historical experience, as appropriate, and on various other assumptions that we believe to be reasonable under the circumstances. Changes in the accounting estimates are reasonably likely to occur from period to period. Accordingly, actual results could differ significantly from the estimates made by our management. We evaluate our estimates and assumptions on an ongoing basis. To the extent that there are material differences between these estimates and actual results, our future financial statement presentation, financial condition, results of operations and cash flows will be affected. We believe that the following critical accounting policies involve a greater degree of judgment and complexity than our other accounting policies. Accordingly, these are the policies we believe are the most critical to understanding and evaluating the consolidated financial condition and results of operations.

### *Revenue Recognition*

#### *Adoption of new revenue standard*

On January 1, 2018, we adopted ASC 606, Revenue from Contracts with Customers, (“new revenue standard”) using the modified retrospective method. The new revenue standard had a material impact in our consolidated financial statements. For further discussion, refer to Note 2, *Summary of Significant Accounting Policies*, to the consolidated financial statements included elsewhere in this Annual Report on Form 10-K.

#### *Automotive Segment*

##### Automotive Sales Revenue

##### Automotive Sales without Resale Value Guarantee

Automotive sales revenue includes revenues related to deliveries of new vehicles, and specific other features and services that meet the definition of a performance obligation under the new revenue standard, including access to our Supercharger network, internet connectivity, Autopilot, full self-driving and over-the-air software updates. We recognize revenue on automotive sales upon delivery to the customer, which is when the control of a vehicle transfers. Payments are typically received at the point control transfers or in accordance with payment terms customary to the business. Other features and services such as access to our Supercharger network, internet connectivity and over-the-air software updates are provisioned upon control transfer of a vehicle and recognized over time on a straight-line basis as we have a stand-ready obligation to deliver such services to the customer. We recognize revenue related to these other features and services over the performance period, which is generally the expected ownership life of the vehicle or the eight-year life of the vehicle. Revenue related to Autopilot and full self-driving features is recognized when functionality is delivered to the customer. For our obligations related to automotive sales, we estimate standalone selling price by considering costs used to develop and deliver the service, third-party pricing of similar options and other information that may be available.

At the time of revenue recognition, we reduce the transaction price and record a reserve against revenue for estimated variable consideration related to future product returns. Such estimates are based on historical experience and are immaterial in all periods presented. In addition, any fees that are paid or payable by us to a customer’s lender when we arrange the financing are recognized as an offset against automotive sales revenue.

Costs to obtain a contract mainly relate to commissions paid to our sales personnel for the sale of vehicles. Commissions are not paid on other obligations such as access to our Supercharger network, internet connectivity, Autopilot, full self-driving and over-the-air software updates. As our contract costs related to automotive sales are typically fulfilled within one year, the costs to obtain a contract are expensed as incurred. Amounts billed to customers related to shipping and handling are classified as automotive revenue, and we have elected to recognize the cost for freight and shipping when control over vehicles, parts, or accessories have transferred to the customer as an expense in cost of revenues. Our policy is to exclude taxes collected from a customer from the transaction price of automotive contracts.

#### Automotive Sales with Resale Value Guarantee

We offer resale value guarantees or similar buy-back terms to certain international customers who purchase vehicles and who finance their vehicles through one of our specified commercial banking partners. We also offer resale value guarantees in connection with automotive sales to certain leasing partners. Under these programs, we receive full payment for the vehicle sales price at the time of delivery and our counterparty has the option of selling their vehicle back to us during the guarantee period, which currently is generally at the end of the term of the applicable loan or financing program, for a pre-determined resale value.

With the exception of two programs which are discussed within the *Automotive Leasing* section, we now recognize revenue when control transfers upon delivery to customers in accordance with the new revenue standard as a sale with a right of return as we do not believe the customer has a significant economic incentive to exercise the resale value guarantee provided to them. The process to determine whether there is a significant economic incentive includes a comparison of a vehicle's estimated market value at the time the option is exercisable with the guaranteed resale value to determine the customer's economic incentive to exercise. The performance obligations and the pattern of recognizing automotive sales with resale value guarantees are consistent with automotive sales without resale value guarantees with the exception of our estimate for sales return reserve. Sales return reserves for automotive sales with resale value guarantees are estimated based on historical experience plus consideration for expected future market values. The two programs that are still being recorded as operating leases are discussed in further detail below in *Vehicle Sales to Leasing Partners with a Resale Value Guarantee and a Buyback Option* and *Vehicle Sales to Customers with a Resale Value Guarantee where Exercise is Probable*.

Prior to the adoption of the new revenue standard, all transactions with resale value guarantees were recorded as operating leases. The amount of sale proceeds equal to the resale value guarantee was deferred until the guarantee expired or was exercised. For certain transactions that were considered interest bearing collateralized borrowings as required under ASC 840, *Leases*, we also accrued interest expense based on our borrowing rate. The remaining sale proceeds were deferred and recognized on a straight-line basis over the stated guarantee period to automotive leasing revenue. The guarantee period expired at the earlier of the end of the guarantee period or the pay-off of the initial loan. We capitalized the cost of these vehicles on the consolidated balance sheet as operating lease vehicles, net, and depreciated their value, less estimated residual value, to cost of automotive leasing revenue over the same period.

In cases where our counterparty retained ownership of the vehicle at the end of the guarantee period, the resale value guarantee liability and any remaining deferred revenue balances related to the vehicle were settled to automotive leasing revenue, and the net book value of the leased vehicle was expensed to cost of automotive leasing revenue. If our counterparty returned the vehicle to us during the guarantee period, we purchased the vehicle from our counterparty in an amount equal to the resale value guarantee and settled any remaining deferred balances to automotive leasing revenue, and we reclassified the net book value of the vehicle on the consolidated balance sheet to used vehicle inventory.

#### Automotive Regulatory Credits

California and certain other states have laws in place requiring vehicle manufacturers to ensure that a portion of the vehicles delivered for sale in that state during each model year are zero-emission vehicles. These laws and regulations provide that a manufacturer of zero-emission vehicles may earn regulatory credits ("ZEV credits") and may sell excess credits to other manufacturers who apply such credits to comply with these regulatory requirements. Similar regulations exist at the federal level that require compliance related to greenhouse gas ("GHG") emissions and also allow for the sale of excess credits by one manufacturer to other manufacturers. As a manufacturer solely of zero-emission vehicles, we have earned emission credits, such as ZEV and GHG credits, on our vehicles, and we expect to continue to earn these credits in the future. We enter into contractual agreements with third-parties to purchase our regulatory credits. Payments for regulatory credits are typically received at the point control transfers to the customer, or in accordance with payment terms customary to the business. We recognize revenue on the sale of regulatory credits at the time control of the regulatory credits is transferred to the purchasing party as automotive revenue in the consolidated statement of operations.

### Automotive Leasing Revenue

Automotive leasing revenue includes revenue recognized under lease accounting guidance for our direct leasing programs as well as the two programs with resale value guarantees which continue to qualify for operating lease treatment. Prior to the adoption of the new revenue standard, all programs with resale value guarantees were accounted for as operating leases.

### Direct Vehicle Leasing Program

We have outstanding leases under our direct vehicle leasing programs in certain locations in the U.S., Canada and Europe. Currently, the direct vehicle leasing program is only offered for new leases to qualified customers in the U.S. and Canada. Qualifying customers are permitted to lease a vehicle directly from Tesla for up to 48 months. At the end of the lease term, customers have the option of either returning the vehicle to us or purchasing it for a pre-determined residual value. We account for these leasing transactions as operating leases. We record leasing revenues to automotive leasing revenue on a straight-line basis over the contractual term, and we record the depreciation of these vehicles to cost of automotive leasing revenue.

We capitalize shipping costs and initial direct costs such as the incremental cost of contract administration, referral fees and sales commissions from the origination of automotive lease agreements as an element of operating lease vehicles, net, and subsequently amortize these costs over the term of the related lease agreement. Our policy is to exclude taxes collected from a customer from the transaction price of automotive contracts.

### Vehicle Sales to Leasing Partners with a Resale Value Guarantee and a Buyback Option

We offer buyback options in connection with automotive sales with resale value guarantees to certain leasing partner sales in the United States. These transactions entail a transfer of leases, which we have originated with an end-customer, to our leasing partner. As control of the vehicles has not been transferred in accordance with the new revenue standard, these transactions continue to be accounted for as interest bearing collateralized borrowings in accordance with ASC 840, *Leases*. Under this program, cash is received for the full price of the vehicle and the collateralized borrowing value is generally recorded within resale value guarantees and the customer upfront deposit is recorded within deferred revenue. We amortize the deferred revenue amount to automotive leasing revenue on a straight-line basis over the option period and accrue interest expense based on our borrowing rate. We capitalize vehicles under this program to operating lease vehicles, net, on the consolidated balance sheet, and we record depreciation from these vehicles to cost of automotive leasing revenue during the period the vehicle is under a lease arrangement. Cash received for these vehicles, net of revenue recognized during the period, is classified as collateralized lease (repayments) borrowings within cash flows from financing activities in the consolidated statement of cash flows.

At the end of the lease term, we settle our liability in cash by either purchasing the vehicle from the leasing partner for the buyback option amount or paying a shortfall to the option amount the leasing partner may realize on the sale of the vehicle. Any remaining balances within deferred revenue and resale value guarantee will be settled to automotive leasing revenue. In cases where the leasing partner retains ownership of the vehicle after the end of our option period, we expense the net value of the leased vehicle to cost of automotive leasing revenue.

On a quarterly basis, we assess the estimated market values of vehicles under our buyback options program to determine if we have sustained a loss on any of these contracts. As we accumulate more data related to the buyback values of our vehicles or as market conditions change, there may be material changes to their estimated values, although we have not experienced any material losses during any period to date.

#### Vehicle Sales to Customers with a Resale Value Guarantee where Exercise is Probable

For certain international programs where we have offered resale value guarantees to certain customers who purchased vehicles and where we expect the customer has a significant economic incentive to exercise the resale value guarantee provided to them, we continue to recognize these transactions as operating leases. The process to determine whether there is a significant economic incentive includes a comparison of a vehicle's estimated market value at the time the option is exercisable with the guaranteed resale value to determine the customer's economic incentive to exercise. We have not sold any vehicles under this program since the first half of 2017 and all current period activity relates to the exercise or cancellation of active transactions. The amount of sale proceeds equal to the resale value guarantee is deferred until the guarantee expires or is exercised. The remaining sale proceeds are deferred and recognized on a straight-line basis over the stated guarantee period to automotive leasing revenue. The guarantee period expires at the earlier of the end of the guarantee period or the pay-off of the initial loan. We capitalize the cost of these vehicles on the consolidated balance sheet as operating lease vehicles, net, and depreciate their value, less salvage value, to cost of automotive leasing revenue over the same period.

In cases where a customer retains ownership of a vehicle at the end of the guarantee period, the resale value guarantee liability and any remaining deferred revenue balances related to the vehicle are settled to automotive leasing revenue, and the net book value of the leased vehicle is expensed to cost of automotive leasing revenue. If a customer returns the vehicle to us during the guarantee period, we purchase the vehicle from the customer in an amount equal to the resale value guarantee and settle any remaining deferred balances to automotive leasing revenue, and we reclassify the net book value of the vehicle on the consolidated balance sheet to used vehicle inventory.

#### Services and Other Revenue

Services and other revenue consists of non-warranty after-sales vehicle services, sales of used vehicles, sales of electric vehicle components and systems to other manufacturers, retail merchandise, and sales by our acquired subsidiaries to third party customers. There were no significant changes to the timing or amount of revenue recognition as a result of our adoption of the new revenue standard.

Revenues related to repair and maintenance services are recognized over time as services are provided and extended service plans are recognized over the performance period of the service contract as the obligation represents a stand-ready obligation to the customer. We sell used vehicles, services, service plans, vehicle components and merchandise separately and thus use standalone selling prices as the basis for revenue allocation to the extent that these items are sold in transactions with other performance obligations. Payment for used vehicles, services, and merchandise are typically received at the point when control transfers to the customer or in accordance with payment terms customary to the business. Payments received for prepaid plans are refundable upon customer cancellation of the related contracts and are included within customer deposits on the consolidated balance sheet.

#### Energy Generation and Storage Segment

##### Energy Generation and Storage Sales

Energy generation and storage revenues consists of the sale of solar energy systems and energy storage systems to residential, small commercial, and large commercial and utility grade customers. Sales of solar energy systems to residential and small scale commercial customers consist of the engineering, design, and installation of the system. Post-installation, residential and small scale commercial customers receive a proprietary monitoring system that captures and displays historical energy generation data. Residential and small scale commercial customers pay the full purchase price of the solar energy system upfront. Revenue for the design and installation obligation is recognized when control transfers, which is when we install a solar energy system and the system passes inspection by the utility or the authority having jurisdiction. Revenue for the monitoring service is recognized ratably as a stand-ready obligation over the warranty period of the solar energy system. Sales of energy storage systems to residential and small scale commercial customers consist of the installation of the energy storage system and revenue is recognized when control transfers, which is when the product has been delivered or, if we are performing installation, when installed and accepted by the customer. Payment for such storage systems is made upon invoice or in accordance with payment terms customary to the business.

For large commercial and utility grade solar energy system and energy storage system sales which consist of the engineering, design, and installation of the system, customers make milestone payments that are consistent with contract-specific phases of a project. Revenue from such contracts is recognized over time using percentage of completion method based on cost incurred as a percentage of total estimated contract costs. Certain large-scale commercial and utility grade solar energy system and energy storage system sales also include operations and maintenance service which are negotiated with the design and installation contracts and are thus considered to be a combined contract with the design and installation service. For certain large commercial and utility grade solar energy systems and energy storage systems where percentage of completion method does not apply, revenue is recognized when control transfers, which is when the product has been delivered to the customer for energy storage systems and when the project has received permission to operate from the utility for solar energy systems. Operations and maintenance service revenue is recognized ratably over the respective contract term. Customer payments for such services are usually paid annually or quarterly in advance.

In instances where there are multiple performance obligations in a single contract, we allocate the consideration to the various obligations in the contract based on the relative standalone selling price method. Standalone selling prices are estimated based on estimated costs plus margin or using market data for comparable products. Costs incurred on the sale of residential installations before the solar energy systems are completed are included as work in process within inventory in the consolidated balance sheets. However, any fees that are paid or payable by us to a solar loan lender would be recognized as an offset against revenue. Costs to obtain a contract relate mainly to commissions paid to our sales personnel related to the sale of solar energy systems and energy storage systems. As our contract costs related to solar energy system and energy storage system sales are typically fulfilled within one year, the costs to obtain a contract are expensed as incurred.

As part of our solar energy system and energy storage system contracts, we may provide the customer with performance guarantees that warrant that the underlying system will meet or exceed the minimum energy generation or retention requirements specified in the contract. In certain instances, we may receive a bonus payment if the system performs above a specified level. Conversely, if a solar energy system or energy storage system does not meet the performance guarantee requirements, we may be required to pay liquidated damages. Other forms of variable consideration related to our large commercial and utility grade solar energy system and energy storage system contracts include variable customer payments that will be made based on our energy market participation activities. Such guarantees and variable customer payments represent a form of variable consideration and are estimated at contract inception at their most likely amount and updated at the end of each reporting period as additional performance data becomes available. Such estimates are included in the transaction price only to the extent that it is probable a significant reversal of revenue will not occur.

We record as deferred revenue any non-refundable amounts that are collected from customers related to fees charged for prepayments and remote monitoring service and operations and maintenance service, which is recognized as revenue ratably over the respective customer contract term.

#### Energy Generation and Storage Leasing

For revenue arrangements where we are the lessor under operating lease agreements for energy generation and storage products, we record lease revenue from minimum lease payments, including upfront rebates and incentives earned from such systems, on a straight-line basis over the life of the lease term, assuming all other revenue recognition criteria have been met. The difference between the payments received and the revenue recognized is recorded as deferred revenue on the consolidated balance sheet.

For solar energy systems where customers purchase electricity from us under PPAs, we have determined that these agreements should be accounted for as operating leases pursuant to ASC 840. Revenue is recognized based on the amount of electricity delivered at rates specified under the contracts, assuming all other revenue recognition criteria are met.

We record as deferred revenue any amounts that are collected from customers, including lease prepayments, in excess of revenue recognized and operations and maintenance service, which is recognized as revenue ratably over the respective customer contract term. Deferred revenue also includes the portion of rebates and incentives received from utility companies and various local and state government agencies, which is recognized as revenue over the lease term.



We capitalize initial direct costs from the origination of solar energy system leases or PPAs, which include the incremental cost of contract administration, referral fees and sales commissions, as an element of solar energy systems, leased and to be leased, net, and subsequently amortize these costs over the term of the related lease or PPA.

#### *Inventory Valuation*

Inventories are stated at the lower of cost or net realizable value. Cost is computed using standard cost for vehicles and energy storage products, which approximates actual cost on a first-in, first-out basis. In addition, cost for solar energy systems is recorded using actual cost. We record inventory write-downs for excess or obsolete inventories based upon assumptions about on current and future demand forecasts. If our inventory on-hand is in excess of our future demand forecast, the excess amounts are written-off.

We also review our inventory to determine whether its carrying value exceeds the net amount realizable upon the ultimate sale of the inventory. This requires us to determine the estimated selling price of our vehicles less the estimated cost to convert the inventory on-hand into a finished product. Once inventory is written-down, a new, lower cost basis for that inventory is established and subsequent changes in facts and circumstances do not result in the restoration or increase in that newly established cost basis.

Should our estimates of future selling prices or production costs change, additional and potentially material increases to this reserve may be required. A small change in our estimates may result in a material charge to our reported financial results.

#### *Warranties*

We provide a manufacturer's warranty on all new and used vehicles, production powertrain components and systems and energy storage products we sell. In addition, we also provide a warranty on the installation and components of the solar energy systems we sell for periods typically between 10 to 30 years. We accrue a warranty reserve for the products sold by us, which includes our best estimate of the projected costs to repair or replace items under warranties and recalls when identified. These estimates are based on actual claims incurred to date and an estimate of the nature, frequency and costs of future claims. These estimates are inherently uncertain given our relatively short history of sales, and changes to our historical or projected warranty experience may cause material changes to the warranty reserve in the future. The warranty reserve does not include projected warranty costs associated with our vehicles subject to lease accounting and our solar energy systems under lease contracts or PPAs, as the costs to repair these warranty claims are expensed as incurred. The portion of the warranty reserve expected to be incurred within the next 12 months is included within accrued liabilities and other while the remaining balance is included within other long-term liabilities on the consolidated balance sheet. Due to the adoption of the new revenue standard, automotive sales with resale value guarantees that were previously recorded within operating lease assets require a corresponding warranty accrual. Warranty expense is recorded as a component of cost of revenues in the consolidated statements of operations.

#### *Stock-Based Compensation*

We use the fair value method of accounting for our stock options and restricted stock units ("RSUs") granted to employees and our employee stock purchase plan (the "ESPP") to measure the cost of employee services received in exchange for the stock-based awards. The fair value of stock option awards with only service conditions and ESPP is estimated on the grant or offering date using the Black-Scholes option-pricing model. The Black-Scholes option-pricing model requires inputs such as the risk-free interest rate, expected term and expected volatility. These inputs are subjective and generally require significant judgment. The fair value of RSUs is measured on the grant date based on the closing fair market value of our common stock. The resulting cost is recognized over the period during which an employee is required to provide service in exchange for the awards, usually the vesting period, which is generally four years for stock options and RSUs and six months for the ESPP. Stock-based compensation expense is recognized on a straight-line basis, net of actual forfeitures in the period (prior to 2017, net of estimated projected forfeitures).

For performance-based awards, stock-based compensation expense is recognized over the expected performance achievement period of individual performance milestones when the achievement of each individual performance milestone becomes probable. For performance-based awards with a vesting schedule based entirely on the attainment of both performance and market conditions, stock-based compensation expense is recognized for each pair of performance and market conditions over the longer of the expected achievement period of the performance and market conditions, beginning at the point in time that the relevant performance condition is considered probable of achievement. The fair value of such awards is estimated on the grant date using Monte Carlo simulations.

As we accumulate additional employee stock-based awards data over time and as we incorporate market data related to our common stock, we may calculate significantly different volatilities and expected lives, which could materially impact the valuation of our stock-based awards and the stock-based compensation expense that we will recognize in future periods. Stock-based compensation expense is recorded in cost of revenues, research and development expense and selling, general and administrative expense in the consolidated statements of operations.

#### *Income Taxes*

We are subject to federal and state taxes in the U.S. and in many foreign jurisdictions. Significant judgment is required in determining our provision for income taxes, our deferred tax assets and liabilities and any valuation allowance recorded against our net deferred tax assets. We make these estimates and judgments about our future taxable income that are based on assumptions that are consistent with our future plans. Tax laws, regulations, and administrative practices may be subject to change due to economic or political conditions including fundamental changes to the tax laws applicable to corporate multinationals. The U.S., many countries in the European Union and a number of other countries are actively considering changes in this regard. As of December 31, 2018, we had recorded a full valuation allowance on our net U.S. deferred tax assets because we expect that it is more likely than not that our U.S. deferred tax assets will not be realized in the foreseeable future. Should the actual amounts differ from our estimates, the amount of our valuation allowance could be materially impacted.

Furthermore, significant judgment is required in evaluating our tax positions. In the ordinary course of business, there are many transactions and calculations for which the ultimate tax settlement is uncertain. As a result, we recognize the effect of this uncertainty on our tax attributes based on our estimates of the eventual outcome. These effects are recognized when, despite our belief that our tax return positions are supportable, we believe that it is more likely than not that those positions may not be fully sustained upon review by tax authorities. We are required to file income tax returns in the U.S. and various foreign jurisdictions, which requires us to interpret the applicable tax laws and regulations in effect in such jurisdictions. Such returns are subject to audit by the various federal, state and foreign taxing authorities, who may disagree with respect to our tax positions. We believe that our consideration is adequate for all open audit years based on our assessment of many factors, including past experience and interpretations of tax law. We review and update our estimates in light of changing facts and circumstances, such as the closing of a tax audit, the lapse of a statute of limitations or a change in estimate. To the extent that the final tax outcome of these matters differs from our expectations, such differences may impact income tax expense in the period in which such determination is made. The eventual impact on our income tax expense depends in part if we still have a valuation allowance recorded against our deferred tax assets in the period that such determination is made.

On December 22, 2017, the 2017 Tax Cuts and Jobs Act (“Tax Act”) was enacted into law making significant changes to the Internal Revenue Code. Changes include, but are not limited to, a federal corporate tax rate decrease from 35% to 21% for tax years beginning after December 31, 2017, the transition of U.S. international taxation from a worldwide tax system to a territorial system and a one-time transition tax on the mandatory deemed repatriation of foreign earnings. We were required to recognize the effect of the tax law changes in the period of enactment, such as re-measuring our U.S. deferred tax assets and liabilities as well as reassessing the net realizability of our deferred tax assets and liabilities. The Tax Act did not give rise to any material impact on the consolidated balance sheets and consolidated statements of operations due to our historical worldwide loss position and the full valuation allowance on our net U.S. deferred tax assets.

In December 2017, the Securities and Exchange Commission staff issued Staff Accounting Bulletin No. 118, Income Tax Accounting Implications of the Tax Cuts and Jobs Act (“SAB 118”), which allowed us to record provisional amounts during a measurement period not to extend beyond one year from the enactment date. As such, in accordance with SAB 118, we completed our analysis during the fourth quarter of 2018 considering current legislation and guidance resulting in no material adjustments from the provisional amounts recorded during the prior year.

#### *Principles of Consolidation*

The consolidated financial statements reflect our accounts and operations and those of our subsidiaries in which we have a controlling financial interest. In accordance with the provisions of ASC 810, *Consolidation*, we consolidate any variable interest entity (“VIE”) of which we are the primary beneficiary. We form VIEs with our financing fund investors in the ordinary course of business in order to facilitate the funding and monetization of certain attributes associated with our solar energy systems and leases under our direct vehicle leasing programs. The typical condition for a controlling financial interest ownership is holding a majority of the voting interests of an entity; however, a controlling financial interest may also exist in entities, such as VIEs, through arrangements that do not involve controlling voting interests. ASC 810 requires a variable interest holder to consolidate a VIE if that party has the power to direct the activities of the VIE that most significantly impact the VIE’s economic performance and the obligation to absorb losses of the VIE that could potentially be significant to the VIE or the right to receive benefits from the VIE that could potentially be significant to the VIE. We do not consolidate a VIE in which we have a majority ownership interest when we are not considered the primary beneficiary. We have determined that we are the primary beneficiary of a number of VIEs. We evaluate our relationships with all the VIEs on an ongoing basis to ensure that we continue to be the primary beneficiary. All intercompany transactions and balances have been eliminated upon consolidation.

#### *Noncontrolling Interests and Redeemable Noncontrolling Interests*

Noncontrolling interests and redeemable noncontrolling interests represent third-party interests in the net assets under certain funding arrangements, or funds, that we enter into to finance the costs of solar energy systems and vehicles under operating leases. We have determined that the contractual provisions of the funds represent substantive profit sharing arrangements. We have further determined that the appropriate methodology for calculating the noncontrolling interest and redeemable noncontrolling interest balances that reflects the substantive profit sharing arrangements is a balance sheet approach using the hypothetical liquidation at book value (“HLBV”) method. We, therefore, determine the amount of the noncontrolling interests and redeemable noncontrolling interests in the net assets of the funds at each balance sheet date using the HLBV method, which is presented on the consolidated balance sheet as noncontrolling interests in subsidiaries and redeemable noncontrolling interests in subsidiaries. Under the HLBV method, the amounts reported as noncontrolling interests and redeemable noncontrolling interests in the consolidated balance sheet represent the amounts the third-parties would hypothetically receive at each balance sheet date under the liquidation provisions of the funds, assuming the net assets of the funds were liquidated at their recorded amounts determined in accordance with GAAP and with tax laws effective at the balance sheet date and distributed to the third-parties. The third-parties’ interests in the results of operations of the funds are determined as the difference in the noncontrolling interest and redeemable noncontrolling interest balances in the consolidated balance sheets between the start and end of each reporting period, after taking into account any capital transactions between the funds and the third-parties. However, the redeemable noncontrolling interest balance is at least equal to the redemption amount. The redeemable noncontrolling interest balance is presented as temporary equity in the mezzanine section of the consolidated balance sheet since these third-parties have the right to redeem their interests in the funds for cash or other assets.

## Business Combinations

We account for business acquisitions under ASC 805, *Business Combinations*. The total purchase consideration for an acquisition is measured as the fair value of the assets given, equity instruments issued and liabilities assumed at the acquisition date. Costs that are directly attributable to the acquisition are expensed as incurred. Identifiable assets (including intangible assets), liabilities assumed (including contingent liabilities) and noncontrolling interests in an acquisition are measured initially at their fair values at the acquisition date. We recognize goodwill if the fair value of the total purchase consideration and any noncontrolling interests is in excess of the net fair value of the identifiable assets acquired and the liabilities assumed. We recognize a bargain purchase gain within other income (expense), net, on the consolidated statement of operations if the net fair value of the identifiable assets acquired and the liabilities assumed is in excess of the fair value of the total purchase consideration and any noncontrolling interests. We include the results of operations of the acquired business in the consolidated financial statements beginning on the acquisition date.

When determining such fair values, we make significant estimates and assumptions. Critical estimates include, but are not limited to, future expected cash flows from the underlying assets and discount rates. Our estimate of fair values is based on assumptions believed to be reasonable but that are inherently uncertain and unpredictable. As a result, actual results may differ from our estimates. Furthermore, our estimates might change as additional information becomes available, as more fully discussed in Note 3, *Business Combinations*, included elsewhere in this Annual Report on Form 10-K.

## Results of Operations

### Revenues

	Year Ended December 31,			2018 vs. 2017 Change		2017 vs. 2016 Change	
	2018	2017	2016	\$	%	\$	%
(Dollars in thousands)							
Automotive sales	\$17,631,522	\$ 8,534,752	\$ 5,589,007	\$9,096,770	107%	\$2,945,745	53%
Automotive leasing	883,461	1,106,548	761,759	(223,087)	-20%	344,789	45%
Total automotive revenues	18,514,983	9,641,300	6,350,766	8,873,683	92%	3,290,534	52%
Services and other	1,391,041	1,001,185	467,972	389,856	39%	533,213	114%
Total automotive & services and other segment revenue	19,906,024	10,642,485	6,818,738	9,263,539	87%	3,823,747	56%
Energy generation and storage segment revenue	1,555,244	1,116,266	181,394	438,978	39%	934,872	515%
Total revenues	<u>\$21,461,268</u>	<u>\$11,758,751</u>	<u>\$ 7,000,132</u>	<u>\$9,702,517</u>	83%	<u>\$4,758,619</u>	68%

### Automotive & Services and Other Segment

Automotive sales revenue includes revenues related to sale of new Model S, Model X and Model 3 vehicles, including access to our Supercharger network, internet connectivity, Autopilot, full self-driving and over-the-air software updates, as well as sales of regulatory credits to other automotive manufacturers. Our revenue from non-ZEV regulatory credits generally follows our production and delivery trends as we have long-term contracts with existing customers for the sale of these credits. However, as we do not have long-term contracts for ZEV credit sales, revenue from sale of ZEV credits fluctuate by quarter depending on when a contract is executed with a buyer. For example, our revenue from ZEV credit sales in the three months ended December 31, 2017 was \$179.1 million while it was \$0 in the three months ended June 30, 2018.

Automotive leasing revenue includes the amortization of revenue for Model S and Model X vehicles under direct lease agreements as well as those sold with resale value guarantees accounted for as operating leases under lease accounting. We do not yet offer leasing for Model 3 vehicles.

Services and other revenue consists of non-warranty after-sales vehicle services, sales of used vehicles, sales of electric vehicle components and systems to other manufacturers, retail merchandise, and sales by our acquired subsidiaries to third party customers.

## 2018 Compared to 2017

Automotive sales revenue increased \$9.10 billion, or 107%, in the year ended December 31, 2018 as compared to the year ended December 31, 2017, primarily due to an increase of approximately 144,330 Model 3 deliveries from our significant production ramp in the year ended December 31, 2018, delivered at average selling prices that remained relatively consistent year-over-year. Additionally, we recognized \$1.40 billion of additional automotive sales revenue due to the adoption of the new revenue standard and an increase of \$58.3 million in sales of regulatory credits to \$418.6 million in the year ended December 31, 2018. ZEV credits sales were \$103.4 million and non-ZEV regulatory credits sales were \$315.2 million in the year ended December 31, 2018, compared to \$279.7 million ZEV credit sales and \$80.6 million in non-ZEV regulatory credit sales in the year ended December 31, 2017. The growth in non-ZEV regulatory credits year-over-year was generally consistent with the delivery volume growth. The above increases in revenue were offset by a decrease of approximately 3,240 Model S and Model X deliveries during the year ended December 31, 2018, excluding the impact of adoption of the new revenue standard, at average selling prices that remained relatively consistent as compared to the year ended December 31, 2017.

Automotive leasing revenue decreased \$223.1 million, or 20%, in the year ended December 31, 2018 as compared to the year ended December 31, 2017. The decrease was primarily due to a downward adjustment of \$832.7 million from the adoption of the new revenue standard, partially offset by an increase in cumulative vehicles under our direct vehicle leasing program and an increase in the number of vehicles under leasing programs where our counterparty has retained ownership of the vehicle during or at the end of the guarantee period when compared to the year ended December 31, 2017. When our counterparty retains ownership, any remaining balances within deferred revenue and resale value guarantee are settled to automotive leasing revenue.

Services and other revenue increased \$389.9 million, or 39%, in the year ended December 31, 2018 as compared to the year ended December 31, 2017. The increase was primarily due to an increase in used vehicle sales from an increased volume of trade-in vehicles, partially offset by lower average selling prices for used vehicles sales due to an increase in trade-ins of relatively lower priced non-Tesla vehicles in the year ended December 31, 2018. Additionally, there was an increase in non-warranty maintenance services revenue as our fleet continues to grow. These increases were partially offset by a decrease in powertrain sales to another automobile manufacturer as we wound down the program in 2017.

## 2017 Compared to 2016

Automotive sales revenue increased \$2.95 billion, or 53%, in the year ended December 31, 2017 compared to the year ended December 31, 2016, primarily related to a 58% increase in deliveries to 80,060 vehicles resulting from increased sales of Model S and Model X, at average selling prices that remained relatively consistent as compared to the prior period, as well as sales of 1,764 Model 3 vehicles since its launch in the third quarter of 2017. Additionally, sales of regulatory credits increased by \$58.0 million to \$360.3 million in the year ended December 31, 2017. ZEV credits sales were \$279.7 million and non-ZEV regulatory credits sales were \$80.6 million in the year ended December 31, 2017, compared to \$215.4 million ZEV credit sales and \$86.9 million in non-ZEV regulatory credit sales in the year ended December 31, 2016. The increases were partially offset by additional deferrals of Autopilot 2.0 revenue in the year ended December 31, 2017.

Automotive leasing revenue increased \$344.8 million, or 45%, in the year ended December 31, 2017 compared to the year ended December 31, 2016. The increase was primarily due to an approximately 30% increase in the number of vehicles under leasing programs or programs with a resale value guarantee compared to the year ended December 31, 2016. In addition, during the year ended December 31, 2017, we recognized an increase of \$23.4 million of automotive leasing revenue upon early payoff and expiration of resale value guarantees as compared to the year ended December 31, 2016.

Service and other revenue increased \$533.2 million, or 114%, in the year ended December 31, 2017 compared to the year ended December 31, 2016. This was primarily due to an increase in used vehicle sales as a result of increased automotive sales as well as from the expansion of our trade-in program. Additionally, there was a \$41.1 million increase from the inclusion of engineering service revenue from Grohmann Engineering GmbH (now Tesla Grohmann Automation GmbH, which we acquired on January 3, 2017, and a \$68.4 million increase in non-warranty maintenance services revenue as our fleet continued to grow during the year ended December 31, 2017.

### *Energy Generation and Storage Segment*

Energy generation and storage revenue includes sale of solar energy systems and energy storage products, leasing revenue from solar energy systems under operating leases and PPAs and the sale of solar energy systems incentives.

#### 2018 Compared to 2017

Energy generation and storage revenue increased by \$439.0 million, or 39%, in the year ended December 31, 2018 as compared to the year ended December 31, 2017. The increase was primarily due to increases in deployments of Powerpack, Powerwall, and cash and loan solar energy systems projects. The increase in Powerpack revenue was significant year-over-year due to increases in revenue recognized for commercial projects, most predominantly \$81.2 million for the South Australia battery project. Additionally, we increased Powerwall production in the year ended December 31, 2018, which helped us to continue to work through our energy storage order backlog.

#### 2017 Compared to 2016

Energy generation and storage revenue increased by \$934.9 million, or 515%, in the year ended December 31, 2017 compared to the year ended December 31, 2016, predominantly due to the inclusion of the full-year of revenue from our solar business, which we gained by acquiring SolarCity on November 21, 2016.

### ***Cost of Revenues and Gross Margin***

(Dollars in thousands)	Year Ended December 31,			2018 vs. 2017 Change		2017 vs. 2016 Change	
	2018	2017	2016	\$	%	\$	%
Cost of revenues							
Automotive sales	\$ 13,685,572	\$ 6,724,480	\$ 4,268,087	\$ 6,961,092	104%	\$ 2,456,393	58%
Automotive leasing	488,425	708,224	481,994	(219,799)	-31%	226,230	47%
Total automotive cost of revenues	14,173,997	7,432,704	4,750,081	6,741,293	91%	2,682,623	56%
Services and other	1,880,354	1,229,022	472,462	651,332	53%	756,560	160%
Total automotive & services and other segment cost of revenues	16,054,351	8,661,726	5,222,543	7,392,625	85%	3,439,183	66%
Energy generation and storage segment	1,364,896	874,538	178,332	490,358	56%	696,206	390%
Total cost of revenues	<u>\$ 17,419,247</u>	<u>\$ 9,536,264</u>	<u>\$ 5,400,875</u>	<u>\$ 7,882,983</u>	83%	<u>\$ 4,135,389</u>	77%
Gross profit total automotive	\$ 4,340,986	\$ 2,208,596	\$ 1,600,685				
Gross margin total automotive	23%	23%	25%				
Gross profit total automotive & services and other segment	\$ 3,851,673	\$ 1,980,759	\$ 1,596,195				
Gross margin total automotive & services and other segment	19%	19%	23%				
Gross profit energy generation and storage segment	\$ 190,348	\$ 241,728	\$ 3,062				
Gross margin energy generation and storage segment	12%	22%	2%				
Total gross profit	\$ 4,042,021	\$ 2,222,487	\$ 1,599,257				
Total gross margin	19%	19%	23%				

### *Automotive & Services and Other Segment*

Cost of automotive sales revenue includes direct parts, material and labor costs, manufacturing overhead, including depreciation costs of tooling and machinery, shipping and logistic costs, vehicle connectivity costs, allocations of electricity and infrastructure costs related to our Supercharger network, and reserves for estimated warranty expenses. Cost of automotive sales revenues also includes adjustments to warranty expense and charges to write down the carrying value of our inventory when it exceeds its estimated net realizable value and to provide for obsolete and on-hand inventory in excess of forecasted demand.

Cost of automotive leasing revenue includes primarily the amortization of operating lease vehicles over the lease term, as well as warranty expenses recognized as incurred. Cost of automotive leasing revenue also includes vehicle connectivity costs and allocations of electricity and infrastructure costs related to our Supercharger network for vehicles under our leasing programs.

Costs of services and other revenue includes costs associated with providing non-warranty after-sales services, costs to acquire and certify used vehicles, and costs for retail merchandise. Cost of services and other revenue also includes direct parts, material and labor costs, manufacturing overhead associated with the sales of electric vehicle components and systems to other manufacturers and sales by our acquired subsidiaries to third party customers.

### 2018 Compared to 2017

Cost of automotive sales revenue increased \$6.96 billion, or 104%, in the year ended December 31, 2018 as compared to the year ended December 31, 2017. The increase was primarily due to a significantly higher volume of Model 3 vehicles deliveries in 2018 and the recognition of \$969.8 million of additional cost of automotive sales revenue due to the adoption of the new revenue standard. These increases were partially offset by significant reductions in Model 3 average costs per unit compared to the year ended December 31, 2017 primarily due to temporary under-utilization of manufacturing capacity at lower production volumes in 2017 and other cost efficiencies. Additionally, there were lower overall costs for Model S and Model X cash deliveries from approximately 3,240 fewer units delivered year-over-year and reductions in combined Model S and Model X average costs per unit as a result of increased manufacturing efficiencies.

Cost of automotive leasing revenue decreased \$219.8 million, or 31%, in the year ended December 31, 2018 compared to the year ended December 31, 2017. The decrease was primarily due to a downward adjustment of \$624.4 million from the adoption of the new revenue standard, partially offset by increased cost of automotive leasing revenue from an increase in cumulative vehicles under our direct vehicle leasing program and an increase in the number of vehicles under leasing programs where our counterparty has retained ownership of the vehicle during or at the end of the guarantee period when compared to the year ended December 31, 2017. When our counterparty retains ownership, the net book value of the leased vehicle of the lease vehicle is expensed to cost of automotive leasing revenue.

Cost of services and other revenue increased \$651.3 million, or 53%, in the year ended December 31, 2018 as compared to the year ended December 31, 2017. The increase was primarily due to the increase in the cost of our new service centers, additional service personnel in existing and new service centers, Mobile Service capabilities, parts distribution centers and investment in new body shops to provide maintenance services to our rapidly growing fleet of vehicles. Additionally, there was an overall increase in the cost of used vehicle sales from the increased volume of relatively lower priced non-Tesla trade-in vehicles. These increases were partially offset by a decrease in cost of powertrain sales to another automobile manufacturer as we wound down the program in 2017.

Gross margin for total automotive remained relatively consistent at 23% in the years ended December 31, 2018 and 2017. There were increases from improved Model S and Model X combined margins as costs per unit decreased year-over-year from continuing manufacturing efficiencies and an increase in regulatory credits sales, which have no associated costs. The increases were partially offset by margin dilution from Model 3 despite Model 3 margins improving year-over-year. The higher proportion of Model 3 as a percentage of our total automotive sales in the year ended December 31, 2018 lowered our overall gross margin for total automotive as Model 3 had a lower annualized margin than Model S and Model X due to temporary under-utilization of manufacturing capacity at lower production volumes in the first half of 2018 and as we have yet to achieve significant manufacturing efficiencies in the production of Model 3.

Gross margin for total automotive & services and other segment remained relatively consistent at 19% in the years ended December 31, 2018 and 2017 primarily due to the automotive gross margin impacts discussed above. Services and other has historically operated at lower margins than our automotive sales and leasing business but has a small impact on the overall segment margin because of its relatively small revenue base.

#### 2017 Compared to 2016

Cost of automotive sales revenues increased \$2.46 billion, or 58%, in the year ended December 31, 2017 compared to the year ended December 31, 2016. This was primarily due to a 58% increase in vehicle deliveries resulting from increased sales of Model S and Model X, as well as the commencement of deliveries of Model 3 in the third quarter of 2017.

Cost of automotive leasing revenue increased \$226.2 million, or 47%, in the year ended December 31, 2017 compared to the year ended December 31, 2016. This was primarily due to an approximately 30% increase in the number of vehicles under leasing programs or programs with a resale value guarantee compared to the year ended December 31, 2016. In addition, during the year ended December 31, 2017, we recognized an increase of \$23.4 million in cost of automotive leasing revenue upon early payoff and the expiration of resale value guarantees.

Cost of services and other revenue increased \$756.6 million, or 160%, in the year ended December 31, 2017 compared to the year ended December 31, 2016, primarily due to the increase in cost of used vehicle sales due to increased volume and the increase in cost to provide maintenance services as our fleet continues to grow.

Gross margin for total automotive decreased from 25% to 23% in the year ended December 31, 2017 compared to the year ended December 31, 2016. The commencement of deliveries of Model 3 in the third quarter of 2017 whereby the full operating costs and depreciation were recorded at much lower production volumes as production ramps and increases in early payoffs and expirations of resale value guarantees year-over-year contributed to the lower gross margin. Lower material and manufacturing costs for Model S and Model X, as we further improved our vehicle production processes and the partial recognition of autopilot 2.0 revenue in the year ended December 31, 2017 partially offset the overall decrease.

Gross margin for total automotive & services and other segment decreased from 23% to 19% in the year ended December 31, 2017 compared to the year ended December 31, 2016. These decreases are driven by the factors impacting gross margin for total automotive, as explained above, as well as higher costs of maintenance service.

#### *Energy Generation and Storage Segment*

Cost of energy generation and storage revenue includes direct and indirect material and labor costs, warehouse rent, freight, warranty expense, other overhead costs and amortization of certain acquired intangible assets. In addition, where arrangements are accounted for as operating leases, the cost of revenue is primarily comprised of depreciation of the cost of leased solar energy systems, maintenance costs associated with those systems and amortization of any initial direct costs.



## 2018 Compared to 2017

Cost of energy generation and storage revenue increased by \$490.4 million, or 56%, in the year ended December 31, 2018 as compared to the year ended December 31, 2017 primarily due to increases in deployments of Powerpack, Powerwall, and cash and loan solar energy system projects. The increase in Powerpack cost of revenue was significant year-over-year due to increases in cost of revenue recognized for commercial projects, most predominantly \$72.5 million for the South Australia battery project. Additionally, costs for cash and loan solar energy system projects have increased from higher installation costs, higher allocation of overhead costs from lower deployment of solar projects overall, and certain warranty related one-time charges. There were also higher costs for our solar energy system leasing arrangements due to impairment charges and higher costs from temporary manufacturing under-utilization of our Solar Roof ramp.

Gross margin for energy generation and storage decreased from 22% to 12% in the year ended December 31, 2018 compared to the year ended December 31, 2017. The decrease was primarily due to the higher proportion of energy storage of our overall energy generation and storage portfolio, due to a three-fold growth of MWh of energy storage deployments in the year ended December 31, 2018. Although energy storage margins have improved significantly as compared to the year ended December 31, 2017, it continues to operate at a lower margin than our solar business, thereby having a greater dilutive impact on our gross margin in the year ended December 31, 2018. Additionally, increases in costs for our cash and loan solar energy system projects, impairment charges on solar energy system leasing arrangements, and temporary manufacturing under-utilization of our Solar Roof ramp have further contributed to the decrease in gross margin.

## 2017 Compared to 2016

Cost of energy generation and storage revenue increased by \$696.2 million, or 390%, in the year ended December 31, 2017 compared to the year ended December 31, 2016. This was primarily due to the inclusion of the full-year of costs from our solar business, which we gained by acquiring SolarCity on November 21, 2016.

Gross margin for energy generation and storage increased from 2% to 22% in the year ended December 31, 2017 compared to the year ended December 31, 2016. This was predominantly due to the inclusion of the full-year of revenue and costs from our solar business, which we gained by acquiring SolarCity.

## ***Research and Development Expense***

(Dollars in thousands)	Year Ended December 31,			2018 vs. 2017 Change		2017 vs. 2016 Change	
	2018	2017	2016	\$	%	\$	%
Research and development	\$ 1,460,370	\$ 1,378,073	\$ 834,408	\$ 82,297	6%	\$ 543,665	65%
As a percentage of revenues	7%	12%	12%				

Research and development (“R&D”) expenses consist primarily of personnel costs for our teams in engineering and research, manufacturing engineering and manufacturing test organizations, prototyping expense, contract and professional services and amortized equipment expense.

R&D expenses increased \$82.3 million, or 6%, in the year ended December 31, 2018 compared to the year ended December 31, 2017. This increase was primarily due to an \$84.2 million increase in employee and labor related expenses from headcount growth to support our business expansion and \$45.2 million increase in stock-based compensation expense related to an increase in headcount and number of employee stock awards granted for new hire and refresher employee stock grants. Additionally, there was an increase of \$16.0 million in facilities, freight, and depreciation expenses due to business expansion, offset by a \$69.7 million decrease in expensed materials as there were higher costs in the year ended December 31, 2017 primarily related to Model 3 development.

R&D expenses increased \$543.7 million, or 65%, in the year ended December 31, 2017 compared to the year ended December 31, 2016. This increase was primarily due to a \$274.9 million increase in employee and labor related expenses from increased headcount as a result of our acquisitions as well as headcount growth from the expansion of our automotive and energy generation and storage businesses, and a \$44.3 million increase in stock-based compensation expense related to an increase in headcount and number of employee stock awards granted for new hire and refresher employee stock grants. Additionally, there were increases in facilities expenses, depreciation expenses, professional and outside service expenses and expensed materials to support the development of future products.

### ***Selling, General and Administrative Expense***

(Dollars in thousands)	Year Ended December 31,			2018 vs. 2017 Change		2017 vs. 2016 Change	
	2018	2017	2016	\$	%	\$	%
Selling, general and administrative	\$2,834,491	\$2,476,500	\$1,432,189	\$ 357,991	14%	\$1,044,311	73%
As a percentage of revenues	13%	21%	20%				

Selling, general and administrative (“SG&A”) expenses generally consist of personnel and facilities costs related to our stores, marketing, sales, executive, finance, human resources, information technology and legal organizations, as well as fees for professional and contract services and litigation settlements.

SG&A expenses increased \$358.0 million, or 14%, in the year ended December 31, 2018 as compared to the year ended December 31, 2017. The increase was primarily due to a \$193.1 million increase in stock-based compensation expense related to the 2018 CEO Performance Award and stock awards granted for new hires and refresher employee stock grants. Additionally, there was a \$153.9 million increase in office, information technology and facilities-related expenses and sales and marketing activities to support our business expansion.

SG&A expenses increased \$1.04 billion, or 73%, in the year ended December 31, 2017 compared to the year ended December 31, 2016. This increase was primarily due to a \$524.0 million increase in employee and labor related expenses from increased headcount as a result of our acquisitions as well as headcount growth from the expansion of our automotive and energy generation and storage businesses, and a \$64.9 million increase in stock-based compensation expense related to an increase in headcount and number of employee stock awards granted for new hire and refresher employee stock grants. Additionally, the increase was due to a \$310.6 million increase in office, information technology and facilities-related expenses to support the growth of our business as well as sales and marketing activities to handle our expanding market presence and a \$140.6 million increase in professional and outside service expenses to support the growth of our business.

### ***Restructuring and other***

(Dollars in thousands)	Year Ended December 31,			2018 vs. 2017 Change		2017 vs. 2016 Change	
	2018	2017	2016	\$	%	\$	%
Restructuring and other	\$ 135,233	\$ —	\$ —	\$ 135,233	N/A	\$ —	N/A
As a percentage of revenues	1%	0%	0%				

During 2018, we carried out certain restructuring actions in order to reduce costs and improve efficiency and recognized \$36.6 million of employee termination expenses and estimated losses from sub-leasing a certain facility. The employee termination cash expenses of \$27.3 million were substantially paid by the end of 2018, while the remaining amounts were non-cash. Also included within restructuring and other activities was \$55.2 million of expenses (materially all of which were non-cash) from restructuring the energy generation and storage segment, which comprised of disposals of certain tangible assets, the shortening of the useful life of a trade name intangible asset and a contract termination penalty. In addition, we concluded that a small portion of the in-process research and development asset is not commercially feasible. Consequently, we recognized an impairment loss of \$13.3 million.

In October 2018, a final court order was entered approving the terms of a settlement in connection with the SEC's legal actions relating to Elon Musk's prior consideration during the third quarter of 2018 of a take-private proposal for Tesla. Consequently, we recognized settlement and legal expenses of \$30.1 million in the year ended December 31, 2018. These expenses were substantially paid by the end of 2018.

There were no restructuring actions in the years ended December 31, 2017 and 2016.

### ***Interest Expense***

(Dollars in thousands)	Year Ended December 31,			2018 vs. 2017 Change		2017 vs. 2016 Change	
	2018	2017	2016	\$	%	\$	%
Interest expense	\$ (663,071)	\$ (471,259)	\$ (198,810)	\$ (191,812)	41%	\$ (272,449)	137%
As a percentage of revenues	3%	4%	3%				

Interest expense increased by \$191.8 million, or 41%, in the year ended December 31, 2018 as compared to the year ended December 31, 2017. The increase was primarily due to an increase in our average outstanding indebtedness at relatively consistent weighted average interest rates as compared to the year ended December 31, 2017. Additionally, there was a decrease of \$70.0 million in the amount of interest we capitalized from the consolidated statement of operations to property, plant, and equipment on the consolidated balance sheets. Lower capitalization results in higher interest expense. The amount of interest we capitalize is driven by our construction in progress balance, which decreased year-over-year due to significant Model 3 capital expenditure ramp in the year ended December 31, 2017.

Interest expense increased by \$272.4 million, or 137%, in the year ended December 31, 2017 as compared to the year ended December 31, 2016. The increase was primarily due to the inclusion of the full-year of interest expense from SolarCity of \$185.5 million for the year ended December 31, 2017. In addition, our average outstanding indebtedness has increased in the year ended December 31, 2017 as compared to the year ended December 31, 2016 mainly due to the Convertible Senior Notes due in 2022 and the Senior Notes due in 2025, both of which we issued during 2017.

### ***Other Income (Expense), Net***

(Dollars in thousands)	Year Ended December 31,			2018 vs. 2017 Change		2017 vs. 2016 Change	
	2018	2017	2016	\$	%	\$	%
Other income (expense), net	\$ 21,866	\$ (125,373)	\$ 111,272	\$ 147,239	Not meaningful	\$ (236,645)	Not meaningful
As a percentage of revenues	0%	-1%	2%				

Other income (expense), net, consists primarily of foreign exchange gains and losses related to our foreign currency-denominated monetary assets and liabilities and changes in the fair values of our fixed-for-floating interest rate swaps. We expect our foreign exchange gains and losses will vary depending upon movements in the underlying exchange rates.

Other income (expense), net, changed favorably by \$147.2 million to a gain of \$21.9 million in the year ended December 31, 2018 from a loss of \$125.4 million in the year ended December 31, 2017. The change was primarily due to favorable fluctuations in foreign currency exchange rates and gains from interest rate swaps related to our debt facilities year-over-year. Additionally, we had \$57.7 million of losses in the year ended December 31, 2017 for measurement period adjustments to the acquisition date fair values of certain SolarCity liabilities as previously reported in our Annual Report on Form 10-K for the year ended December 31, 2016, with no corresponding expense in the year ended December 31, 2018.

Other income (expense), net, changed unfavorably by \$236.7 million to a loss of \$125.4 million in the year ended December 31, 2017 from a gain of \$111.3 million in the year ended December 31, 2016. The decrease was primarily due to \$57.7 million of losses in the year ended December 31, 2017 for measurement period adjustments to the acquisition date fair value of SolarCity and fluctuations in foreign currency exchange rates.

### ***Provision for Income Taxes***

(Dollars in thousands)	Year Ended December 31,			2018 vs. 2017 Change		2017 vs. 2016 Change	
	2018	2017	2016	\$	%	\$	%
Provision for income taxes	\$ 57,837	\$ 31,546	\$ 26,698	\$ 26,291	83%	\$ 4,848	18%
Effective tax rate	-6%	-1%	-4%				

Our provision for income taxes increased by \$26.3 million, or 83%, in the year ended December 31, 2018 as compared to the year ended December 31, 2017. The increase was primarily due to the increase in taxable profits in certain foreign jurisdictions year-over-year.

Our provision for income taxes increased by \$4.9 million, or 18%, in the year ended December 31, 2017 as compared to the year ended December 31, 2016. This increase was primarily due to the increase in vehicle deliveries in foreign tax jurisdictions, partially offset by \$10.5 million of future U.S. alternative minimum tax refunds as a result of the Tax Act, which previously had an associated valuation allowance.

### ***Net Income (Loss) Attributable to Noncontrolling Interests and Redeemable Noncontrolling Interests***

(Dollars in thousands)	Year Ended December 31,			2018 vs. 2017 Change		2017 vs. 2016 Change	
	2018	2017	2016	\$	%	\$	%
Net loss attributable to noncontrolling interests and redeemable noncontrolling interests in subsidiaries	\$ (86,491)	\$ (279,178)	\$ (98,132)	\$ 192,687	-69%	\$ (181,046)	184%

Our net income (loss) attributable to noncontrolling interests and redeemable noncontrolling interests was related to financing fund arrangements.

### ***Liquidity and Capital Resources***

As of December 31, 2018, we had \$3.69 billion of cash and cash equivalents. Balances held in foreign currencies had a U.S. dollar equivalent of \$749.0 million and consisted primarily of Chinese yuan, euros and Japanese yen. Our sources of cash are predominately from our deliveries of vehicles, sales and installations of our energy storage products and solar energy systems, proceeds from debt facilities, proceeds from financing funds and proceeds from equity offerings.

Our sources of liquidity and cash flows enable us to fund ongoing operations, research and development projects for new products, increases in Model 3 production capacity at the Tesla Factory, the establishment of Model 3 production capacity at Gigafactory Shanghai, the continued expansion of Gigafactory 1, the addition of manufacturing capacity for Model Y with the expectation to achieve volume production by the end of 2020, and the continued expansion of our retail and service locations, body shops, Mobile Service fleet and Supercharger network. We currently expect total 2019 capital expenditures to be approximately \$2.5 billion.

In 2019, we will continue to utilize our increasing experience and learnings from past and current product ramps to do so at a level of capital efficiency per dollar of spend that we expect to be significantly greater than historical levels. For example, based on our experience with ramping Model 3 at the Tesla Factory, we expect that the capital spend per unit of Model 3 manufacturing capacity at Gigafactory Shanghai will be less than that of our line in Fremont. Likewise, based on such experience and the substantial commonality of components we expect between Model Y and Model 3, we believe that the production ramp of Model Y will be significantly faster than that of Model 3 and cost less per unit of manufacturing capacity than that of Model 3 at Fremont. Considering the pipeline of new products planned at this point, and consistent with our current strategy of using a partner to manufacture cells, as well as considering all other infrastructure growth and expansion of Gigafactory 1, Gigafactory 2 and Gigafactory Shanghai, we currently estimate that capital expenditures will be between \$2.5 to \$3.0 billion annually for the next two fiscal years. Moreover, we expect that the cash we generate from our core operations will generally be sufficient to cover our future capital expenditures and to pay down our near-term debt obligations (including the repayment of \$920.0 million for our 0.25% Convertible Senior Notes due on March 1, 2019), although we may choose to seek alternative financing sources. For example, we expect that much of our investment in Gigafactory Shanghai will be funded through indebtedness arranged through local financial institutions in China. As always, we continually evaluate our capital expenditure needs and may decide it is best to raise additional capital to fund the rapid growth of our business.

We have an agreement to spend or incur \$5.0 billion in combined capital, operational expenses, costs of goods sold and other costs in the State of New York during the 10-year period following full production at Gigafactory 2. We anticipate meeting these obligations through our operations at this facility and other operations within the State of New York, and we do not believe that we face a significant risk of default.

We expect that our current sources of liquidity together with our projection of cash flows from operating activities will provide us with adequate liquidity over at least the next 12 months. A large portion of our future expenditures is to fund our growth, and we can adjust our capital and operating expenditures by operating segment, including future expansion of our product offerings, retail and service locations, body shops, Mobile Service fleet, and Supercharger network. We may need or want to raise additional funds in the future, and these funds may not be available to us when we need or want them, or at all. If we cannot raise additional funds when we need or want them, our operations and prospects could be negatively affected.

In addition, we had \$1.50 billion of unused committed amounts under our credit facilities and financing funds as of December 31, 2018, some of which are subject to satisfying specified conditions prior to draw-down (such as pledging to our lenders sufficient amounts of qualified receivables, inventories, leased vehicles and our interests in those leases, solar energy systems and the associated customer contracts, our interests in financing funds or various other assets; and contributing or selling qualified solar energy systems and the associated customer contracts or qualified leased vehicles and our interests in those leases into the financing funds). Upon the draw-down of any unused committed amounts, there are no restrictions on the use of such funds for general corporate purposes. For details regarding our indebtedness and financing funds, refer to Note 13, *Long-Term Debt Obligations*, and Note 18, *Variable Interest Entity Arrangements*, to the consolidated financial statements included elsewhere in this Annual Report on Form 10-K.

## Summary of Cash Flows

(Dollars in thousands)	Year Ended December 31,		
	2018	2017	2016
Net cash provided by (used in) operating activities	\$ 2,097,802	\$ (60,654)	\$ (123,829)
Net cash used in investing activities	\$ (2,337,428)	\$ (4,195,877)	\$ (1,081,085)
Net cash provided by financing activities	\$ 573,755	\$ 4,414,864	\$ 3,743,976

### Cash Flows from Operating Activities

Our cash flows from operating activities are significantly affected by our cash investments to support the growth of our business in areas such as research and development and selling, general and administrative and working capital, especially inventory, which includes vehicles in transit. Our operating cash inflows include cash from vehicle sales, lease payments directly from customers, customer deposits, sales of regulatory credits and energy generation and storage products. These cash inflows are offset by our payments to suppliers for production materials and parts used in our manufacturing process, employee compensation, operating lease payments and interest payments on our financings.

Net cash from operating activities changed favorably by \$2.16 billion to net cash provided by operating activities of \$2.10 billion during the year ended December 31, 2018 from net cash used in operating activities of \$60.7 million during the year ended December 31, 2017. This favorable change was primarily due to the increase in net income, excluding non-cash expenses and gains, of \$1.60 billion and the decrease in net operating assets and liabilities of \$554.6 million. The decrease in net operating assets and liabilities was mainly driven by an increase in accounts payable and accrued liabilities, as a result of increased expenditures to support our ramp of Model 3 deliveries and a net decrease in operating lease vehicles and resale value guarantee liability primarily due to the adoption of the new revenue standard, wherein certain vehicle sales to customer or leasing partners with a resale value guarantee were previously accounted for as an in-substance operating leases are now accounted for as sales with a right of return upon control transfer. The increase in cash from certain operating activities was partially offset by the increase in accounts receivable and inventory, as a result of increased Model 3 and energy products deliveries and production. Additionally, there was a decrease in customer deposits primarily due to Model 3 fulfillments and an increase in other assets as we paid \$141.3 million for the land use rights for Gigafactory Shanghai.

Net cash used in operating activities during the year ended December 31, 2017 decreased by \$63.2 million as compared to the year ended December 31, 2016 due to the decrease in net operating assets and liabilities of \$197.3 million partially offset by the decrease in net loss, excluding non-cash expenses and gains, of \$134.1 million. The decrease in working capital was mainly driven by faster processing of payments for our vehicles and our focus on reducing inventory in the fourth quarter of 2017.

During the year ended December 31, 2016, cash used in operating activities was primarily a result of our net loss of \$773.0 million, the increase in accounts payable and accrued liabilities of \$750.6 million as our business expanded, the increase in resale value guarantees of \$326.9 million and deferred revenue of \$383.0 million as the number of vehicles with a resale value guarantee increased and the increase in customer deposits of \$388.4 million primarily due to Model 3 reservations. These increases were partially offset by the increase in inventories and operating lease vehicles of \$2.47 billion as we expanded our program for direct leases and vehicles with a resale value guarantee.

### Cash Flows from Investing Activities

Cash flows from investing activities and their variability across each period related primarily to capital expenditures, which were \$2.32 billion during 2018, \$4.08 billion during 2017 and \$1.44 billion during 2016. Capital expenditures during 2018 were \$2.10 billion from purchases of property and equipment, mainly for Model 3 production and the expansion of our customer support infrastructure, and \$218.8 million for the design, acquisition and installation of solar energy systems under operating leases with customers.

Capital expenditures during 2017 were \$3.41 billion from purchases of property and equipment mainly for Model 3 production and \$666.5 million for the design, acquisition and installation of solar energy systems under operating leases with customers. We also paid \$114.5 million, net of the cash acquired, for acquisitions in 2017.

Capital expenditures during 2016 were \$1.28 billion from purchases of property and equipment and \$159.7 million for the design, acquisition and installation of solar energy systems under operating leases with customers. These expenditures were partially offset by the assumed cash of \$342.7 million as a result of the SolarCity acquisition in 2016.

In 2014, we began construction of Gigafactory 1. We used \$687.0 million, \$1.45 billion, and \$455.3 million of cash towards Gigafactory 1 construction during the years ended December 31, 2018, 2017, and 2016 respectively.

#### *Cash Flows from Financing Activities*

Cash flows from financing activities during the year ended December 31, 2018 consisted primarily of \$1.18 billion of net borrowings under automobile asset-backed notes, \$431.0 million of net borrowings under the senior secured asset-based revolving credit agreement (the “Credit Agreement”), \$334.1 million from the issuance of solar asset-backed notes and \$295.7 million of proceeds from exercises of stock options and other stock issuances. These cash inflows were partially offset by net repayments of \$581.9 million under our vehicle lease-backed loan and security agreements (the “Warehouse Agreements”), collateralized lease repayments of \$559.2 million, repayments of \$230.0 million of the 2.75% Convertible Senior Notes due on November 1, 2018, and repayments of \$210.2 million under the revolving aggregation credit facility. See Note 13, *Long-Term Debt Obligations*, and Note 2, *Summary of Significant Accounting Policies*, to the consolidated financial statements included elsewhere in this Annual Report on Form 10-K for further details regarding our debt obligations and collateralized borrowings, respectively.

Cash flows from financing activities during the year ended December 31, 2017 consisted primarily of \$966.4 million from the issuance of the 2.375% Convertible Senior Notes due in 2022, \$1.77 billion from the issuance of the 5.3% Senior Notes due in 2025 and \$400.2 million from our March 2017 public offering of common stock, net of underwriter fees. However, we paid \$151.2 million for the purchase of bond hedges net of the amount we received from the sale of warrants. Furthermore, we received \$511.3 million of net proceeds from collateralized lease borrowings and \$527.5 million of net proceeds from fund investors.

Cash flows from financing activities during the year ended December 31, 2016 consisted primarily of \$1.70 billion from our May 2016 public offering of common stock, net of underwriter fees, \$995.4 million of proceeds from issuances of debt net of repayments and \$769.7 million of net proceeds from collateralized lease borrowings. The net proceeds from issuances of debt consisted primarily of \$834.0 million of net borrowings under the Credit Agreement and \$390.0 million of borrowings under the Warehouse Agreements, partially offset by settlements of \$454.7 million for certain conversions of the 1.50% Convertible Senior Notes due in June 2018. Furthermore, we received \$180.3 million of net proceeds from fund investors.

### Contractual Obligations

We are party to contractual obligations involving commitments to make payments to third parties, including certain debt financing arrangements and leases, primarily for stores, service centers, certain manufacturing and corporate offices. These also include, as part of our normal business practices, contracts with suppliers for purchases of certain raw materials, components and services to facilitate adequate supply of these materials and services and capacity reservation contracts. The following table sets forth, as of December 31, 2018, certain significant obligations that will affect our future liquidity (in thousands):

	Total	Year Ended December 31,					Thereafter
		2019	2020	2021	2022	2023	
Operating lease obligations	\$ 1,628,154	\$ 275,654	\$ 256,931	\$ 230,406	\$ 182,911	\$ 157,662	\$ 524,590
Capital lease obligations, including interest	1,461,236	416,952	503,545	506,197	23,828	4,776	5,938
Purchase obligations (1)	18,088,100	4,860,431	3,255,968	3,391,637	3,985,336	2,570,730	23,998
Long-term debt, including scheduled interest (2)	12,570,082	2,583,160	2,485,372	2,260,528	1,629,556	302,345	3,309,121
Total	<u>\$33,747,572</u>	<u>\$8,136,197</u>	<u>\$6,501,816</u>	<u>\$6,388,768</u>	<u>\$5,821,631</u>	<u>\$3,035,513</u>	<u>\$3,863,647</u>

These amounts represent (i) purchase orders of \$2.40 billion issued under binding and enforceable agreements with all vendors as of December 31, 2018 and (ii) \$15.69 billion in other estimable purchase obligations pursuant to such agreements, primarily relating to the purchase of lithium-ion cells produced by Panasonic at Gigafactory 1, including any additional amounts we may have to pay vendors if we do not meet certain minimum purchase obligations. In cases where no purchase orders were outstanding under binding and

- (1) enforceable agreements as of December 31, 2018, we have included estimated amounts based on our best estimates and assumptions or discussions with the relevant vendors as of such date or, where applicable, on amounts or assumptions included in such agreements for purposes of discussion or reference. In certain cases, such estimated amounts were subject to contingent events. Furthermore, these amounts do not include future payments for purchase obligations that were recorded in accounts payable or accrued liabilities as of December 31, 2018.

- (2) Long-term debt, including scheduled interest, includes our non-recourse indebtedness of \$3.61 billion. Non-recourse debt refers to debt that is recourse to only specified assets of our subsidiaries. Short-term scheduled interest payments and amortization of convertible senior note conversion features, debt discounts and deferred financing costs for the year ended December 31, 2019 is \$361.2 million. Long-term scheduled interest payments and amortization of convertible senior note conversion features, debt discounts and deferred financing costs for the years thereafter is \$1.58 billion.

The table above excludes unrecognized tax benefits of \$243.8 million because if recognized, they would be an adjustment to our deferred tax assets.

### Off-Balance Sheet Arrangements

During the periods presented, we did not have relationships with unconsolidated entities or financial partnerships, such as entities often referred to as structured finance or special purpose entities, which were established for the purpose of facilitating off-balance sheet arrangements or other contractually narrow or limited purposes.

### Recent Accounting Pronouncements

See Note 2, *Summary of Significant Accounting Policies*, to the consolidated financial statements included elsewhere in this Annual Report on Form 10-K.



## **ITEM 7A. QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISK**

### **Foreign Currency Risk**

We transact business globally in multiple currencies and hence have foreign currency risks related to our revenue, costs of revenue and operating expenses denominated in currencies other than the U.S. dollar (primarily the euro, Japanese yen, Canadian dollar, Chinese yuan and Norwegian krone). In general, we are a net receiver of currencies other than the U.S. dollar for our foreign subsidiaries. Accordingly, changes in exchange rates and, in particular, a strengthening of the U.S. dollar have in the past, and may in the future, negatively affect our revenue and other operating results as expressed in U.S. dollars.

We have also experienced, and will continue to experience, fluctuations in our net income (loss) as a result of gains (losses) on the settlement and the re-measurement of monetary assets and liabilities denominated in currencies that are not the local currency (primarily consisting of our intercompany and cash and cash equivalents balances). For the year ended December 31, 2018, we recognized a net foreign currency gain of \$1.5 million in other income (expense), net, with our largest re-measurement exposures from the euro, New Taiwan dollar and Canadian dollar. For the year ended December 31, 2017, we recognized a net foreign currency loss of \$52.3 million in other income (expense), net, with our largest re-measurement exposures from the euro, Canadian dollar and Norwegian krone.

We considered the historical trends in foreign currency exchange rates and determined that it is reasonably possible that adverse changes in foreign currency exchange rates of 10% for all currencies could be experienced in the near-term. These changes were applied to our total monetary assets and liabilities denominated in currencies other than our local currencies at the balance sheet dates to compute the impact these changes would have had on our net income (loss) before income taxes. These changes would have resulted in an adverse impact of \$175.7 million at December 31, 2018 and \$116.0 million at December 31, 2017.

### **Interest Rate Risk**

We are exposed to interest rate risk on our borrowings that bear interest at floating rates. Pursuant to our risk management policies, in certain cases, we utilize derivative instruments to manage some of this risk. We do not enter into derivative instruments for trading or speculative purposes. A hypothetical 10% change in our interest rates would have increased our interest expense for the years ended December 31, 2018 and 2017 by \$8.5 million and \$7.6 million, respectively.

## ITEM 8. FINANCIAL STATEMENTS AND SUPPLEMENTARY DATA

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## **Report of Independent Registered Public Accounting Firm**

To the Board of Directors and Stockholders of Tesla, Inc.

### ***Opinions on the Financial Statements and Internal Control over Financial Reporting***

We have audited the accompanying consolidated balance sheets of Tesla, Inc. and its subsidiaries (the “Company”) as of December 31, 2018 and 2017, and the related consolidated statements of operations, of comprehensive loss, of redeemable noncontrolling interests and equity, and of cash flows for each of the three years in the period ended December 31, 2018, including the related notes (collectively referred to as the “consolidated financial statements”). We also have audited the Company's internal control over financial reporting as of December 31, 2018, based on criteria established in *Internal Control - Integrated Framework* (2013) issued by the Committee of Sponsoring Organizations of the Treadway Commission (COSO).

In our opinion, the consolidated financial statements referred to above present fairly, in all material respects, the financial position of the Company as of December 31, 2018 and 2017, and the results of its operations and its cash flows for each of the three years in the period ended December 31, 2018 in conformity with accounting principles generally accepted in the United States of America. Also in our opinion, the Company maintained, in all material respects, effective internal control over financial reporting as of December 31, 2018, based on criteria established in *Internal Control - Integrated Framework* (2013) issued by the COSO.

### ***Change in Accounting Principle***

As discussed in Note 2 to the consolidated financial statements, the Company changed the manner in which it accounts for revenue from contracts with customers in 2018.

### ***Basis for Opinions***

The Company's management is responsible for these consolidated financial statements, for maintaining effective internal control over financial reporting, and for its assessment of the effectiveness of internal control over financial reporting, included in Management's Report on Internal Control over Financial Reporting appearing under Item 9A. Our responsibility is to express opinions on the Company's consolidated financial statements and on the Company's internal control over financial reporting based on our audits. We are a public accounting firm registered with the Public Company Accounting Oversight Board (United States) (PCAOB) and are required to be independent with respect to the Company in accordance with the U.S. federal securities laws and the applicable rules and regulations of the Securities and Exchange Commission and the PCAOB.

We conducted our audits in accordance with the standards of the PCAOB. Those standards require that we plan and perform the audits to obtain reasonable assurance about whether the consolidated financial statements are free of material misstatement, whether due to error or fraud, and whether effective internal control over financial reporting was maintained in all material respects.

Our audits of the consolidated financial statements included performing procedures to assess the risks of material misstatement of the consolidated financial statements, whether due to error or fraud, and performing procedures that respond to those risks. Such procedures included examining, on a test basis, evidence regarding the amounts and disclosures in the consolidated financial statements. Our audits also included evaluating the accounting principles used and significant estimates made by management, as well as evaluating the overall presentation of the consolidated financial statements. Our audit of internal control over financial reporting included obtaining an understanding of internal control over financial reporting, assessing the risk that a material weakness exists, and testing and evaluating the design and operating effectiveness of internal control based on the assessed risk. Our audits also included performing such other procedures as we considered necessary in the circumstances. We believe that our audits provide a reasonable basis for our opinions.

***Definition and Limitations of Internal Control over Financial Reporting***

A company's internal control over financial reporting is a process designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles. A company's internal control over financial reporting includes those policies and procedures that (i) pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of the assets of the company; (ii) provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with generally accepted accounting principles, and that receipts and expenditures of the company are being made only in accordance with authorizations of management and directors of the company; and (iii) provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use, or disposition of the company's assets that could have a material effect on the financial statements.

Because of its inherent limitations, internal control over financial reporting may not prevent or detect misstatements. Also, projections of any evaluation of effectiveness to future periods are subject to the risk that controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate.

/s/PricewaterhouseCoopers LLP

San Jose, California

February 19, 2019

We have served as the Company's auditor since 2005.

**Tesla, Inc.**  
**Consolidated Balance Sheets**  
(in thousands, except per share data)

	December 31, 2018	December 31, 2017
<b>Assets</b>		
Current assets		
Cash and cash equivalents	\$ 3,685,618	\$ 3,367,914
Restricted cash	192,551	155,323
Accounts receivable, net	949,022	515,381
Inventory	3,113,446	2,263,537
Prepaid expenses and other current assets	365,671	268,365
Total current assets	8,306,308	6,570,520
Operating lease vehicles, net	2,089,758	4,116,604
Solar energy systems, leased and to be leased, net	6,271,396	6,347,490
Property, plant and equipment, net	11,330,077	10,027,522
Intangible assets, net	282,492	361,502
Goodwill	68,159	60,237
MyPower customer notes receivable, net of current portion	421,548	456,652
Restricted cash, net of current portion	398,219	441,722
Other assets	571,657	273,123
<b>Total assets</b>	<b>\$ 29,739,614</b>	<b>\$ 28,655,372</b>
<b>Liabilities</b>		
Current liabilities		
Accounts payable	\$ 3,404,451	\$ 2,390,250
Accrued liabilities and other	2,094,253	1,731,366
Deferred revenue	630,292	1,015,253
Resale value guarantees	502,840	787,333
Customer deposits	792,601	853,919
Current portion of long-term debt and capital leases	2,567,699	796,549
Current portion of promissory notes issued to related parties	—	100,000
Total current liabilities	9,992,136	7,674,670
Long-term debt and capital leases, net of current portion	9,403,672	9,418,319
Deferred revenue, net of current portion	990,873	1,177,799
Resale value guarantees, net of current portion	328,926	2,309,222
Other long-term liabilities	2,710,403	2,442,970

<b>Total liabilities</b>	23,426,010	23,022,980
Commitments and contingencies (Note 17)		
Redeemable noncontrolling interests in subsidiaries	555,964	397,734
Convertible senior notes (Note 13)	—	70
<b>Equity</b>		
Stockholders' equity		
Preferred stock; \$0.001 par value; 100,000 shares authorized; no shares issued and outstanding	—	—
Common stock; \$0.001 par value; 2,000,000 shares authorized; 172,603 and 168,797 shares issued and outstanding as of December 31, 2018 and 2017, respectively	173	169
Additional paid-in capital	10,249,120	9,178,024
Accumulated other comprehensive (loss) income	(8,218)	33,348
Accumulated deficit	(5,317,832)	(4,974,299)
Total stockholders' equity	4,923,243	4,237,242
Noncontrolling interests in subsidiaries	834,397	997,346
<b>Total liabilities and equity</b>	<b>\$ 29,739,614</b>	<b>\$ 28,655,372</b>

The accompanying notes are an integral part of these consolidated financial statements.

**Tesla, Inc.**  
**Consolidated Statements of Operations**  
(in thousands, except per share data)

	Year Ended December 31,		
	2018	2017	2016
<b>Revenues</b>			
Automotive sales	\$ 17,631,522	\$ 8,534,752	\$ 5,589,007
Automotive leasing	883,461	1,106,548	761,759
Total automotive revenues	18,514,983	9,641,300	6,350,766
Energy generation and storage	1,555,244	1,116,266	181,394
Services and other	1,391,041	1,001,185	467,972
Total revenues	21,461,268	11,758,751	7,000,132
<b>Cost of revenues</b>			
Automotive sales	13,685,572	6,724,480	4,268,087
Automotive leasing	488,425	708,224	481,994
Total automotive cost of revenues	14,173,997	7,432,704	4,750,081
Energy generation and storage	1,364,896	874,538	178,332
Services and other	1,880,354	1,229,022	472,462
Total cost of revenues	17,419,247	9,536,264	5,400,875
<b>Gross profit</b>	4,042,021	2,222,487	1,599,257
<b>Operating expenses</b>			
Research and development	1,460,370	1,378,073	834,408
Selling, general and administrative	2,834,491	2,476,500	1,432,189
Restructuring and other	135,233	—	—
Total operating expenses	4,430,094	3,854,573	2,266,597
<b>Loss from operations</b>	(388,073)	(1,632,086)	(667,340)
Interest income	24,533	19,686	8,530
Interest expense	(663,071)	(471,259)	(198,810)
Other income (expense), net	21,866	(125,373)	111,272
<b>Loss before income taxes</b>	(1,004,745)	(2,209,032)	(746,348)
Provision for income taxes	57,837	31,546	26,698
<b>Net loss</b>	(1,062,582)	(2,240,578)	(773,046)
Net loss attributable to noncontrolling interests and redeemable noncontrolling interests in subsidiaries	(86,491)	(279,178)	(98,132)
<b>Net loss attributable to common stockholders</b>	<u>\$ (976,091)</u>	<u>\$ (1,961,400)</u>	<u>\$ (674,914)</u>
Net loss per share of common stock attributable to common stockholders			
Basic	<u>\$ (5.72)</u>	<u>\$ (11.83)</u>	<u>\$ (4.68)</u>
Diluted	<u>\$ (5.72)</u>	<u>\$ (11.83)</u>	<u>\$ (4.68)</u>
Weighted average shares used in computing net loss per share of common stock			
Basic	<u>170,525</u>	<u>165,758</u>	<u>144,212</u>
Diluted	<u>170,525</u>	<u>165,758</u>	<u>144,212</u>

The accompanying notes are an integral part of these consolidated financial statements.

**Tesla, Inc.**  
**Consolidated Statements of Comprehensive Loss**  
**(in thousands)**

	Year Ended December 31,		
	2018	2017	2016
Net loss attributable to common stockholders	\$ (976,091)	\$ (1,961,400)	\$ (674,914)
Unrealized gains (losses) on derivatives:			
Change in net unrealized gain	—	—	43,220
Less: Reclassification adjustment for net gains into net loss	—	(5,570)	(44,904)
Net unrealized loss on derivatives	—	(5,570)	(1,684)
Foreign currency translation adjustment	(41,566)	62,658	(18,500)
Other comprehensive (loss) income	(41,566)	57,088	(20,184)
Comprehensive loss	<u>\$ (1,017,657)</u>	<u>\$ (1,904,312)</u>	<u>\$ (695,098)</u>

The accompanying notes are an integral part of these consolidated financial statements.



**Tesla, Inc.**

**Consolidated Statements of Redeemable Noncontrolling Interests and Equity**  
(in thousands, except per share data)

	Redeemable Noncontrolling Interests	Common Stock		Additional Paid-In Capital	Accumulated Deficit	Accumulated Other Comprehensive Loss	Total Stockholders' Equity	Noncontrolling Interests in Subsidiaries	Total Equity
		Shares	Amount						
<b>Balance as of December 31, 2015</b>	\$ —	131,425	\$ 131	\$ 3,409,452	\$ (2,322,323)	\$ (3,556)	\$ 1,083,704	\$ —	\$ 1,083,704
Reclassification from mezzanine equity to equity for 1.50% Convertible Senior Notes due in 2018	—	—	—	38,501	—	—	38,501	—	38,501
Exercises of conversion feature of convertible senior notes	—	—	—	(15,056)	—	—	(15,056)	—	(15,056)
Common stock issued, net of shares withheld for employee taxes	—	11,096	11	163,817	—	—	163,828	—	163,828
Issuance of common stock in May 2016 public offering at \$215.00 per share, net of issuance costs of \$14,595	—	7,915	8	1,687,139	—	—	1,687,147	—	1,687,147
Issuance of common stock upon acquisition of SolarCity and assumed awards	—	11,125	11	2,145,977	—	—	2,145,988	—	2,145,988
Stock-based compensation	—	—	—	347,357	—	—	347,357	—	347,357
Assumption of capped calls	—	—	—	(3,460)	—	—	(3,460)	—	(3,460)
Assumption of noncontrolling interests through acquisition	315,943	—	—	—	—	—	—	750,574	750,574
Contributions from noncontrolling interests through acquisition	100,996	—	—	—	—	—	—	100,531	100,531
Distributions to noncontrolling interests through acquisition	(7,137)	—	—	—	—	—	—	(10,561)	(10,561)
Net loss	(42,763)	—	—	—	(674,914)	—	(674,914)	(55,369)	(730,283)
Other comprehensive loss	—	—	—	—	—	(20,184)	(20,184)	—	(20,184)
<b>Balance as of December 31, 2016</b>	<b>367,039</b>	<b>161,561</b>	<b>161</b>	<b>7,773,727</b>	<b>(2,997,237)</b>	<b>(23,740)</b>	<b>4,752,911</b>	<b>785,175</b>	<b>5,538,086</b>
Adjustment of prior periods due to adoption of Accounting Standards Update No. 2016-09	—	—	—	15,662	(15,662)	—	—	—	—
Conversion feature of Convertible Senior Notes due in 2022	—	—	—	145,613	—	—	145,613	—	145,613
Purchases of bond hedges	—	—	—	(204,102)	—	—	(204,102)	—	(204,102)
Sales of warrants	—	—	—	52,883	—	—	52,883	—	52,883
Reclassification from mezzanine equity to equity for 1.50% Convertible Senior Notes due in 2018	—	—	—	8,714	—	—	8,714	—	8,714
Exercises of conversion feature of convertible senior notes	—	1,408	2	230,151	—	—	230,153	—	230,153
Common stock issued, net of shares withheld for employee taxes	—	4,257	4	259,381	—	—	259,385	—	259,385
Issuance of common stock in March 2017 public offering at \$262.00 per share, net of issuance costs of \$2,854	—	1,536	2	399,645	—	—	399,647	—	399,647
Issuance of common stock upon acquisitions and assumed awards	—	35	0	10,528	—	—	10,528	—	10,528
Stock-based compensation	—	—	—	485,822	—	—	485,822	—	485,822
Contributions from noncontrolling interests	192,421	—	—	—	—	—	—	597,282	597,282
Distributions to noncontrolling interests	(100,703)	—	—	—	—	—	—	(163,626)	(163,626)
Buy-outs of noncontrolling interests	(2,921)	—	—	—	—	—	—	(409)	(409)
Net loss	(58,102)	—	—	—	(1,961,400)	—	(1,961,400)	(221,076)	(2,182,476)
Other comprehensive income	—	—	—	—	—	57,088	57,088	—	57,088
<b>Balance as of December 31, 2017</b>	<b>397,734</b>	<b>168,797</b>	<b>169</b>	<b>9,178,024</b>	<b>(4,974,299)</b>	<b>33,348</b>	<b>4,237,242</b>	<b>997,346</b>	<b>5,234,588</b>
Adjustments for prior periods from adopting ASC 606	8,101	—	—	—	623,172	—	623,172	(89,084)	534,088
Adjustments for prior periods from adopting Accounting Standards Update No. 2017-05	—	—	—	—	9,386	—	9,386	—	9,386
Reclassification from mezzanine equity to equity for 1.50% Convertible Senior Notes due in 2018	—	—	—	70	—	—	70	—	70
Exercises of conversion feature of convertible senior notes	—	238	0	(40)	—	—	(40)	—	(40)
Common stock issued, net of shares withheld for employee taxes	—	3,568	4	295,719	—	—	295,723	—	295,723
Stock-based compensation	—	—	—	775,554	—	—	775,554	—	775,554
Contributions from noncontrolling interests	275,736	—	—	—	—	—	—	161,399	161,399
Distributions to noncontrolling interests	(61,557)	—	—	—	—	—	—	(209,994)	(209,994)
Buy-outs of noncontrolling interests	(2,829)	—	—	(207)	—	—	(207)	—	(207)
Net loss	(61,221)	—	—	—	(976,091)	—	(976,091)	(25,270)	(1,001,361)
Other comprehensive loss	—	—	—	—	—	(41,566)	(41,566)	—	(41,566)
<b>Balance as of December 31, 2018</b>	<b>\$ 555,964</b>	<b>172,603</b>	<b>\$ 173</b>	<b>\$ 10,249,120</b>	<b>\$ (5,317,832)</b>	<b>\$ (8,218)</b>	<b>\$ 4,923,243</b>	<b>\$ 834,397</b>	<b>\$ 5,757,640</b>

The accompanying notes are an integral part of these consolidated financial statements.

**Tesla, Inc.**  
**Consolidated Statements of Cash Flows**  
**(in thousands)**

	<b>Year Ended December 31,</b>		
	<b>2018</b>	<b>2017</b>	<b>2016</b>
<b>Cash Flows from Operating Activities</b>			
Net loss	\$ (1,062,582)	\$ (2,240,578)	\$ (773,046)
Adjustments to reconcile net loss to net cash provided by (used in) operating activities:			
Depreciation, amortization and impairment	1,901,050	1,636,003	947,099
Stock-based compensation	749,024	466,760	334,225
Amortization of debt discounts and issuance costs	158,730	91,037	94,690
Inventory write-downs	85,272	131,665	65,520
Loss on disposals of fixed assets	161,361	105,770	34,633
Foreign currency transaction (gains) losses	(1,511)	52,309	(29,183)
Loss (gain) related to SolarCity acquisition	—	57,746	(88,727)
Non-cash interest and other operating activities	48,507	135,237	(15,179)
Changes in operating assets and liabilities, net of effect of business combinations:			
Accounts receivable	(496,732)	(24,635)	(216,565)
Inventory	(1,023,264)	(178,850)	(632,867)
Operating lease vehicles	(214,747)	(1,522,573)	(1,832,836)
Prepaid expenses and other current assets	(82,125)	(72,084)	56,806
Other assets and MyPower customer notes receivable	(207,409)	(15,453)	(49,353)
Accounts payable and accrued liabilities	1,722,850	388,206	750,640
Deferred revenue	406,661	468,902	382,962
Customer deposits	(96,685)	170,027	388,361
Resale value guarantee	(110,564)	208,718	326,934
Other long-term liabilities	159,966	81,139	132,057
Net cash provided by (used in) operating activities	2,097,802	(60,654)	(123,829)
<b>Cash Flows from Investing Activities</b>			
Purchases of property and	(2,100,724)	(3,414,814)	(1,280,802)

equipment excluding capital leases, net of sales			
Maturities of short-term marketable securities	—	—	16,667
Purchases of solar energy systems, leased and to be leased	(218,792)	(666,540)	(159,669)
Business combinations, net of cash acquired	(17,912)	(114,523)	342,719
Net cash used in investing activities	(2,337,428)	(4,195,877)	(1,081,085)
<b>Cash Flows from Financing Activities</b>			
Proceeds from issuances of common stock in public offerings	—	400,175	1,701,734
Proceeds from issuances of convertible and other debt	6,176,173	7,138,055	2,852,964
Repayments of convertible and other debt	(5,247,057)	(3,995,484)	(1,857,594)
Repayments of borrowings issued to related parties	(100,000)	(165,000)	—
Collateralized lease (repayments) borrowings	(559,167)	511,321	769,709
Proceeds from exercises of stock options and other stock issuances	295,722	259,116	163,817
Principal payments on capital leases	(180,805)	(103,304)	(46,889)
Common stock and debt issuance costs	(14,973)	(63,111)	(20,042)
Purchases of convertible note hedges	—	(204,102)	—
Proceeds from settlement of convertible note hedges	—	287,213	—
Proceeds from issuances of warrants	—	52,883	—
Payments for settlements of warrants	(11)	(230,385)	—
Proceeds from investments by noncontrolling interests in subsidiaries	437,134	789,704	201,527
Distributions paid to noncontrolling interests in subsidiaries	(227,304)	(261,844)	(21,250)
Payments for buy-outs of noncontrolling interests in subsidiaries	(5,957)	(373)	—
Net cash provided by financing activities	573,755	4,414,864	3,743,976
Effect of exchange rate changes on cash and cash equivalents and restricted cash	(22,700)	39,726	(6,553)
Net increase in cash and cash equivalents and restricted cash	311,429	198,059	2,532,509
Cash and cash equivalents and restricted cash, beginning of period	3,964,959	3,766,900	1,234,391
Cash and cash equivalents and	\$ 4,276,388	\$ 3,964,959	\$ 3,766,900

restricted cash, end of period			
<b>Supplemental Non-Cash Investing and Financing Activities</b>			
Shares issued in connection with business combinations and assumed vested awards	\$ —	\$ 10,528	\$ 2,145,977
Acquisitions of property and equipment included in liabilities	\$ 249,141	\$ 914,108	\$ 663,771
Estimated fair value of facilities under build-to-suit leases	\$ 94,445	\$ 313,483	\$ 307,879
<b>Supplemental Disclosures</b>			
Cash paid during the period for interest, net of amounts capitalized	\$ 380,836	\$ 182,571	\$ 38,693
Cash paid during the period for taxes, net of refunds	\$ 35,409	\$ 65,695	\$ 16,385

The accompanying notes are an integral part of these consolidated financial statements.

**Tesla, Inc.**  
**Notes to Consolidated Financial Statements**

**Note 1 – Overview**

Tesla, Inc. (“Tesla”, the “Company”, “we”, “us” or “our”) was incorporated in the State of Delaware on July 1, 2003. We design, develop, manufacture and sell high-performance fully electric vehicles and design, manufacture, install and sell solar energy generation and energy storage products. Our Chief Executive Officer, as the chief operating decision maker (“CODM”), organizes the Company, manages resource allocations and measures performance among two operating and reportable segments: (i) automotive and (ii) energy generation and storage.

**Note 2 – Summary of Significant Accounting Policies**

*Principles of Consolidation*

The accompanying consolidated financial statements have been prepared in conformity with U.S. generally accepted accounting principles (“GAAP”) and reflect our accounts and operations and those of our subsidiaries in which we have a controlling financial interest. In accordance with the provisions of Accounting Standards Codification (“ASC”) 810, *Consolidation*, we consolidate any variable interest entity (“VIE”) of which we are the primary beneficiary. We form VIEs with financing fund investors in the ordinary course of business in order to facilitate the funding and monetization of certain attributes associated with solar energy systems and leases under our direct vehicle leasing programs. The typical condition for a controlling financial interest ownership is holding a majority of the voting interests of an entity; however, a controlling financial interest may also exist in entities, such as VIEs, through arrangements that do not involve controlling voting interests. ASC 810 requires a variable interest holder to consolidate a VIE if that party has the power to direct the activities of the VIE that most significantly impact the VIE’s economic performance and the obligation to absorb losses of the VIE that could potentially be significant to the VIE or the right to receive benefits from the VIE that could potentially be significant to the VIE. We do not consolidate a VIE in which we have a majority ownership interest when we are not considered the primary beneficiary. We have determined that we are the primary beneficiary of a number of VIEs (see Note 18, *Variable Interest Entity Arrangements*). We evaluate our relationships with all the VIEs on an ongoing basis to ensure that we continue to be the primary beneficiary. All intercompany transactions and balances have been eliminated upon consolidation.

*Reclassifications*

Certain prior period balances have been reclassified to conform to the current period presentation in the consolidated financial statements and the accompanying notes as a result of the adoption of the Accounting Standards Update (“ASU”) 2016-18, *Statement of Cash Flows: Restricted Cash*.

*Use of Estimates*

The preparation of financial statements in conformity with GAAP requires management to make estimates and assumptions that affect the reported amounts of assets, liabilities and disclosures in the accompanying notes. Estimates are used for, but not limited to, determining the transaction price of products and services in arrangements with multiple performance obligations and determining the amortization period of these obligations, significant economic incentive for residual value guarantee arrangements, sales return reserves, the collectability of accounts receivable, inventory valuation, fair value of long-lived assets, goodwill, fair value of financial instruments, residual value of operating lease vehicles, depreciable lives of property and equipment and solar energy systems, fair value and residual value of solar energy systems subject to leases, warranty liabilities, income taxes, contingencies, the accrued liability for solar energy system performance guarantees, determining lease pass-through financing obligations, the discount rates used to determine the fair value of investment tax credits, the valuation of build-to-suit lease assets, fair value of interest rate swaps and inputs used to value stock-based compensation. In addition, estimates and assumptions are used for the accounting for business combinations, including the fair values and useful lives of acquired assets, assumed liabilities and noncontrolling interests. Management bases its estimates on historical experience and on various other assumptions believed to be reasonable, the results of which form the basis for making judgments about the carrying values of assets and liabilities. Actual results could differ from those estimates.

## *Revenue Recognition*

### *Adoption of new accounting standards*

ASU 2014-09, *Revenue - Revenue from Contracts with Customers*. On January 1, 2018, we adopted the new accounting standard ASC 606, *Revenue from Contracts with Customers* and all the related amendments (“new revenue standard”) using the modified retrospective method. As a policy election, the new revenue standard was applied only to contracts that were not substantially completed as of the date of adoption. We recognized the cumulative effect of initially applying the new revenue standard as an adjustment to the January 1, 2018 opening balance of accumulated deficit. The prior period consolidated financial statements have not been retrospectively adjusted and continue to be reported under the accounting standards in effect for those periods.

A majority of our automotive sales revenue is recognized when control transfers upon delivery to customers. For certain vehicle sales where revenue was previously deferred as an in-substance operating lease, such as certain vehicle sales to customers or leasing partners with a resale value guarantee, we now recognize revenue when the vehicles are shipped as a sale with a right of return. As a result, the corresponding operating lease asset, deferred revenue, and resale value guarantee balances as of December 31, 2017, were reclassified to accumulated deficit as part of our adoption entry. Furthermore, the warranty liability related to such vehicles has been accrued as a result of the change from in-substance operating leases to vehicle sales. Prepayments on contracts that can be cancelled without significant penalties, such as vehicle maintenance plans, have been reclassified from deferred revenue to customer deposits. Refer to the *Automotive Revenue* and *Automotive Leasing Revenue* sections below for further discussion of the impact on various categories of vehicle sales.

Following the adoption of the new revenue standard, the revenue recognition for our other sales arrangements, including sales of solar energy systems, energy storage products, services, and sales of used vehicles, remained consistent with our historical revenue recognition policy. Under our lease pass-through fund arrangements, we do not have any further performance obligations and therefore reclassified all investment tax credit (“ITC”) deferred revenue as of December 31, 2017, to accumulated deficit as part of our adoption entry. The corresponding effects of the changes to lease pass-through fund arrangements are also reflected in our non-controlling interests in subsidiaries. Additionally, we have considered the impact from any new revenue arrangements in the current year that would have been accounted for differently under ASC 605, *Revenue Recognition*, as an adjustment from adoption of the new revenue standard.

Accordingly, the cumulative effect of the changes made to our consolidated January 1, 2018 consolidated balance sheet for the adoption of the new revenue standard was as follows (in thousands):

	Balances at December 31, 2017	Adjustments from Adoption of New Revenue Standard	Balances at January 1, 2018
<b>Assets</b>			
Inventory	\$ 2,263,537	\$ (27,009)	\$ 2,236,528
Prepaid expenses and other current assets	268,365	51,735	320,100
Operating lease vehicles, net	4,116,604	(1,808,932)	2,307,672
Other assets	273,123	68,355	341,478
<b>Liabilities</b>			
Accrued liabilities and other	1,731,366	74,487	1,805,853
Deferred revenue	1,015,253	(436,737)	578,516
Resale value guarantees	787,333	(295,909)	491,424
Customer deposits	853,919	56,081	910,000
Deferred revenue, net of current portion	1,177,799	(429,771)	748,028
Resale value guarantees, net of current portion	2,309,222	(1,346,179)	963,043
Other long-term liabilities	2,442,970	104,767	2,547,737
Redeemable noncontrolling interests in subsidiaries	397,734	8,101	405,835
<b>Equity</b>			
Accumulated other comprehensive income	33,348	15,221	48,569
Accumulated deficit	(4,974,299)	623,172	(4,351,127)
Noncontrolling interests in subsidiaries	997,346	(89,084)	908,262

In accordance with the new revenue standard requirements, the impact of adoption on our consolidated balance sheet was as follows (in thousands):

	December 31, 2018		
	As Reported	Balances Without Adoption of New Revenue Standard	Effect of Change Higher / (Lower)
<b>Assets</b>			
Inventory	3,113,446	3,183,615	(70,169)
Prepaid expenses and other current assets	365,671	278,929	86,742
Operating lease vehicles, net	2,089,758	4,103,277	(2,013,519)
Other assets	571,657	463,558	108,099
<b>Liabilities</b>			
Accrued liabilities and other	2,094,253	2,005,180	89,073
Deferred revenue	630,292	1,122,427	(492,135)
Resale value guarantees	502,840	831,350	(328,510)
Customer deposits	792,601	734,241	58,360
Deferred revenue, net of current portion	990,873	1,432,566	(441,693)
Resale value guarantees, net of current portion	328,926	1,994,442	(1,665,516)
Other long-term liabilities	2,710,403	2,587,794	122,609
Redeemable noncontrolling interests in subsidiaries	555,964	549,520	6,444
<b>Equity</b>			
Accumulated other comprehensive loss	(8,218)	6,314	(14,532)
Accumulated deficit	(5,317,832)	(6,163,834)	846,002
Noncontrolling interests in subsidiaries	834,397	903,346	(68,949)



In accordance with the new revenue standard requirements, the impact of adoption on our consolidated statement of operations and consolidated statement of comprehensive loss was as follows (in thousands):

	Year Ended December 31, 2018		
	As Reported	Balances Without Adoption of New Revenue Standard	Effect of Change Higher / (Lower)
<b>Revenues</b>			
Automotive sales	\$ 17,631,522	\$ 16,228,508	\$ 1,403,014
Automotive leasing	883,461	1,716,136	(832,675)
Energy generation and storage	1,555,244	1,540,419	14,825
<b>Cost of revenues</b>			
Automotive sales	13,685,572	12,715,818	969,754
Automotive leasing	488,425	1,112,828	(624,403)
Provision for income taxes	57,837	59,332	(1,495)
Net loss	(1,062,582)	(1,303,890)	241,308
Net loss attributable to noncontrolling interests and redeemable noncontrolling interests in subsidiaries	(86,491)	(104,969)	18,478
Net loss attributable to common stockholders	(976,091)	(1,198,921)	222,830
Foreign currency translation adjustment	(41,566)	(11,813)	(29,753)
Comprehensive loss	(1,017,657)	(1,210,734)	193,077

In accordance with the new revenue standard requirements, the impact of adoption on our consolidated statement of cash flows for the year ended December 31, 2018 was an increase in collateralized lease repayments of \$474.2 million, from a net financing cash outflow of \$84.9 million to a net financing cash outflow of \$559.2 million as presented, with an offsetting increase to cash outflows from operations. Additionally, the adjustments to the consolidated balance sheet, consolidated statement of operations and consolidated statement of comprehensive income (loss) identified above would have corresponding impacts within the operating section of the consolidated statement of cash flows.

#### *Automotive Segment*

##### Automotive Sales Revenue

##### Automotive Sales without Resale Value Guarantee

Automotive sales revenue includes revenues related to deliveries of new vehicles, and specific other features and services that meet the definition of a performance obligation under the new revenue standard, including access to our Supercharger network, internet connectivity, Autopilot, full self-driving and over-the-air software updates. We recognize revenue on automotive sales upon delivery to the customer, which is when the control of a vehicle transfers. Payments are typically received at the point control transfers or in accordance with payment terms customary to the business. Other features and services such as access to our Supercharger network, internet connectivity and over-the-air software updates are provisioned upon control transfer of a vehicle and recognized over time on a straight-line basis as we have a stand-ready obligation to deliver such services to the customer. We recognize revenue related to these other features and services over the performance period, which is generally the expected ownership life of the vehicle or the eight-year life of the vehicle. Revenue related to Autopilot and full self-driving features is recognized when functionality is delivered to the customer. For our obligations related to automotive sales, we estimate standalone selling price by considering costs used to develop and deliver the service, third-party pricing of similar options and other information that may be available.

At the time of revenue recognition, we reduce the transaction price and record a reserve against revenue for estimated variable consideration related to future product returns. Such estimates are based on historical experience and are immaterial in all periods presented. In addition, any fees that are paid or payable by us to a customer's lender when we arrange the financing are recognized as an offset against automotive sales revenue.

Costs to obtain a contract mainly relate to commissions paid to our sales personnel for the sale of vehicles. Commissions are not paid on other obligations such as access to our Supercharger network, internet connectivity, Autopilot, full self-driving and over-the-air software updates. As our contract costs related to automotive sales are typically fulfilled within one year, the costs to obtain a contract are expensed as incurred. Amounts billed to customers related to shipping and handling are classified as automotive revenue, and we have elected to recognize the cost for freight and shipping when control over vehicles, parts, or accessories have transferred to the customer as an expense in cost of revenues. Our policy is to exclude taxes collected from a customer from the transaction price of automotive contracts.

#### Automotive Sales with Resale Value Guarantee

We offer resale value guarantees or similar buy-back terms to certain international customers who purchase vehicles and who finance their vehicles through one of our specified commercial banking partners. We also offer resale value guarantees in connection with automotive sales to certain leasing partners. Under these programs, we receive full payment for the vehicle sales price at the time of delivery and our counterparty has the option of selling their vehicle back to us during the guarantee period, which currently is generally at the end of the term of the applicable loan or financing program, for a pre-determined resale value.

With the exception of two programs which are discussed within the *Automotive Leasing* section, we now recognize revenue when control transfers upon delivery to customers in accordance with the new revenue standard as a sale with a right of return as we do not believe the customer has a significant economic incentive to exercise the resale value guarantee provided to them. The process to determine whether there is a significant economic incentive includes a comparison of a vehicle's estimated market value at the time the option is exercisable with the guaranteed resale value to determine the customer's economic incentive to exercise. The performance obligations and the pattern of recognizing automotive sales with resale value guarantees are consistent with automotive sales without resale value guarantees with the exception of our estimate for sales return reserve. Sales return reserves for automotive sales with resale value guarantees are estimated based on historical experience plus consideration for expected future market values. The two programs that are still being recorded as operating leases are discussed in further detail below in *Vehicle Sales to Leasing Partners with a Resale Value Guarantee and a Buyback Option* and *Vehicle Sales to Customers with a Resale Value Guarantee where Exercise is Probable*.

Prior to the adoption of the new revenue standard, all transactions with resale value guarantees were recorded as operating leases. The amount of sale proceeds equal to the resale value guarantee was deferred until the guarantee expired or was exercised. For certain transactions that were considered interest bearing collateralized borrowings as required under ASC 840, *Leases*, we also accrued interest expense based on our borrowing rate. The remaining sale proceeds were deferred and recognized on a straight-line basis over the stated guarantee period to automotive leasing revenue. The guarantee period expired at the earlier of the end of the guarantee period or the pay-off of the initial loan. We capitalized the cost of these vehicles on the consolidated balance sheet as operating lease vehicles, net, and depreciated their value, less estimated residual value, to cost of automotive leasing revenue over the same period.

In cases where our counterparty retained ownership of the vehicle at the end of the guarantee period, the resale value guarantee liability and any remaining deferred revenue balances related to the vehicle were settled to automotive leasing revenue, and the net book value of the leased vehicle was expensed to cost of automotive leasing revenue. If our counterparty returned the vehicle to us during the guarantee period, we purchased the vehicle from our counterparty in an amount equal to the resale value guarantee and settled any remaining deferred balances to automotive leasing revenue, and we reclassified the net book value of the vehicle on the consolidated balance sheet to used vehicle inventory.

Deferred revenue activity related to the access to our Supercharger network, internet connectivity, Autopilot, full self-driving and over-the-air software updates on automotive sales with and without resale value guarantee consisted of the following (in thousands):

	<u>Year Ended December 31, 2018</u>
Deferred revenue on automotive sales with and without resale value guarantee— beginning of period (post adoption of new revenue standard)	\$ 475,919
Additions	532,294
Net changes in liability for pre-existing contracts	(13,248)
Revenue recognized	<u>(112,214)</u>
Deferred revenue on automotive sales with and without resale value guarantee— end of period	<u>\$ 882,751</u>

Deferred revenue is equivalent to the total transaction price allocated to the performance obligations that are unsatisfied, or partially unsatisfied, as of December 31, 2018. From the deferred revenue balance as of January 1, 2018, revenue recognized during the year ended December 31, 2018 was \$81.0 million. Of the total deferred revenue on automotive sales with and without resale value guarantees, we expect to recognize \$326.7 million of revenue in the next 12 months. The remaining balance will be recognized over the performance period as discussed above in *Automotive Sales without Resale Value Guarantee*.

#### Automotive Regulatory Credits

California and certain other states have laws in place requiring vehicle manufacturers to ensure that a portion of the vehicles delivered for sale in that state during each model year are zero-emission vehicles. These laws and regulations provide that a manufacturer of zero-emission vehicles may earn regulatory credits (“ZEV credits”) and may sell excess credits to other manufacturers who apply such credits to comply with these regulatory requirements. Similar regulations exist at the federal level that require compliance related to greenhouse gas (“GHG”) emissions and also allow for the sale of excess credits by one manufacturer to other manufacturers. As a manufacturer solely of zero-emission vehicles, we have earned emission credits, such as ZEV and GHG credits, on our vehicles, and we expect to continue to earn these credits in the future. We enter into contractual agreements with third-parties to purchase our regulatory credits. Payments for regulatory credits are typically received at the point control transfers to the customer, or in accordance with payment terms customary to the business.

We recognize revenue on the sale of regulatory credits at the time control of the regulatory credits is transferred to the purchasing party as automotive revenue in the consolidated statement of operations. Revenue from the sale of regulatory credits totaled \$418.6 million, \$360.3 million and \$302.3 million for the years ended December 31, 2018, 2017 and 2016, respectively. We had no deferred revenue related to sales of automotive regulatory credits as of December 31, 2018 and 2017.

#### Automotive Leasing Revenue

Automotive leasing revenue includes revenue recognized under lease accounting guidance for our direct leasing programs as well as the two programs with resale value guarantees which continue to qualify for operating lease treatment. Prior to the adoption of the new revenue standard, all programs with resale value guarantees were accounted for as operating leases.

### Direct Vehicle Leasing Program

We have outstanding leases under our direct vehicle leasing programs in certain locations in the U.S., Canada and Europe. Currently, the direct vehicle leasing program is only offered for new leases to qualified customers in the U.S. and Canada. Qualifying customers are permitted to lease a vehicle directly from Tesla for up to 48 months. At the end of the lease term, customers have the option of either returning the vehicle to us or purchasing it for a pre-determined residual value. We account for these leasing transactions as operating leases. We record leasing revenues to automotive leasing revenue on a straight-line basis over the contractual term, and we record the depreciation of these vehicles to cost of automotive leasing revenue. For the years ended December 31, 2018, 2017 and 2016, we recognized \$393.2 million, \$220.6 million and \$112.7 million, respectively. As of December 31, 2018 and 2017, we had deferred \$109.8 million and \$96.6 million, respectively, of lease-related upfront payments, which will be recognized on a straight-line basis over the contractual terms of the individual leases.

We capitalize shipping costs and initial direct costs such as the incremental cost of contract administration, referral fees and sales commissions from the origination of automotive lease agreements as an element of operating lease vehicles, net, and subsequently amortize these costs over the term of the related lease agreement. Our policy is to exclude taxes collected from a customer from the transaction price of automotive contracts.

### Vehicle Sales to Leasing Partners with a Resale Value Guarantee and a Buyback Option

We offer buyback options in connection with automotive sales with resale value guarantees with certain leasing partner sales in the United States. These transactions entail a transfer of leases, which we have originated with an end-customer, to our leasing partner. As control of the vehicles has not been transferred in accordance with the new revenue standard, these transactions continue to be accounted for as interest bearing collateralized borrowings in accordance with ASC 840, *Leases*. Under this program, cash is received for the full price of the vehicle and the collateralized borrowing value is generally recorded within resale value guarantees and the customer upfront deposit is recorded within deferred revenue. We amortize the deferred revenue amount to automotive leasing revenue on a straight-line basis over the option period and accrue interest expense based on our borrowing rate. We capitalize vehicles under this program to operating lease vehicles, net, on the consolidated balance sheet, and we record depreciation from these vehicles to cost of automotive leasing revenue during the period the vehicle is under a lease arrangement. Cash received for these vehicles, net of revenue recognized during the period, is classified as collateralized lease (repayments) borrowings within cash flows from financing activities in the consolidated statement of cash flows.

At the end of the lease term, we settle our liability in cash by either purchasing the vehicle from the leasing partner for the buyback option amount or paying a shortfall to the option amount the leasing partner may realize on the sale of the vehicle. Any remaining balances within deferred revenue and resale value guarantee will be settled to automotive leasing revenue. In cases where the leasing partner retains ownership of the vehicle after the end of our option period, we expense the net value of the leased vehicle to cost of automotive leasing revenue. The maximum amount we could be required to pay under this program, should we decide to repurchase all vehicles, was \$479.8 million as of December 31, 2018, including \$309.8 million within a 12-month period. As of December 31, 2018, we had \$558.3 million of such borrowings recorded in resale value guarantees and \$92.5 million recorded in deferred revenue liability. For the year ended December 31, 2018, we recognized \$332.4 million of leasing revenue related to this program.

On a quarterly basis, we assess the estimated market values of vehicles under our buyback options program to determine if we have sustained a loss on any of these contracts. As we accumulate more data related to the buyback values of our vehicles or as market conditions change, there may be material changes to their estimated values, although we have not experienced any material losses during any period to date.

#### Vehicle Sales to Customers with a Resale Value Guarantee where Exercise is Probable

For certain international programs where we have offered resale value guarantees to certain customers who purchased vehicles and where we expect the customer has a significant economic incentive to exercise the resale value guarantee provided to them, we continue to recognize these transactions as operating leases. The process to determine whether there is a significant economic incentive includes a comparison of a vehicle's estimated market value at the time the option is exercisable with the guaranteed resale value to determine the customer's economic incentive to exercise. We have not sold any vehicles under this program since the first half of 2017 and all current period activity relates to the exercise or cancellation of active transactions. The amount of sale proceeds equal to the resale value guarantee is deferred until the guarantee expires or is exercised. The remaining sale proceeds are deferred and recognized on a straight-line basis over the stated guarantee period to automotive leasing revenue. The guarantee period expires at the earlier of the end of the guarantee period or the pay-off of the initial loan. We capitalize the cost of these vehicles on the consolidated balance sheet as operating lease vehicles, net, and depreciate their value, less salvage value, to cost of automotive leasing revenue over the same period.

In cases where a customer retains ownership of a vehicle at the end of the guarantee period, the resale value guarantee liability and any remaining deferred revenue balances related to the vehicle are settled to automotive leasing revenue, and the net book value of the leased vehicle is expensed to cost of automotive leasing revenue. If a customer returns the vehicle to us during the guarantee period, we purchase the vehicle from the customer in an amount equal to the resale value guarantee and settle any remaining deferred balances to automotive leasing revenue, and we reclassify the net book value of the vehicle on the consolidated balance sheet to used vehicle inventory. As of December 31, 2018, \$149.7 million of the guarantees were exercisable by customers within the next 12 months. For the year ended December 31, 2018, we recognized \$157.9 million of leasing revenue related to this program.

#### Services and Other Revenue

Services and other revenue consists of non-warranty after-sales vehicle services, sales of used vehicles, sales of electric vehicle components to other manufacturers, retail merchandise, and sales by our acquired subsidiaries to third party customers. There were no significant changes to the timing or amount of revenue recognition as a result of our adoption of the new revenue standard.

Revenues related to repair and maintenance services are recognized over time as services are provided and extended service plans are recognized over the performance period of the service contract as the obligation represents a stand-ready obligation to the customer. We sell used vehicles, services, service plans, vehicle components and merchandise separately and thus use standalone selling prices as the basis for revenue allocation to the extent that these items are sold in transactions with other performance obligations. Payment for used vehicles, services, and merchandise are typically received at the point when control transfers to the customer or in accordance with payment terms customary to the business. Payments received for prepaid plans are refundable upon customer cancellation of the related contracts and are included within customer deposits on the consolidated balance sheet. Deferred revenue related to services and other revenue was immaterial as of December 31, 2018 and 2017.

#### Energy Generation and Storage Segment

##### Energy Generation and Storage Sales

Energy generation and storage revenues consists of the sale of solar energy systems and energy storage systems to residential, small commercial, and large commercial and utility grade customers. Sales of solar energy systems to residential and small scale commercial customers consist of the engineering, design, and installation of the system. Post installation, residential and small scale commercial customers receive a proprietary monitoring system that captures and displays historical energy generation data. Residential and small scale commercial customers pay the full purchase price of the solar energy system upfront. Revenue for the design and installation obligation is recognized when control transfers, which is when we install a solar energy system and the system passes inspection by the utility or the authority having jurisdiction. Revenue for the monitoring service is recognized ratably as a stand-ready obligation over the warranty period of the solar energy system. Sales of energy storage systems to residential and small scale commercial customers consist of the installation of the energy storage system and revenue is recognized when control transfers, which is when the product has been delivered or, if we are performing installation, when installed and accepted by the customer. Payment for such storage systems is made upon invoice or in accordance with payment terms customary to the business.

For large commercial and utility grade solar energy system and energy storage system sales which consist of the engineering, design, and installation of the system, customers make milestone payments that are consistent with contract-specific phases of a project. Revenue from such contracts is recognized over time using the percentage of completion method based on cost incurred as a percentage of total estimated contract costs. Certain large-scale commercial and utility grade solar energy system and energy storage system sales also include operations and maintenance service which are negotiated with the design and installation contracts and are thus considered to be a combined contract with the design and installation service. For certain large commercial and utility grade solar energy systems and energy storage systems where the percentage of completion method does not apply, revenue is recognized when control transfers, which is when the product has been delivered to the customer for energy storage systems and when the project has received permission to operate from the utility for solar energy systems. Operations and maintenance service revenue is recognized ratably over the respective contract term. Customer payments for such services are usually paid annually or quarterly in advance.

In instances where there are multiple performance obligations in a single contract, we allocate the consideration to the various obligations in the contract based on the relative standalone selling price method. Standalone selling prices are estimated based on estimated costs plus margin or using market data for comparable products. Costs incurred on the sale of residential installations before the solar energy systems are completed are included as work in process within inventory in the consolidated balance sheets. However, any fees that are paid or payable by us to a solar loan lender would be recognized as an offset against revenue. Costs to obtain a contract relate mainly to commissions paid to our sales personnel related to the sale of solar energy systems and energy storage systems. As our contract costs related to solar energy system and energy storage system sales are typically fulfilled within one year, the costs to obtain a contract are expensed as incurred.

As part of our solar energy system and energy storage system contracts, we may provide the customer with performance guarantees that warrant that the underlying system will meet or exceed the minimum energy generation or retention requirements specified in the contract. In certain instances, we may receive a bonus payment if the system performs above a specified level. Conversely, if a solar energy system or energy storage system does not meet the performance guarantee requirements, we may be required to pay liquidated damages. Other forms of variable consideration related to our large commercial and utility grade solar energy system and energy storage system contracts include variable customer payments that will be made based on our energy market participation activities. Such guarantees and variable customer payments represent a form of variable consideration and are estimated at contract inception at their most likely amount and updated at the end of each reporting period as additional performance data becomes available. Such estimates are included in the transaction price only to the extent that it is probable a significant reversal of revenue will not occur.

We record as deferred revenue any non-refundable amounts that are collected from customers related to fees charged for prepayments and remote monitoring service and operations and maintenance service, which is recognized as revenue ratably over the respective customer contract term. As of December 31, 2018 and 2017, deferred revenue related to such customer payments amounted to \$148.7 million and \$124.0 million, respectively. Revenue recognized from the deferred revenue balance as of January 1, 2018, was \$41.4 million for the year ended December 31, 2018. We have elected the practical expedient to omit disclosure of the amount of the transaction price allocated to remaining performance obligations for energy generation and storage sales with an original expected contract length of one year or less. As of December 31, 2018, total transaction price allocated to performance obligations that were unsatisfied or partially unsatisfied for contracts with an original expected length of more than one year was \$117.9 million. Of this amount, we expect to recognize \$7.0 million in the next 12 months and the remaining over a period up to 30 years.

#### Energy Generation and Storage Leasing

For revenue arrangements where we are the lessor under operating lease agreements for energy generation and storage products, we record lease revenue from minimum lease payments, including upfront rebates and incentives earned from such systems, on a straight-line basis over the life of the lease term, assuming all other revenue recognition criteria have been met. The difference between the payments received and the revenue recognized is recorded as deferred revenue on the consolidated balance sheet.

For solar energy systems where customers purchase electricity from us under power purchase agreements (“PPAs”), we have determined that these agreements should be accounted for as operating leases pursuant to ASC 840. Revenue is recognized based on the amount of electricity delivered at rates specified under the contracts, assuming all other revenue recognition criteria are met.

We record as deferred revenue any amounts that are collected from customers, including lease prepayments, in excess of revenue recognized and operations and maintenance service, which is recognized as revenue ratably over the respective customer contract term. As of December 31, 2018 and 2017, deferred revenue related to such customer payments amounted to \$225.4 million and \$206.8 million, respectively. Deferred revenue also includes the portion of rebates and incentives received from utility companies and various local and state government agencies, which is recognized as revenue over the lease term. As of December 31, 2018 and December 31, 2017, deferred revenue from rebates and incentives amounted to \$36.8 million and \$27.2 million, respectively.

We capitalize initial direct costs from the origination of solar energy system leases or PPAs, which include the incremental cost of contract administration, referral fees and sales commissions, as an element of solar energy systems, leased and to be leased, net, and subsequently amortize these costs over the term of the related lease or PPA.

#### *Revenue by source*

The following table disaggregates our revenue by major source (in thousands):

	<u>Year Ended December 31, 2018</u>
Automotive sales without resale value guarantee	\$ 15,809,890
Automotive sales with resale value guarantee	1,403,014
Automotive regulatory credits	418,618
Energy generation and storage sales	1,056,543
Services and other	<u>1,391,041</u>
Total revenues from sales and services	20,079,106
Automotive leasing	883,461
Energy generation and storage leasing	<u>498,701</u>
Total revenues	<u><u>\$ 21,461,268</u></u>

#### *Cost of Revenues*

##### *Automotive Segment*

##### Automotive Sales

Cost of automotive sales revenue includes direct parts, material and labor costs, manufacturing overhead, including depreciation costs of tooling and machinery, shipping and logistic costs, vehicle connectivity costs, allocations of electricity and infrastructure costs related to our Supercharger network, and reserves for estimated warranty expenses. Cost of automotive sales revenues also includes adjustments to warranty expense and charges to write down the carrying value of our inventory when it exceeds its estimated net realizable value and to provide for obsolete and on-hand inventory in excess of forecasted demand.

##### Automotive Leasing

Cost of automotive leasing revenue includes primarily the amortization of operating lease vehicles over the lease term, as well as warranty expenses recognized as incurred. Cost of automotive leasing revenue also includes vehicle connectivity costs and allocations of electricity and infrastructure costs related to our Supercharger network for vehicles under our leasing programs.

##### Services and Other

Costs of services and other revenue includes costs associated with providing non-warranty after-sales services, costs to acquire and certify used vehicles, and costs for retail merchandise. Cost of services and other revenue also includes direct parts, material and labor costs, manufacturing overhead associated with the sales of electric vehicle components and systems to other manufacturers and sales by our acquired subsidiaries to third party customers.

### *Energy Generation and Storage Segment*

#### *Energy Generation and Storage*

Energy generation and storage cost of revenue includes direct and indirect material and labor costs, warehouse rent, freight, warranty expense, other overhead costs and amortization of certain acquired intangible assets. In addition, where arrangements are accounted for as operating leases, the cost of revenue is primarily comprised of depreciation of the cost of leased solar energy systems, maintenance costs associated with those systems and amortization of any initial direct costs.

#### *Research and Development Costs*

Research and development costs are expensed as incurred.

#### *Marketing, Promotional and Advertising Costs*

Marketing, promotional and advertising costs are expensed as incurred and are included as an element of selling, general and administrative expense in the consolidated statement of operations. We incurred marketing, promotional and advertising costs of \$70.0 million, \$66.5 million and \$48.0 million in the years ended December 31, 2018, 2017 and 2016, respectively.

#### *Income Taxes*

Income taxes are computed using the asset and liability method, under which deferred tax assets and liabilities are determined based on the difference between the financial statement and tax bases of assets and liabilities using enacted tax rates in effect for the year in which the differences are expected to affect taxable income. Valuation allowances are established when necessary to reduce deferred tax assets to the amount expected to be realized.

We record liabilities related to uncertain tax positions when, despite our belief that our tax return positions are supportable, we believe that it is more likely than not that those positions may not be fully sustained upon review by tax authorities. Accrued interest and penalties related to unrecognized tax benefits are classified as income tax expense.

#### *Comprehensive Income (Loss)*

Comprehensive income (loss) is comprised of net income (loss) and other comprehensive income (loss). Other comprehensive income (loss) consists of unrealized gains and losses on cash flow hedges and available-for-sale marketable securities and foreign currency translation adjustments that have been excluded from the determination of net income (loss).

#### *Stock-Based Compensation*

We recognize compensation expense for costs related to all share-based payments, including stock options, restricted stock units ("RSUs") and our employee stock purchase plan (the "ESPP"). The fair value of stock option awards with only service conditions and the ESPP is estimated on the grant or offering date using the Black-Scholes option-pricing model. The fair value of RSUs is measured on the grant date based on the closing fair market value of our common stock. Stock-based compensation expense is recognized on a straight-line basis over the requisite service period, net of actual forfeitures in the period (prior to 2017, net of estimated projected forfeitures). Stock-based compensation associated with awards assumed from the acquisition of SolarCity Corporation ("SolarCity") is measured as of the acquisition date using the relevant assumptions and recognized on a straight-line basis over the remaining requisite service period, net of actual forfeitures in the period (prior to 2017, net of estimated projected forfeitures).



For performance-based awards, stock-based compensation expense is recognized over the expected performance achievement period of individual performance milestones when the achievement of each individual performance milestone becomes probable. For performance-based awards with a vesting schedule based entirely on the attainment of both performance and market conditions, stock-based compensation expense is recognized for each pair of performance and market conditions over the longer of the expected achievement period of the performance and market conditions, beginning at the point in time that the relevant performance condition is considered probable of achievement. The fair value of such awards is estimated on the grant date using Monte Carlo simulations (see Note 15, *Equity Incentive Plans*).

As we accumulate additional employee stock-based awards data over time and as we incorporate market data related to our common stock, we may calculate significantly different volatilities and expected lives, which could materially impact the valuation of our stock-based awards and the stock-based compensation expense that we will recognize in future periods. Stock-based compensation expense is recorded in cost of revenues, research and development expense and selling, general and administrative expense in the consolidated statements of operations.

#### *Noncontrolling Interests and Redeemable Noncontrolling Interests*

Noncontrolling interests and redeemable noncontrolling interests represent third-party interests in the net assets under certain funding arrangements, or funds, that we enter into to finance the costs of solar energy systems and vehicles under operating leases. We have determined that the contractual provisions of the funds represent substantive profit sharing arrangements. We have further determined that the appropriate methodology for calculating the noncontrolling interest and redeemable noncontrolling interest balances that reflects the substantive profit sharing arrangements is a balance sheet approach using the hypothetical liquidation at book value (“HLBV”) method. We, therefore, determine the amount of the noncontrolling interests and redeemable noncontrolling interests in the net assets of the funds at each balance sheet date using the HLBV method, which is presented on the consolidated balance sheet as noncontrolling interests in subsidiaries and redeemable noncontrolling interests in subsidiaries. Under the HLBV method, the amounts reported as noncontrolling interests and redeemable noncontrolling interests in the consolidated balance sheet represent the amounts the third-parties would hypothetically receive at each balance sheet date under the liquidation provisions of the funds, assuming the net assets of the funds were liquidated at their recorded amounts determined in accordance with GAAP and with tax laws effective at the balance sheet date and distributed to the third-parties. The third-parties’ interests in the results of operations of the funds are determined as the difference in the noncontrolling interest and redeemable noncontrolling interest balances in the consolidated balance sheets between the start and end of each reporting period, after taking into account any capital transactions between the funds and the third-parties. However, the redeemable noncontrolling interest balance is at least equal to the redemption amount. The redeemable noncontrolling interest balance is presented as temporary equity in the mezzanine section of the consolidated balance sheet since these third-parties have the right to redeem their interests in the funds for cash or other assets.

#### *Net Income (Loss) per Share of Common Stock Attributable to Common Stockholders*

Basic net income (loss) per share of common stock attributable to common stockholders is calculated by dividing net income (loss) attributable to common stockholders by the weighted-average shares of common stock outstanding for the period. Potentially dilutive shares, which are based on the weighted-average shares of common stock underlying outstanding stock-based awards, warrants and convertible senior notes using the treasury stock method or the if-converted method, as applicable, are included when calculating diluted net income (loss) per share of common stock attributable to common stockholders when their effect is dilutive. Since we intend to settle in cash the principal outstanding under the 0.25% Convertible Senior Notes due in 2019, the 1.25% Convertible Senior Notes due in 2021 and the 2.375% Convertible Senior Notes due in 2022, we use the treasury stock method when calculating their potential dilutive effect, if any. Furthermore, in connection with the offerings of our bond hedges, we entered into convertible note hedges (see Note 13, *Long-Term Debt Obligations*). However, our convertible note hedges are not included when calculating potentially dilutive shares since their effect is always anti-dilutive.

The following table presents the potentially dilutive shares that were excluded from the computation of diluted net income (loss) per share of common stock attributable to common stockholders, because their effect was anti-dilutive:

	Year Ended December 31,		
	2018	2017	2016
Stock-based awards	9,928,789	10,456,363	12,091,473
Convertible senior notes	1,432,656	2,315,463	841,191
Warrants	214,213	579,137	262,702

#### *Business Combinations*

We account for business acquisitions under ASC 805, *Business Combinations*. The total purchase consideration for an acquisition is measured as the fair value of the assets given, equity instruments issued and liabilities assumed at the acquisition date. Costs that are directly attributable to the acquisition are expensed as incurred. Identifiable assets (including intangible assets), liabilities assumed (including contingent liabilities) and noncontrolling interests in an acquisition are measured initially at their fair values at the acquisition date. We recognize goodwill if the fair value of the total purchase consideration and any noncontrolling interests is in excess of the net fair value of the identifiable assets acquired and the liabilities assumed. We recognize a bargain purchase gain within other income (expense), net, on the consolidated statement of operations if the net fair value of the identifiable assets acquired and the liabilities assumed is in excess of the fair value of the total purchase consideration and any noncontrolling interests. We include the results of operations of the acquired business in the consolidated financial statements beginning on the acquisition date.

#### *Cash and Cash Equivalents*

All highly liquid investments with an original maturity of three months or less at the date of purchase are considered cash equivalents. Our cash equivalents are primarily comprised of money market funds.

#### *Restricted Cash*

We maintain certain cash balances restricted as to withdrawal or use. Our restricted cash is comprised primarily of cash as collateral for our sales to lease partners with a resale value guarantee, letters of credit, real estate leases, insurance policies, credit card borrowing facilities and certain operating leases. In addition, restricted cash includes cash received from certain fund investors that have not been released for use by us and cash held to service certain payments under various secured debt facilities.

The following table totals cash and cash equivalents and restricted cash as reported on the consolidated balance sheets; the sums are presented in the consolidated statements of cash flows (in thousands):

	December 31, 2018	December 31, 2017	December 31, 2016	December 31, 2015
Cash and cash equivalents	\$ 3,685,618	\$ 3,367,914	\$ 3,393,216	\$ 1,196,908
Restricted cash (1)	192,551	155,323	105,519	5,961
Restricted cash, net of current portion	398,219	441,722	268,165	31,522
Total as presented in the consolidated statements of cash flows	<u>\$ 4,276,388</u>	<u>\$ 3,964,959</u>	<u>\$ 3,766,900</u>	<u>\$ 1,234,391</u>

- (1) In the consolidated balance sheet as of December 31, 2015, the restricted cash and marketable securities balance of \$22.6 million included \$16.7 million of marketable securities. This balance of marketable securities has been excluded in the table above.

#### *Accounts Receivable and Allowance for Doubtful Accounts*

Accounts receivable primarily include amounts related to sales of powertrain systems, sales of energy generation and storage products, receivables from financial institutions and leasing companies offering various financing products to our customers, sales of regulatory credits to other automotive manufacturers and maintenance services on vehicles owned by leasing companies. We provide an allowance against accounts receivable to the amount we reasonably believe will be collected. We write-off accounts receivable when they are deemed uncollectible.

We typically do not carry significant accounts receivable related to our vehicle and related sales as customer payments are due prior to vehicle delivery, except for amounts due from commercial financial institutions for approved financing arrangements between our customers and the financial institutions.

#### *MyPower Customer Notes Receivable*

We have customer notes receivable under the legacy MyPower loan program. MyPower was offered by SolarCity to provide residential customers with the option to finance the purchase of a solar energy system through a 30-year loan. The outstanding balances, net of any allowance for potentially uncollectible amounts, are presented on the consolidated balance sheet as a component of prepaid expenses and other current assets for the current portion and as MyPower customer notes receivable, net of current portion, for the long-term portion. In determining the allowance and credit quality for customer notes receivable, we identify significant customers with known disputes or collection issues and also consider our historical level of credit losses and current economic trends that might impact the level of future credit losses. Customer notes receivable that are individually impaired are charged-off as a write-off of the allowance for losses. Since acquisition, there have been no new significant customers with known disputes or collection issues, and the amount of potentially uncollectible amounts has been insignificant. In addition, there were no material non-accrual or past due customer notes receivable as of December 31, 2018.

#### *Concentration of Risk*

##### *Credit Risk*

Financial instruments that potentially subject us to a concentration of credit risk consist of cash, cash equivalents, restricted cash, accounts receivable, convertible note hedges, and interest rate swaps. Our cash balances are primarily invested in money market funds or on deposit at high credit quality financial institutions in the U.S. These deposits are typically in excess of insured limits. As of December 31, 2018 and 2017, no entity represented 10% or more of our total accounts receivable balance. The risk of concentration for our interest rate swaps is mitigated by transacting with several highly-rated multinational banks.

##### *Supply Risk*

We are dependent on our suppliers, the majority of which are single source suppliers, and the inability of these suppliers to deliver necessary components of our products in a timely manner at prices, quality levels and volumes acceptable to us, or our inability to efficiently manage these components from these suppliers, could have a material adverse effect on our business, prospects, financial condition and operating results.

#### *Inventory Valuation*

Inventories are stated at the lower of cost or net realizable value. Cost is computed using standard cost for vehicles and energy storage products, which approximates actual cost on a first-in, first-out basis. In addition, cost for solar energy systems is recorded using actual cost. We record inventory write-downs for excess or obsolete inventories based upon assumptions about on current and future demand forecasts. If our inventory on-hand is in excess of our future demand forecast, the excess amounts are written-off.

We also review our inventory to determine whether its carrying value exceeds the net amount realizable upon the ultimate sale of the inventory. This requires us to determine the estimated selling price of our vehicles less the estimated cost to convert the inventory on-hand into a finished product. Once inventory is written-down, a new, lower cost basis for that inventory is established and subsequent changes in facts and circumstances do not result in the restoration or increase in that newly established cost basis.

Should our estimates of future selling prices or production costs change, additional and potentially material increases to this reserve may be required. A small change in our estimates may result in a material charge to our reported financial results.

#### *Operating Lease Vehicles*

Vehicles that are leased as part of our direct vehicle leasing program, vehicles delivered to leasing partners with a resale value guarantee and a buyback option, as well as vehicles delivered to customers with resale value guarantee where exercise is probable are classified as operating lease vehicles as the related revenue transactions are treated as operating leases (refer to the *Automotive Leasing Revenue* section above for details). Operating lease vehicles are recorded at cost less accumulated depreciation. Depreciation is computed using the straight-line method over the expected operating lease term. The total cost of operating lease vehicles recorded on the consolidated balance sheets as of December 31, 2018 and 2017 was \$2.55 billion and \$4.85 billion, respectively. Accumulated depreciation related to leased vehicles as of December 31, 2018 and 2017 was \$457.6 million and \$733.3 million, respectively.

#### *Solar Energy Systems, Leased and To Be Leased*

We are the lessor of solar energy systems under leases that qualify as operating leases. Our leases are accounted for in accordance with ASC 840. To determine lease classification, we evaluate the lease terms to determine whether there is a transfer of ownership or bargain purchase option at the end of the lease, whether the lease term is greater than 75% of the useful life or whether the present value of the minimum lease payments exceed 90% of the fair value at lease inception. We utilize periodic appraisals to estimate useful lives and fair values at lease inception and residual values at lease termination. Solar energy systems are stated at cost less accumulated depreciation.

Depreciation and amortization is calculated using the straight-line method over the estimated useful lives of the respective assets, as follows:

Solar energy systems leased to customers	30 to 35 years
Initial direct costs related to customer solar energy system lease acquisition costs	Lease term (up to 25 years)

Solar energy systems held for lease to customers are installed systems pending interconnection with the respective utility companies and will be depreciated as solar energy systems leased to customers when they have been interconnected and placed in-service. Solar energy systems under construction represents systems that are under installation, which will be depreciated as solar energy systems leased to customers when they are completed, interconnected and leased to customers. Initial direct costs related to customer solar energy system lease acquisition costs are capitalized and amortized over the term of the related customer lease agreements.

#### *Property, Plant and Equipment*

Property, plant and equipment, including leasehold improvements, are recognized at cost less accumulated depreciation. Depreciation is generally computed using the straight-line method over the estimated useful lives of the respective assets, as follows:

Machinery, equipment, vehicles and office furniture	2 to 12 years
Building and building improvements	15 to 30 years
Computer equipment and software	3 to 10 years

Depreciation for tooling is computed using the units-of-production method whereby capitalized costs are amortized over the total estimated productive life of the respective assets. As of December 31, 2018, the estimated productive life for Model S and Model X tooling was 325,000 vehicles based on our current estimates of production. As of December 31, 2018, the estimated productive life for Model 3 tooling was 1,000,000 vehicles based on our current estimates of production.

Leasehold improvements are depreciated on a straight-line basis over the shorter of their estimated useful lives or the terms of the related leases.

Upon the retirement or sale of our property, plant and equipment, the cost and associated accumulated depreciation are removed from the consolidated balance sheet, and the resulting gain or loss is reflected on the consolidated statement of operations. Maintenance and repair expenditures are expensed as incurred while major improvements that increase the functionality, output or expected life of an asset are capitalized and depreciated ratably over the identified useful life.

Interest expense on outstanding debt is capitalized during the period of significant capital asset construction. Capitalized interest on construction-in-progress is included within property, plant and equipment and is amortized over the life of the related assets.

Furthermore, we are deemed to be the owner, for accounting purposes, during the construction phase of certain long-lived assets under build-to-suit lease arrangements because of our involvement with the construction, our exposure to any potential cost overruns or our other commitments under the arrangements. In these cases, we recognize build-to-suit lease assets under construction and corresponding build-to-suit lease liabilities on the consolidated balance sheet, in accordance with ASC 840. Once construction is completed, if a lease meets certain “sale-leaseback” criteria, we remove the asset and liability and account for the lease as an operating lease. Otherwise, the lease is accounted for as a capital lease.

#### *Long-Lived Assets Including Acquired Intangible Assets*

We review our property, plant and equipment, long-term prepayments and intangible assets for impairment whenever events or changes in circumstances indicate that the carrying amount of an asset (or asset group) may not be recoverable. We measure recoverability by comparing the carrying amount to the future undiscounted cash flows that the asset is expected to generate. If the asset is not recoverable, its carrying amount would be adjusted-down to its fair value. For the year ended December 31, 2018, we have recognized certain material impairments of our long-lived assets (refer to Note 4, *Intangible Assets*, for further details). For the years ended December 31, 2017 and 2016, we have recognized no material impairments of our long-lived assets.

Intangible assets with definite lives are amortized on a straight-line basis over their estimated useful lives, which range from two to thirty years.

#### *Capitalization of Software Costs*

For costs incurred in development of internal use software, we capitalize costs incurred during the application development stage. Costs related to preliminary project activities and post-implementation activities are expensed as incurred. Internal use software is amortized on a straight-line basis over its estimated useful life of three to ten years. We evaluate the useful lives of these assets on an annual basis, and we test for impairment whenever events or changes in circumstances occur that could impact the recoverability of these assets.

#### *Foreign Currency*

We determine the functional and reporting currency of each of our international subsidiaries and their operating divisions based on the primary currency in which they operate. In cases where the functional currency is not the U.S. dollar, we recognize a cumulative translation adjustment created by the different rates we apply to accumulated deficits, including current period income or loss, and the balance sheet. For each subsidiary, we apply the monthly average functional currency rate to its income or loss and the month-end functional currency rate to translate the balance sheet.

Foreign currency transaction gains and losses are a result of the effect of exchange rate changes on transactions denominated in currencies other than the functional currency. Transaction gains and losses are recognized in other income (expense), net, in the consolidated statement of operations. For the years ended December 31, 2018, 2017 and 2016, we recorded foreign currency transaction gains of \$1.5 million, losses of \$52.3 million and gains of \$26.1 million, respectively.

### Warranties

We provide a manufacturer's warranty on all new and used vehicles, production powertrain components and systems and energy storage products we sell. In addition, we also provide a warranty on the installation and components of the solar energy systems we sell for periods typically between 10 to 30 years. We accrue a warranty reserve for the products sold by us, which includes our best estimate of the projected costs to repair or replace items under warranties and recalls when identified. These estimates are based on actual claims incurred to date and an estimate of the nature, frequency and costs of future claims. These estimates are inherently uncertain given our relatively short history of sales, and changes to our historical or projected warranty experience may cause material changes to the warranty reserve in the future. The warranty reserve does not include projected warranty costs associated with our vehicles subject to lease accounting and our solar energy systems under lease contracts or PPAs, as the costs to repair these warranty claims are expensed as incurred. The portion of the warranty reserve expected to be incurred within the next 12 months is included within accrued liabilities and other while the remaining balance is included within other long-term liabilities on the consolidated balance sheet. Due to the adoption of the new revenue standard, automotive sales with resale value guarantees that were previously recorded within operating lease assets require a corresponding warranty accrual, which is included in the table below. Warranty expense is recorded as a component of cost of revenues in the consolidated statements of operations. Accrued warranty activity consisted of the following (in thousands):

	Year Ended December 31,		
	2018	2017	2016
Accrued warranty—beginning of period	\$ 401,790	\$ 266,655	\$ 180,754
Assumed warranty liability from acquisition	—	4,737	31,366
Warranty costs incurred	(209,124)	(122,510)	(79,147)
Net changes in liability for pre-existing warranties, including expirations and foreign exchange impact	(26,294)	4,342	(20,084)
Additional warranty accrued from adoption of the new revenue standard	37,139	—	—
Provision for warranty	544,315	248,566	153,766
Accrued warranty—end of period	<u>\$ 747,826</u>	<u>\$ 401,790</u>	<u>\$ 266,655</u>

For the years ended December 31, 2018, 2017, and 2016, warranty costs incurred for vehicles accounted for as operating leases or collateralized debt arrangements were \$21.9 million, \$35.5 million and \$19.0 million, respectively.

### Solar Energy System Performance Guarantees

We guarantee a specified minimum solar energy production output for certain solar energy systems leased or sold to customers, generally for a term of up to 30 years. We monitor the solar energy systems to ensure that these outputs are being achieved. We evaluate if any amounts are due to our customers and make any payments periodically as specified in the customer agreements. As of December 31, 2018 and 2017, we had recognized a liability of \$7.5 million and \$6.3 million, respectively, within accrued liabilities and other on the consolidated balance sheets, related to these guarantees based on our assessment of the exposures.

### Solar Renewable Energy Credits

We account for solar renewable energy credits ("SRECs") when they are purchased by us or sold to third-parties. For SRECs generated by solar energy systems owned by us and minted by government agencies, we do not recognize any specifically identifiable costs as there are no specific incremental costs incurred to generate the SRECs. For SRECs purchased by us, we record these SRECs at their cost, subject to impairment testing. We recognize revenue from the sale of an SREC when the SREC is transferred to the buyer, and the cost of the SREC, if any, is then recorded to cost of revenue.



### *Deferred Investment Tax Credit Revenue*

We have solar energy systems that are eligible for ITCs that accrue to eligible property under the Internal Revenue Code (“IRC”). Under Section 50(d)(5) of the IRC and the related regulations, a lessor of qualifying property may elect to treat the lessee as the owner of such property for the purposes of claiming the ITCs associated with such property. These regulations enable the ITCs to be separated from the ownership of the property and allow the transfer of the ITCs. Under our lease pass-through fund arrangements, we can make a tax election to pass-through the ITCs to the investors, who are the legal lessee of the property. Therefore, we are able to monetize these ITCs to the investors who can utilize them in return for cash payments. We consider the monetization of ITCs to constitute one of the key elements of realizing the value associated with solar energy systems. Consequently, we consider the proceeds from the monetization of ITCs to be a component of revenue generated from solar energy systems.

In accordance with the relevant FASB guidance, we recognize revenue from the monetization of ITCs when (1) persuasive evidence of an arrangement exists, (2) delivery has occurred or services have been rendered, (3) the sales price is fixed or determinable and (4) collection of the related receivable is reasonably assured. An ITC is subject to recapture under the IRC if the underlying solar energy system either ceases to be a qualifying property or undergoes a change in ownership within five years of its placed-in-service date; the recapture amount decreases on each anniversary of the placed-in-service date. Since we have an obligation to ensure that the solar energy system is in-service and operational for a term of five years in order to avoid any recapture of the ITC, we recognize revenue as the recapture amount decreases, assuming the other revenue recognition criteria above have been met. As a result, the monetized ITC is initially recorded as deferred revenue on the consolidated balance sheets, and subsequently, one-fifth of the monetized ITC is recognized as energy generation and storage revenue on the consolidated statement of operations on each anniversary of the solar energy system’s placed-in-service date over five years. As discussed in the *Revenue Recognition* section above, following the adoption of the new revenue standard on January 1, 2018, we no longer defer the monetized ITC as deferred revenue outstanding and have reclassified all ITC deferred revenue as of December 31, 2017 to our opening accumulated deficit.

We indemnify the investors for any recapture of ITCs due to our non-compliance. We have concluded that the likelihood of a recapture event is remote, and consequently, we have not recognized a liability for this indemnification on the consolidated balance sheets.

### *Nevada Tax Incentives*

We have entered into agreements with the State of Nevada and Storey County in Nevada that provide abatements for sales, use, real property, personal property and employer excise taxes, discounts to the base tariff energy rates and transferable tax credits. These incentives are available for the applicable periods beginning on October 17, 2014 and ending on either June 30, 2024 or June 30, 2034 (depending on the incentive). Under these agreements, we were eligible for a maximum of \$195.0 million of transferable tax credits, subject to capital investments by us and our partners for Gigafactory 1 of at least \$3.50 billion, which we exceeded during 2017, and specified hiring targets for Gigafactory 1, which we exceeded during 2018. We record these credits as earned when we have evidence there is a market for their sale. Credits are applied as a cost offset to either employee expense or to capital assets, depending on the source of the credits. Credits earned from employee hires or capital spending by our partners at Gigafactory 1 are recorded as a reduction to operating expenses. As of December 31, 2018 and 2017, we had earned \$195.0 million and \$163.0 million of transferable tax credits under these agreements, respectively.

### *Recent Accounting Pronouncements*

In May 2014, the Financial Accounting Standards Board (“FASB”) issued ASU No. 2014-09, *Revenue from Contracts with Customers*, to replace the existing revenue recognition criteria for contracts with customers. In August 2015, the FASB issued ASU No. 2015-14, *Deferral of the Effective Date*, to defer the effective date of ASU No. 2014-09 to interim and annual periods beginning after December 15, 2017. Subsequently, the FASB issued ASU No. 2016-08, *Principal versus Agent Considerations*, ASU No. 2016-10, *Identifying Performance Obligations and Licensing*, ASU No. 2016-11, *Rescission of SEC Guidance Because of Accounting Standards Updates 2014-09 and 2014-16 Pursuant to Staff Announcements at the March 3, 2016 EITF Meeting*, ASU No. 2016-12, *Narrow-Scope Improvements and Practical Expedients*, and ASU No. 2016-20, *Technical Corrections and Improvements*, to clarify and amend the guidance in ASU No. 2014-09. We adopted the ASUs on January 1, 2018 on a modified retrospective basis through a cumulative adjustment to accumulated deficit. The adoption of the ASUs changed the timing of revenue recognition to be at delivery for certain vehicle sales to customers or leasing partners with a resale value guarantee, which now qualify to be accounted for as sales with a right of return as opposed to the prior accounting as operating leases or collateralized lease borrowings. Upon adoption of the ASUs, we recorded a decrease to our beginning accumulated deficit of \$623.2 million including income tax effects, which were immaterial. Refer to the *Revenue Recognition* section above for details.

In February 2016, the FASB issued ASU No. 2016-02, *Leases*, to require lessees to recognize all leases, with limited exceptions, on the balance sheet, while recognition on the statement of operations will remain similar to current lease accounting. The ASU also eliminates real estate-specific provisions and modifies certain aspects of lessor accounting. Subsequently, the FASB issued ASU No. 2018-10, *Codification Improvements to Topic 842*, ASU No. 2018-11, *Targeted Improvements*, and ASU No. 2018-20, *Narrow-Scope Improvements for Lessors*, to clarify and amend the guidance in ASU No. 2016-02. The ASUs are effective for interim and annual periods beginning after December 15, 2018, with early adoption permitted. We will adopt the ASUs on January 1, 2019 on a modified retrospective basis through a cumulative adjustment to our beginning accumulated deficit balance. Prior comparative periods will not be restated under this method, and we will adopt all available practical expedients, as applicable. Further, solar leases that commence on or after January 1, 2019, where we are the lessor and which are currently accounted for as leases, will no longer meet the definition of a lease. Instead, solar leases commencing on or after January 1, 2019 will be accounted for under ASC 606. In addition to recognizing operating leases that were previously not recognized on the consolidated balance sheet, we also expect most of our build-to-suit leases to be de-recognized with a net decrease of approximately of \$100.0 million to our beginning accumulated deficit before income tax effects, as our build-to-suit leases will no longer qualify for build-to-suit accounting and will instead be recognized as operating leases or finance leases. Upon adoption, our consolidated balance sheet will include an overall reduction in assets in the range of approximately \$400.0 million to \$500.0 million and a reduction in liabilities in the range of approximately \$500.0 million to \$600.0 million. The ASUs are not expected to have a material impact on the consolidated statement of operations or the consolidated statement of cash flows.

In June 2016, the FASB issued ASU No. 2016-13, *Measurement of Credit Losses on Financial Instruments*, to require financial assets carried at amortized cost to be presented at the net amount expected to be collected based on historical experience, current conditions and forecasts. Subsequently, the FASB issued ASU No. 2018-19, *Codification Improvements to Topic 326*, to clarify that receivables arising from operating leases are within the scope of lease accounting standards. The ASUs are effective for interim and annual periods beginning after December 15, 2019, with early adoption permitted. Adoption of the ASUs is modified retrospective. We are currently obtaining an understanding of the ASUs and plan to adopt them on January 1, 2020.

In August 2016, the FASB issued ASU No. 2016-15, *Classification of Certain Cash Receipts and Cash Payments*, to reduce the diversity in practice with respect to the classification of certain cash receipts and cash payments on the statement of cash flows. The ASU is effective for interim and annual periods beginning after December 15, 2017. Adoption of the ASU is retrospective. We adopted the ASU on January 1, 2018, which did not have a material impact on the consolidated financial statements.

In November 2016, the FASB issued ASU No. 2016-18, *Statement of Cash Flows: Restricted Cash*, which requires entities to present the aggregate changes in cash, cash equivalents, restricted cash and restricted cash equivalents in the statement of cash flows. As a result, the statement of cash flows now presents restricted cash and restricted cash equivalents as a part of the beginning and ending balances of cash and cash equivalents. The ASU is effective for interim and annual periods beginning after December 15, 2017. Adoption of the ASU is retrospective. We adopted the ASU on January 1, 2018, which resulted in restricted cash being combined with unrestricted cash reconciling beginning and ending balances. Refer to the *Restricted Cash* section for the reconciliation.

In January 2017, the FASB issued ASU No. 2017-01, *Clarifying the Definition of a Business*, to clarify which transactions should be accounted for as acquisitions (or disposals) of assets or businesses. The ASU is effective for interim and annual periods beginning after December 15, 2017. Adoption of the ASU is prospective. We adopted the ASU on January 1, 2018, which did not have a material impact on the consolidated financial statements.

In January 2017, the FASB issued ASU No. 2017-04, *Simplifying the Test for Goodwill Impairment*, to simplify the test for goodwill impairment by removing Step 2. An entity will, therefore, perform the goodwill impairment test by comparing the fair value of a reporting unit with its carrying amount and recognizing an impairment charge for the amount by which the carrying amount exceeds the fair value, not to exceed the total amount of goodwill allocated to the reporting unit. An entity still has the option to perform a qualitative assessment to determine if the quantitative impairment test is necessary. The ASU is effective for interim and annual periods beginning after December 15, 2019, with early adoption permitted. Adoption of the ASU is prospective. We have not yet selected an adoption date, though the ASU is currently not expected to have a material impact on the consolidated financial statements.

In February 2017, the FASB issued ASU No. 2017-05, *Gains and Losses from the Recognition of Nonfinancial Assets*, to clarify the scope of asset derecognition guidance and accounting for partial sales of nonfinancial assets. The ASU is effective for interim and annual periods beginning after December 15, 2017. We adopted the ASU on January 1, 2018 on a modified retrospective basis through a cumulative adjustment to accumulated deficit. Upon adoption of the ASU, we recorded a \$9.4 million decrease to our beginning accumulated deficit balance.

In May 2017, the FASB issued ASU No. 2017-09, *Scope of Modification Accounting*, to provide guidance on which changes to the terms or conditions of a share-based payment award require an entity to apply modification accounting. The ASU is effective for interim and annual periods beginning after December 15, 2017. Adoption of the ASU is prospective. We adopted the ASU on January 1, 2018, which did not have a material impact on the consolidated financial statements.

In August 2017, the FASB issued ASU No. 2017-12, *Targeted Improvements to Accounting for Hedging Activities*, to simplify the application of current hedge accounting guidance. The ASU expands and refines hedge accounting for both non-financial and financial risk components and aligns the recognition and presentation of the effects of the hedging instrument and the hedged item in the financial statements. The ASU is effective for interim and annual periods beginning after December 15, 2018, with early adoption permitted. Adoption of the ASU will be prospective for us. We plan to adopt the ASU on January 1, 2019, and the ASU is currently not expected to have a material impact on the consolidated financial statements.

In January 2018, the FASB issued ASU No. 2018-01, *Land Easement Practical Expedient Transition to Topic 842*, to permit an entity to elect a practical expedient to not re-evaluate land easements that existed or expired before the entity's adoption of ASU No. 2016-02, *Leases*, and that are not currently accounted for as leases. The ASU is effective for the same periods as ASU No. 2016-02, and the ASU will not have a material impact on the consolidated financial statements.

In August 2018, the FASB issued ASU No. 2018-15, *Customer's Accounting for Implementation Costs Incurred in a Cloud Computing Arrangement that Is a Service Contract*. The ASU aligns the requirements for capitalizing implementation costs incurred in a hosting arrangement that is a service contract with the requirements for capitalizing implementation costs incurred to develop or obtain internal-use software (and hosting arrangements that include an internal-use software license). The ASU is effective for interim and annual periods beginning after December 15, 2019, with early adoption permitted. Adoption of the ASU is either retrospective or prospective. We are currently obtaining an understanding of the ASU and plan to adopt the ASU prospectively on January 1, 2020.

### **Note 3 – Business Combinations**

#### ***Grohmann Acquisition***

On January 3, 2017, we completed our acquisition of Grohmann Engineering GmbH (now Tesla Grohmann Automation GmbH or “Grohmann”), which specializes in the design, development and sale of automated manufacturing systems, for \$109.5 million in cash. We acquired Grohmann to improve the speed and efficiency of our manufacturing processes.

At the time of acquisition, we entered into an incentive compensation arrangement for up to a maximum of \$25.8 million of payments contingent upon continued service with us for 36 months after the acquisition date. Such payments would have been accounted for as compensation expense in the periods earned. However, during the three months ended March 31, 2017, we terminated the incentive compensation arrangement and accelerated the payments thereunder. As a result, we recorded the entire \$25.8 million as compensation expense in the three months ended March 31, 2017, which was included within selling, general and administrative expense in the consolidated statements of operations.

*Fair Value of Assets Acquired and Liabilities Assumed*

Fair value estimates are based on a complex series of judgments about future events and uncertainties and rely heavily on estimates and assumptions. The judgments used to determine the estimated fair value assigned to each class of assets acquired and liabilities assumed, as well as asset lives and the expected future cash flows and related discount rates, can materially impact our results of operations. Significant inputs used included the amount of cash flows, the expected period of the cash flows and the discount rates. During the fourth quarter of 2017, we finalized our estimate of the acquisition date fair values of the assets acquired and the liabilities assumed. Prior to finalization, there were no changes to the fair values of the assets acquired and the liabilities assumed.

The allocation of the purchase consideration was based on management's estimate of the acquisition date fair values of the assets acquired and the liabilities assumed, as follows (in thousands):

**Assets acquired:**

Cash and cash equivalents	\$	334
Accounts receivable		42,947
Inventory		10,031
Property, plant and equipment		44,030
Intangible assets		21,723
Prepaid expenses and other assets, current and non-current		1,998
Total assets acquired		<u>121,063</u>

**Liabilities assumed:**

Accounts payable	(19,975)
Accrued liabilities	(12,403)
Debt and capital leases, current and non-current	(9,220)
Other long-term liabilities	(10,049)
Total liabilities assumed	<u>(51,647)</u>
Net assets acquired	69,416
Goodwill	40,065
Total purchase price	<u>\$ 109,481</u>

Goodwill represented the excess of the purchase price over the fair value of the net assets acquired and was primarily attributable to the expected synergies from potential monetization opportunities and from integrating Grohmann's technology into our automotive business as well as the acquired talent. Goodwill is not deductible for U.S. income tax purposes and is not amortized. Rather, we assess goodwill for impairment annually in the fourth quarter, or more frequently if events or changes in circumstances indicate that it might be impaired, by comparing its carrying value to the reporting unit's fair value.

### *Identifiable Intangible Assets Acquired*

The determination of the fair values of the identified intangible assets and their respective useful lives as of the acquisition date was as follows (in thousands, except for useful lives):

	<b>Fair Value</b>	<b>Useful Life (in years)</b>
Developed technology	\$ 12,528	10
Software	3,341	3
Customer relations	3,236	6
Trade name	1,775	7
Other	843	2
Total intangible assets	<u>\$ 21,723</u>	

Grohmann's results of operations since the acquisition date have been included within the automotive segment in the consolidated statements of operations. Standalone and pro forma results of operations have not been presented because they were not material to the consolidated financial statements.

### *SolarCity Acquisition*

On November 21, 2016 (the "Acquisition Date"), we completed our acquisition of SolarCity. Pursuant to the Agreement and Plan of Merger (the "Merger Agreement"), each issued and outstanding share of SolarCity common stock was converted into 0.110 (the "Exchange Ratio") shares of our common stock. In addition, SolarCity's stock option awards and restricted stock unit awards were assumed by us and converted into corresponding equity awards in respect of our common stock based on the Exchange Ratio, with the awards retaining the same vesting and other terms and conditions as in effect immediately prior to the acquisition.

### *Fair Value of Purchase Consideration*

The Acquisition Date fair value of the purchase consideration was as follows (in thousands, except for share and per share amounts):

Total fair value of Tesla common stock issued (11,124,497 shares issued at \$185.04 per share)	\$ 2,058,477
Fair value of replacement Tesla stock options and restricted stock units for vested SolarCity awards	87,500
Total purchase price	<u>\$ 2,145,977</u>

Furthermore, the assumed unvested SolarCity awards of \$95.9 million are recognized as stock-based compensation expense over the remaining requisite service period. Per ASC 805, the replacement of stock options or other share-based payment awards in conjunction with a business combination represents a modification of share-based payment awards that must be accounted for in accordance with ASC 718, *Stock Compensation*. As a result of our issuance of replacement awards, a portion of the fair-value-based measure of the replacement awards is included in the purchase consideration. To determine the portion of the replacement awards that is part of the purchase consideration, we measured the fair value of both the replacement awards and the historical awards as of the Acquisition Date. The fair value of the replacement awards, whether vested or unvested, was included in the purchase consideration to the extent that pre-acquisition services were rendered.

Transaction costs of \$21.7 million were expensed as incurred to selling, general and administrative expense on the consolidated statements of operations.

### *Fair Value of Assets Acquired and Liabilities Assumed*

Fair value estimates are based on a complex series of judgments about future events and uncertainties and rely heavily on estimates and assumptions. The judgments used to determine the estimated fair value assigned to each class of assets acquired and liabilities assumed, as well as asset lives and the expected future cash flows and related discount rates, can materially impact our results of operations. Specifically, we utilized a discounted cash flow model to value the acquired solar energy systems, leased and to be leased, as well as the noncontrolling interests in subsidiaries. Significant inputs used included the amount of cash flows, the expected period of the cash flows and the discount rates.

The allocation of the purchase consideration was based on management's estimate of the Acquisition Date fair values of the assets acquired and the liabilities assumed, as follows (in thousands):

#### **Assets acquired:**

Cash and cash equivalents	\$ 213,523
Accounts receivable	74,619
Inventory	191,878
Solar energy systems, leased and to be leased	5,781,496
Property, plant and equipment	1,056,312
MyPower customer notes receivable, net of current portion	498,141
Restricted cash	129,196
Intangible assets	356,510
Prepaid expenses and other assets, current and non-current	199,864
Total assets acquired	8,501,539

#### **Liabilities assumed:**

Accounts payable	(230,078)
Accrued liabilities	(284,765)
Debt and capital leases, current and non-current	(3,403,840)
Financing obligations	(121,290)
Deferred revenue, current and non-current	(271,128)
Other liabilities	(950,423)
Total liabilities assumed	(5,261,524)
Net assets acquired	3,240,015
Noncontrolling interests redeemable and non-redeemable	(1,066,517)
Capped call options associated with 2014 convertible notes	3,460
Total net assets acquired	2,176,958
Gain on acquisition	(30,981)
Total purchase price	\$ 2,145,977

### *Gain on Acquisition*

Since the fair value of the net assets acquired was greater than the purchase price, we recognized a gain on acquisition of \$88.7 million in the fourth quarter of 2016, which was recorded within other income (expense), net, on the consolidated statements of operations.

During the fourth quarter of 2017, we finalized our estimate of the Acquisition Date fair values of the assets acquired and the liabilities assumed. Prior to finalization, during the year ended December 31, 2017, we recorded an \$11.6 million measurement period adjustment to MyPower customer notes receivable, net of current portion, and a \$46.2 million measurement period adjustment to accrued liabilities. The measurement period adjustments were recorded as losses to other income (expense), net, in the consolidated statement of operations and reduced the gain on acquisition initially recognized in the fourth quarter of 2016.

### *Identifiable Intangible Assets Acquired*

The determination of the fair values of the identified intangible assets and their respective useful lives as of the Acquisition Date was as follows (in thousands, except for useful lives):

	<u>Fair Value</u>	<u>Useful Life (in years)</u>
Developed technology	\$ 113,361	7
Trade name (1)	43,500	3
Favorable contracts and leases, net	112,817	15
IPR&D	86,832	Not applicable
Total intangible assets	<u>\$ 356,510</u>	

- (1) Refer to Note 4, *Intangible Assets*, for discussion over changes to the assumptions of the useful life of this asset post acquisition.

### *Unaudited Pro Forma Financial Information*

The consolidated financial statements for the year ended December 31, 2016 include SolarCity's results of operations from the Acquisition Date through December 31, 2016. Net revenues and operating loss attributable to SolarCity during this period and included in the consolidated statement of operations were \$84.1 million and \$68.2 million, respectively.

The following unaudited pro forma financial information for the year ended December 31, 2016 gives effect to our acquisition of SolarCity as if the acquisition had occurred on January 1, 2015 (in thousands, except per share data):

Revenue	\$ 7,536,876
Net loss attributable to common stockholders	(702,868)
Net loss per share of common stock, basic and diluted	\$ (4.56)
Weighted-average shares used in computing net loss per share of common stock, basic and diluted	154,090

The unaudited pro forma financial information includes adjustments for the depreciation of solar energy systems, leased and to be leased, the intangible assets acquired, the effect of the acquisition on deferred revenue and noncontrolling interests and the transaction costs related to the acquisition. The unaudited pro forma financial information is presented for illustrative purposes only and is not necessarily indicative of the results of operations of future periods. The unaudited pro forma financial information does not give effect to the potential impact of current financial conditions, regulatory matters, synergies, operating efficiencies or cost savings that might be associated with the acquisition. Consequently, actual results could differ from the unaudited pro forma financial information presented.

#### Note 4 – Intangible Assets

Information regarding our acquired intangible assets was as follows (in thousands):

	December 31, 2018				December 31, 2017			
	Gross Carrying Amount	Accumulated Amortization	Other	Net Carrying Amount	Gross Carrying Amount	Accumulated Amortization	Other	Net Carrying Amount
<b>Finite-lived intangible assets:</b>								
Developed technology	\$152,431	\$(40,705)	\$ 1,205	\$112,931	\$125,889	\$(19,317)	\$ 1,847	\$108,419
Trade names	45,275	(44,056)	170	1,389	45,275	(10,924)	261	34,612
Favorable contracts and leases, net	112,817	(16,409)	—	96,408	112,817	(8,639)	—	104,178
Other	<u>35,559</u>	<u>(11,540)</u>	<u>719</u>	<u>24,738</u>	<u>34,099</u>	<u>(7,775)</u>	<u>1,137</u>	<u>27,461</u>
Total finite-lived intangible assets	346,082	(112,710)	2,094	235,466	318,080	(46,655)	3,245	274,670
<b>Indefinite-lived intangible assets:</b>								
IPR&D	<u>60,290</u>	<u>—</u>	<u>(13,264)</u>	<u>47,026</u>	<u>86,832</u>	<u>—</u>	<u>—</u>	<u>86,832</u>
Total indefinite-lived intangible assets	60,290	—	(13,264)	47,026	86,832	—	—	86,832
Total intangible assets	<u>\$406,372</u>	<u>\$(112,710)</u>	<u>\$(11,170)</u>	<u>\$282,492</u>	<u>\$404,912</u>	<u>\$(46,655)</u>	<u>\$3,245</u>	<u>\$361,502</u>

The in-process research and development (“IPR&D”), which we acquired from SolarCity, is accounted for as an indefinite-lived asset until the completion or abandonment of the associated research and development efforts. If the research and development efforts are successfully completed and commercial feasibility is reached, the IPR&D would be amortized over its then estimated useful life. If the research and development efforts are not completed or are abandoned, the IPR&D might be impaired. The fair value of the IPR&D was estimated using the replacement cost method under the cost approach, based on the historical acquisition costs and expenses of the technology adjusted for estimated developer’s profit, opportunity cost and obsolescence factor. During the year ended December 31, 2018, we concluded that a portion of the IPR&D was not commercially feasible, and consequently recognized an abandonment loss of \$13.3 million in restructuring and other expenses in the consolidated statements of operations. Additionally, \$26.5 million of IPR&D was put into production during the year ended December 31, 2018, and we expect to complete the remaining research and development efforts in the first half of 2019. The nature of the research and development efforts consists principally of planning, designing and testing the technology for viability in manufacturing solar cells and modules. If commercial feasibility is not achieved for the remaining IPR&D, we would likely look to other alternative technologies.

The costs associated with one of the trade names acquired by us has been fully amortized as of December 31, 2018 as we phased out the use of such trade name in our sales and marketing efforts.

Total future amortization expense for intangible assets was estimated as follows (in thousands):

	December 31, 2018
2019	\$ 34,637
2020	32,729
2021	32,729
2022	32,729
2023	26,537
Thereafter	76,105
Total	<u>\$ 235,466</u>



## Note 5 – Fair Value of Financial Instruments

ASC 820, *Fair Value Measurements*, states that fair value is an exit price, representing the amount that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants. As such, fair value is a market-based measurement that should be determined based on assumptions that market participants would use in pricing an asset or a liability. The three-tiered fair value hierarchy, which prioritizes which inputs should be used in measuring fair value, is comprised of: (Level I) observable inputs such as quoted prices in active markets; (Level II) inputs other than quoted prices in active markets that are observable either directly or indirectly and (Level III) unobservable inputs for which there is little or no market data. The fair value hierarchy requires the use of observable market data when available in determining fair value. Our assets and liabilities that were measured at fair value on a recurring basis were as follows (in thousands):

	December 31, 2018				December 31, 2017			
	Fair Value	Level I	Level II	Level III	Fair Value	Level I	Level II	Level III
Money market funds (cash and cash equivalents & restricted cash)								
	\$1,812,828	1,812,828	\$ —	\$ —	\$2,163,459	\$2,163,459	\$ —	\$ —
Interest rate swaps, net	11,070	—	11,070	—	59	—	59	—
Total	<u>\$1,823,898</u>	<u>\$1,812,828</u>	<u>\$ 11,070</u>	<u>\$ —</u>	<u>\$2,163,518</u>	<u>\$2,163,459</u>	<u>\$ 59</u>	<u>\$ —</u>

All of our money market funds were classified within Level I of the fair value hierarchy because they were valued using quoted prices in active markets. Our interest rate swaps were classified within Level II of the fair value hierarchy because they were valued using alternative pricing sources or models that utilized market observable inputs, including current and forward interest rates. During the year ended December 31, 2018, there were no transfers between the levels of the fair value hierarchy.

### Interest Rate Swaps

We enter into fixed-for-floating interest rate swap agreements to swap variable interest payments on certain debt for fixed interest payments, as required by certain of our lenders. We do not designate our interest rate swaps as hedging instruments. Accordingly, our interest rate swaps are recorded at fair value on the consolidated balance sheets within other assets or other long-term liabilities, with any changes in their fair values recognized as other income (expense), net, in the consolidated statements of operations and with any cash flows recognized as investing activities in the consolidated statements of cash flows. Our interest rate swaps outstanding were as follows (in thousands):

	December 31, 2018			December 31, 2017		
	Aggregate Notional Amount	Gross Asset at Fair Value	Gross Liability at Fair Value	Aggregate Notional Amount	Gross Asset at Fair Value	Gross Liability at Fair Value
Interest rate swaps	\$ 800,293	\$ 12,159	\$ 1,089	\$ 496,544	\$ 5,304	\$ 5,245

For the years ended December 31, 2018, 2017 and 2016, our interest rate swaps activity was as follows (in thousands):

	Year Ended December 31,		
	2018	2017	2016
Gross gains	\$ 21,558	\$ 7,192	\$ 6,995
Gross losses	\$ 11,670	\$ 13,082	\$ —

### Disclosure of Fair Values

Our financial instruments that are not re-measured at fair value include accounts receivable, MyPower customer notes receivable, rebates receivable, accounts payable, accrued liabilities, customer deposits, the participation interest and debt. The carrying values of these financial instruments other than the participation interest, the convertible senior notes, the 5.30% Senior Notes due in 2025, the solar asset-backed notes, the solar loan-backed notes and the automotive asset-backed notes approximate their fair values.

We estimate the fair value of the convertible senior notes and the 5.30% Senior Notes due in 2025 using commonly accepted valuation methodologies and market-based risk measurements that are indirectly observable, such as credit risk (Level II). In addition, we estimate the fair values of the participation interest, the solar asset-backed notes, the solar loan-backed notes and the automotive asset-backed notes based on rates currently offered for instruments with similar maturities and terms (Level III). The following table presents the estimated fair values and the carrying values (in thousands):

	December 31, 2018		December 31, 2017	
	Carrying Value	Fair Value	Carrying Value	Fair Value
Convertible senior notes	\$ 3,660,316	\$ 4,346,642	\$ 3,722,673	\$ 4,488,651
Senior notes	\$ 1,778,756	\$ 1,575,000	\$ 1,775,550	\$ 1,732,500
Participation interest	\$ 18,946	\$ 18,431	\$ 17,545	\$ 17,042
Solar asset-backed notes	\$ 1,183,675	\$ 1,206,755	\$ 880,415	\$ 898,145
Solar loan-backed notes	\$ 203,052	\$ 211,788	\$ 236,844	\$ 248,149
Automotive asset-backed notes	\$ 1,172,160	\$ 1,179,910	\$ —	\$ —

### Note 6 – Inventory

Our inventory consisted of the following (in thousands):

	December 31, 2018	December 31, 2017
Raw materials	\$ 931,828	\$ 821,396
Work in process	296,991	243,181
Finished goods	1,581,763	1,013,909
Service parts	302,864	185,051
Total	<u>\$ 3,113,446</u>	<u>\$ 2,263,537</u>

Finished goods inventory included vehicles in transit to fulfill customer orders, new vehicles available for immediate sale at our retail and service center locations, used vehicles and energy storage products. During the year ended December 31, 2018, we made the decision to utilize some of our fleet cars as service loaners on a long-term basis. As a result, we reclassified \$121.2 million of finished goods inventory to property, plant and equipment.

For solar energy systems, leased and to be leased, we commence transferring component parts from inventory to construction in progress, a component of solar energy systems, leased and to be leased, once a lease contract with a customer has been executed and installation has been initiated. Additional costs incurred on the leased systems, including labor and overhead, are recorded within construction in progress.

We write-down inventory for any excess or obsolete inventories or when we believe that the net realizable value of inventories is less than the carrying value. During the years ended December 31, 2018, 2017 and 2016, we recorded write-downs of \$78.3 million, \$124.1 million and \$52.8 million, respectively, in cost of revenues.

**Note 7 – Solar Energy Systems, Leased and To Be Leased, Net**

Solar energy systems, leased and to be leased, net, consisted of the following (in thousands):

	December 31, 2018	December 31, 2017
Solar energy systems leased to customers	\$ 6,430,729	\$ 6,009,977
Initial direct costs related to customer solar energy system lease acquisition costs	99,380	74,709
	<u>6,530,109</u>	<u>6,084,686</u>
Less: accumulated depreciation and amortization	(495,518)	(220,110)
	<u>6,034,591</u>	<u>5,864,576</u>
Solar energy systems under construction	67,773	243,847
Solar energy systems to be leased to customers	169,032	239,067
Solar energy systems, leased and to be leased – net (1)	<u>\$ 6,271,396</u>	<u>\$ 6,347,490</u>

- (1) As of December 31, 2018 and 2017, solar energy systems, leased and to be leased, included \$36.0 million of capital leased assets with accumulated depreciation and amortization of \$3.8 million and \$1.9 million, respectively.

**Note 8 – Property, Plant and Equipment**

Our property, plant and equipment, net, consisted of the following (in thousands):

	December 31, 2018	December 31, 2017
Machinery, equipment, vehicles and office furniture	\$ 6,328,966	\$ 4,251,711
Tooling	1,397,514	1,255,952
Leasehold improvements	960,971	789,751
Land and buildings	4,047,006	2,517,247
Computer equipment, hardware and software	487,421	395,067
Construction in progress	807,297	2,541,588
	<u>14,029,175</u>	<u>11,751,316</u>
Less: Accumulated depreciation	(2,699,098)	(1,723,794)
Total	<u>\$ 11,330,077</u>	<u>\$ 10,027,522</u>

Construction in progress is primarily comprised of tooling and equipment related to the manufacturing of our vehicles and a portion of Gigafactory 1 construction. Completed assets are transferred to their respective asset classes, and depreciation begins when an asset is ready for its intended use. Construction in progress also includes certain build-to-suit lease costs incurred at our Buffalo manufacturing facility, referred to as Gigafactory 2. During the year ended December 31, 2018, we had significant transfers from construction in progress to the various property, plant and equipment asset classes as assets were placed in service primarily at Gigafactory 1 and Gigafactory 2. Interest on outstanding debt is capitalized during periods of significant capital asset construction and amortized over the useful lives of the related assets. During the years ended December 31, 2018 and 2017, we capitalized \$54.9 million and \$124.9 million, respectively, of interest.

As of December 31, 2018 and 2017, the table above included \$1.69 billion and \$1.63 billion, respectively, of gross build-to-suit lease assets. As of December 31, 2018 and 2017, the corresponding financing liabilities of \$81.7 million and \$14.9 million, respectively, were recorded in accrued liabilities and \$1.66 billion and \$1.67 billion, respectively, were recorded in other long-term liabilities on the consolidated balance sheets.

Depreciation expense during the years ended December 31, 2018, 2017 and 2016 was \$1.11 billion, \$769.3 million and \$477.3 million, respectively. Gross property and equipment under capital leases as of December 31, 2018 and 2017 was \$1.52 billion and \$688.3 million, respectively. Accumulated depreciation on property and equipment under capital leases as of these dates was \$231.6 million and \$100.6 million, respectively.

Panasonic has partnered with us on Gigafactory 1 with investments in the production equipment that it uses to manufacture and supply us with battery cells. Under our arrangement with Panasonic, we plan to purchase the full output from their production equipment at negotiated prices. As these terms convey to us the right to use, as defined in ASC 840, *Leases*, their production equipment, we consider them to be leased assets when production commences. This results in us recording the cost of their production equipment within property, plant and equipment, net, on the consolidated balance sheets with a corresponding liability recorded to long-term debt and capital leases. For all suppliers and partners for which we plan to purchase the full output from their production equipment located at Gigafactory 1, we have applied similar accounting. As of December 31, 2018 and 2017, we had cumulatively capitalized costs of \$1.24 billion and \$473.3 million, respectively, on the consolidated balance sheets in relation to the production equipment under our Panasonic arrangement. We had cumulatively capitalized total costs for Gigafactory 1, including costs under our Panasonic arrangement, of \$4.62 billion and \$3.15 billion as of December 31, 2018 and 2017, respectively.

#### Note 9 – Non-cancellable Operating Lease Payments Receivable

As of December 31, 2018, future minimum lease payments to be received from customers under non-cancellable operating leases for each of the next five years and thereafter were as follows (in thousands):

2019	\$	501,625
2020		418,299
2021		270,838
2022		186,807
2023		188,809
Thereafter		2,469,732
Total	\$	<u>4,036,110</u>

The above table does not include vehicle sales to customers or leasing partners with a resale value guarantee as the cash payments were received upfront. In addition, we assumed through our acquisition of SolarCity and will continue to enter into PPAs with our customers that are accounted for as leases. These customers are charged solely based on actual power produced by the installed solar energy system at a predefined rate per kilowatt-hour of power produced. The future payments from such arrangements are not included in the above table as they are a function of the power generated by the related solar energy systems in the future. Furthermore, the above table does not include performance-based incentives receivable from various utility companies. The amount of contingent rentals recognized as revenue for the years presented were not material.

#### Note 10 - Accrued Liabilities and Other

As of December 31, 2018 and 2017, accrued liabilities and other current liabilities consisted of the following (in thousands):

	December 31, 2018	December 31, 2017
Accrued purchases	\$ 394,216	\$ 753,408
Payroll and related costs	448,836	378,284
Taxes payable	348,663	185,807
Financing obligation, current portion	61,761	67,313
Accrued warranty	200,701	125,502
Sales return reserve, current portion	107,800	—
Accrued interest	77,917	75,572
	81,739	14,915

Build-to-suit lease liability, current portion		
Other current liabilities	372,620	130,565
Total	<u>\$ 2,094,253</u>	<u>\$ 1,731,366</u>

Taxes payable included value added tax, sales tax, property tax, use tax and income tax payables.

Accrued purchases primarily reflected receipts of goods and services that we had not been invoiced yet. As we are invoiced for these goods and services, this balance will reduce and accounts payable will increase.

Due to the adoption of the new revenue standard, automotive sales with resale value guarantees that are now accounted for as sales with a right of return require a corresponding sales return reserve, which is included in accrued liabilities and other when the reserve is current and other long-term liabilities when the reserve is non-current on the consolidated balance sheets. For automotive sales without a resale value guarantee, we record a reserve against revenue for the estimated variable consideration related to future product returns in accrued liabilities and other on the consolidated balance sheets. See Note 2, *Summary of Significant Accounting Policies* for details.

#### Note 11 – Other Long-Term Liabilities

Other long-term liabilities consisted of the following, net of current portion (in thousands):

	December 31, 2018	December 31, 2017
Accrued warranty reserve	\$ 547,125	\$ 276,289
Build-to-suit lease liability	1,662,017	1,665,768
Deferred rent expense	59,252	46,820
Financing obligation	50,383	67,929
Liability for receipts from an investor	—	29,713
Sales return reserve	84,143	—
Other noncurrent liabilities	307,483	356,451
Total other long-term liabilities	\$ 2,710,403	\$ 2,442,970

The liability for receipts from an investor represents the amounts received from the investor under a lease pass-through fund arrangement for the monetization of ITCs for solar energy systems not yet placed in service. Due to the adoption of the new revenue standard, automotive sales with resale value guarantees that are now accounted for as sales with a right of return require a corresponding sales return reserve, which is included in accrued liabilities and other when the reserve is current and other long-term liabilities when the reserve is non-current on the consolidated balance sheets.

#### Note 12 – Customer Deposits

Customer deposits primarily consisted of cash payments from customers at the time they place an order or reservation for a vehicle or an energy product and any additional payments up to the point of delivery or the completion of installation, including the fair values of any customer trade-in vehicles that are applicable toward a new vehicle purchase. Customer deposit amounts and timing vary depending on the vehicle model, the energy product and the country of delivery. In the case of a vehicle, customer deposits are fully refundable up to the point the vehicle is placed into the production cycle. In the case of an energy generation or storage product, customer deposits are fully refundable prior to the entry into a purchase agreement or in certain cases for a limited time thereafter (in accordance with applicable laws). Customer deposits are included in current liabilities until refunded or until they are applied towards the customer's purchase balance. As of December 31, 2018 and December 31, 2017, we held \$792.6 million and \$853.9 million, respectively, in customer deposits.

Due to the adoption of the new revenue standard, customer deposits now include prepayments on contracts that can be cancelled without significant penalties, such as vehicle maintenance plans, which were previously reported as

deferred revenue. As a result, the adoption of the new revenue standard increased the customer deposits balance as of December 31, 2018 by \$58.4 million as compared to what the balance would have been under ASC 605, *Revenue Recognition* (see Note 2, *Summary of Significant Accounting Policies*).

### Note 13 –Long-Term Debt Obligations

The following is a summary of our debt as of December 31, 2018 (in thousands):

	Unpaid Principal Balance	Net Carrying Value		Unused Committed Amount*	Contractual Interest Rates	Contractual Maturity Date
		Current	Long-Term			
<b>Recourse debt:</b>						
0.25% Convertible Senior Notes due in 2019 ("2019 Notes")	920,000	912,625	—	—	0.25%	March 2019
1.25% Convertible Senior Notes due in 2021 ("2021 Notes")	1,380,000	—	1,243,496	—	1.25%	March 2021
2.375% Convertible Senior Notes due in 2022 ("2022 Notes")	977,500	—	871,326	—	2.375%	March 2022
5.30% Senior Notes due in 2025 ("2025 Notes")	1,800,000	—	1,778,756	—	5.30%	August 2025
Credit Agreement	1,540,000	—	1,540,000	230,999	1% plus LIBOR	June 2020
Vehicle and other Loans	76,203	1,203	75,000	—	1.8%-7.6%	January 2019-December 2021
1.625% Convertible Senior Notes due in 2019	565,992	541,070	—	—	1.625%	November 2019
Zero-Coupon Convertible Senior Notes due in 2020	103,000	—	91,799	—	0.0%	December 2020
Solar Bonds	24,725	119	25,190	—	2.6%-5.8%	January 2019-January 2031
Total recourse debt	7,387,420	1,455,017	5,625,567	230,999		
<b>Non-recourse debt:</b>						
Warehouse Agreements	92,000	13,604	78,396	1,008,000	3.9%-4.2%	September 2020
Canada Credit Facility	73,220	31,766	41,454	—	3.6%-5.9%	November 2022
Term Loan due in 2019	180,624	180,624	—	—	6.1%	January 2019
Term Loan due in 2021	169,050	6,876	161,453	—	6.0%	January 2021
Cash equity debt	466,837	10,911	441,472	—	5.3%-5.8%	July 2033-January 2035
Solar asset-backed notes	1,214,071	28,761	1,154,914	—	4.0%-7.7%	September 2024-February 2048
Solar loan-backed notes	210,249	9,888	193,164	—	4.8%-7.5%	September 2048-September 2049
Automotive asset-backed notes	1,177,937	467,926	704,234	—	2.3%-7.9%	December 2019-June 2022
Solar Renewable Energy Credit and other Loans	26,742	16,612	9,836	17,633	5.1%-7.9%	December 2019-July 2021
Total non-recourse debt	3,610,730	766,968	2,784,923	1,025,633		
Total debt	<u>\$ 10,998,150</u>	<u>\$ 2,221,985</u>	<u>\$ 8,410,490</u>	<u>\$ 1,256,632</u>		



The following is a summary of our debt as of December 31, 2017 (in thousands):

	Unpaid Principal Balance	Net Carrying Value		Unused Committed Amount*	Contractual Interest Rates	Contractual Maturity Date
		Current	Long-Term			
<b>Recourse debt:</b>						
1.50% Convertible Senior Notes due in 2018 ("2018 Notes")	\$ 5,512	\$ 5,442	\$ —	\$ —	1.50%	June 2018
2019 Notes	920,000	—	869,092	—	0.25%	March 2019
2021 Notes	1,380,000	—	1,186,131	—	1.25%	March 2021
2022 Notes	977,500	—	841,973	—	2.375%	March 2022
2025 Notes	1,800,000	—	1,775,550	—	5.30%	August 2025
Credit Agreement	1,109,000	—	1,109,000	729,929	1% plus LIBOR	June 2020
Vehicle and other Loans	16,205	15,944	261	—	1.8%-7.6%	January 2018-September 2019
2.75% Convertible Senior Notes due in 2018	230,000	222,171	—	—	2.75%	November 2018
1.625% Convertible Senior Notes due in 2019	566,000	—	511,389	—	1.625%	November 2019
Zero-Coupon Convertible Senior Notes due in 2020	103,000	—	86,475	—	0.0%	December 2020
Related Party Promissory Notes due in February 2018	100,000	100,000	—	—	6.5%	February 2018
Solar Bonds	32,016	7,008	24,940	—	2.6%-5.8%	March 2018-January 2031
Total recourse debt	7,239,233	350,565	6,404,811	729,929		
<b>Non-recourse debt:</b>						
Warehouse Agreements	673,811	195,382	477,867	426,189	3.1%	September 2019
Canada Credit Facility	86,708	31,106	55,603	—	3.6%-5.1%	November 2021
Term Loan due in December 2018	157,095	156,884	—	19,534	4.8%	December 2018
Term Loan due in January 2021	176,290	5,885	169,352	—	4.9%	January 2021
Revolving Aggregation Credit Facility	161,796	—	158,733	438,204	4.1%-4.5%	December 2019
Solar Renewable Energy Credit Loan Facility	38,575	15,858	22,774	—	7.3%	July 2021
Cash equity debt	482,133	12,334	454,421	—	5.3%-5.8%	July 2033-January 2035
Solar asset-backed notes	907,241	23,829	856,586	—	4.0%-7.7%	November 2038-February 2048
Solar loan-backed notes	244,498	8,006	228,838	—	4.8%-7.5%	September 2048-September 2049
Total non-recourse debt	2,928,147	449,284	2,424,174	883,927		
Total debt	\$ 10,167,380	\$ 799,849	\$ 8,828,985	\$ 1,613,856		

\* Unused committed amounts under some of our credit facilities and financing funds are subject to satisfying specified conditions prior to draw-down (such as pledging to our lenders sufficient amounts of qualified receivables, inventories, leased vehicles and our interests in those leases, solar energy systems and the associated customer contracts, our interests in financing funds or various other assets). Upon draw-down of any unused committed amounts, there are no restrictions on use of available funds for general corporate purposes.

Recourse debt refers to debt that is recourse to our general assets. Non-recourse debt refers to debt that is recourse to only specified assets of our subsidiaries. The differences between the unpaid principal balances and the net carrying values are due to convertible senior note conversion features, debt discounts or deferred financing costs. As of December 31, 2018, we were in compliance with all financial debt covenants, which include minimum liquidity and expense-coverage balances and ratios.

#### **2018 Notes, Bond Hedges and Warrant Transactions**

In May 2013, we issued \$660.0 million in aggregate principal amount of 1.50% Convertible Senior Notes due in June 2018 in a public offering. The net proceeds from the issuance, after deducting transaction costs, were \$648.0 million.

Each \$1,000 of principal of the 2018 Notes is initially convertible into 8.0306 shares of our common stock, which is equivalent to an initial conversion price of \$124.52 per share, subject to adjustment upon the occurrence of specified events. Holders of the 2018 Notes may convert, at their option, on or after March 1, 2018. Further, holders of the 2018 Notes may convert, at their option, prior to March 1, 2018 only under the following circumstances: (1) during any quarter beginning after September 30, 2013, if the closing price of our common stock for at least 20 trading days (whether or not consecutive) during the last 30 consecutive trading days immediately preceding the quarter is greater than or equal to 130% of the conversion price; (2) during the five-business day period following any five-consecutive trading day period in which the trading price of the 2018 Notes is less than 98% of the product of the closing price of our common stock for each day during such five-consecutive trading day period or (3) if we make specified distributions to holders of our common stock or if specified corporate transactions occur. Upon conversion, we would pay cash for the principal amount and, if applicable, deliver shares of our common stock (subject to our right to deliver cash in lieu of all or a portion of such shares of our common stock) based on a daily conversion value. If a fundamental change occurs prior to the maturity date, holders of the 2018 Notes may require us to repurchase all or a portion of their 2018 Notes for cash at a repurchase price equal to 100% of the principal amount plus any accrued and unpaid interest. In addition, if specific corporate events occur prior to the maturity date, we would increase the conversion rate for a holder who elects to convert its 2018 Notes in connection with such an event in certain circumstances.

In accordance with GAAP relating to embedded conversion features, we initially valued and bifurcated the conversion feature associated with the 2018 Notes. We recorded to stockholders' equity \$82.8 million for the conversion feature. The resulting debt discount is being amortized to interest expense at an effective interest rate of 4.29%.

In connection with the offering of the 2018 Notes, we entered into convertible note hedge transactions whereby we have the option to purchase initially (subject to adjustment for certain specified events) 5.3 million shares of our common stock at a price of \$124.52 per share. The cost of the convertible note hedge transactions was \$177.5 million. In addition, we sold warrants whereby the holders of the warrants have the option to purchase initially (subject to adjustment for certain specified events) 5.3 million shares of our common stock at a price of \$184.48 per share. We received \$120.3 million in cash proceeds from the sale of these warrants. Taken together, the purchase of the convertible note hedges and the sale of the warrants are intended to reduce potential dilution from the conversion of the 2018 Notes and to effectively increase the overall conversion price from \$124.52 to \$184.48 per share. As these transactions meet certain accounting criteria, the convertible note hedges and warrants are recorded in stockholders' equity and are not accounted for as derivatives. The net cost incurred in connection with the convertible note hedge and warrant transactions was recorded as a reduction to additional paid-in capital on the consolidated balance sheet.

During the first quarter of 2018, \$5.2 million in aggregate principal amount of the 2018 Notes were converted for \$5.2 million in cash and 25,745 shares of our common stock. As a result, we recognized a loss on debt extinguishment of less than \$0.1 million.

As of June 30, 2018, the 2018 Notes had been completely settled.

#### ***2019 Notes, 2021 Notes, Bond Hedges and Warrant Transactions***

In March 2014, we issued \$800.0 million in aggregate principal amount of 0.25% Convertible Senior Notes due in March 2019 and \$1.20 billion in aggregate principal amount of 1.25% Convertible Senior Notes due in March 2021 in a public offering. In April 2014, we issued an additional \$120.0 million in aggregate principal amount of the 2019 Notes and \$180.0 million in aggregate principal amount of the 2021 Notes, pursuant to the exercise in full of the overallotment options by the underwriters. The total net proceeds from the issuances, after deducting transaction costs, were \$905.8 million for the 2019 Notes and \$1.36 billion for the 2021 Notes.

Each \$1,000 of principal of these notes is initially convertible into 2.7788 shares of our common stock, which is equivalent to an initial conversion price of \$359.87 per share, subject to adjustment upon the occurrence of specified events. Holders of these notes may elect to convert on or after December 1, 2018 for the 2019 Notes and December 1, 2020 for the 2021 Notes. The settlement of such an election to convert the 2019 Notes would be in cash and/or shares of our common stock, which we intend to settle in cash, on the maturity date. The settlement of such an election to convert the 2021 Notes would be in cash for the principal amount and, if applicable, shares of our common stock (subject to our right to deliver cash in lieu of all or a portion of such shares of our common stock), on the maturity date. Further, holders of these notes may convert, at their option, prior to the respective dates above only under the following circumstances: (1) during a quarter in which the closing price of our common stock for at least 20 trading days (whether or not consecutive) during the last 30 consecutive trading days immediately preceding the quarter is greater than or equal to 130% of the conversion price; (2) during the five-business day period following any five-consecutive trading day period in which the trading price of these notes is less than 98% of the product of the closing price of our common stock for each day during such five-consecutive trading day period or (3) if we make specified distributions to holders of our common stock or if specified corporate transactions occur. Upon such a conversion of the 2019 Notes, we would pay or deliver (as applicable) cash, shares of our common stock or a combination thereof, at our election. Upon such a conversion of the 2021 Notes, we would pay cash for the principal amount and, if applicable, deliver shares of our common stock (subject to our right to deliver cash in lieu of all or a portion of such shares of our common stock) based on a daily conversion value. If a fundamental change occurs prior to the applicable maturity date, holders of these notes may require us to repurchase all or a portion of their notes for cash at a repurchase price equal to 100% of the principal amount plus any accrued and unpaid interest. In addition, if specific corporate events occur prior to the applicable maturity date, we would increase the conversion rate for a holder who elects to convert their notes in connection with such an event in certain circumstances. As of December 31, 2018, none of the conditions permitting the holders of 2021 Notes to early convert had been met. Therefore, 2021 Notes were classified as long-term.

In accordance with GAAP relating to embedded conversion features, we initially valued and bifurcated the conversion features associated with these notes. We recorded to stockholders' equity \$188.1 million for the 2019 Notes' conversion feature and \$369.4 million for the 2021 Notes' conversion feature. The resulting debt discounts are being amortized to interest expense at an effective interest rate of 4.89% and 5.96%, respectively.

In connection with the offering of these notes in March 2014, we entered into convertible note hedge transactions whereby we have the option to purchase initially (subject to adjustment for certain specified events) a total of 5.6 million shares of our common stock at a price of \$359.87 per share. The total cost of the convertible note hedge transactions was \$524.7 million. In addition, we sold warrants whereby the holders of the warrants have the option to purchase initially (subject to adjustment for certain specified events) 2.2 million shares of our common stock at a price of \$512.66 per share for the 2019 Notes and 3.3 million shares of our common stock at a price of \$560.64 per share for 2021 Notes. We received \$338.4 million in total cash proceeds from the sales of these warrants. Similarly, in connection with the issuance of the additional notes in April 2014, we entered into convertible note hedge transactions and paid a total of \$78.7 million. In addition, we sold warrants to purchase initially (subject to adjustment for certain specified events) 0.3 million shares of our common stock at a price of \$512.66 per share for the 2019 Notes and 0.5 million shares of our common stock at a price of \$560.64 per share for the 2021 Notes. We received \$50.8 million in total cash proceeds from the sales of these warrants. Taken together, the purchases of the convertible note hedges and the sales of the warrants are intended to reduce potential dilution and/or cash payments from the conversion of these notes and to effectively increase the overall conversion price from \$359.87 to \$512.66 per share for the 2019 Notes and from \$359.87 to \$560.64 per share for the 2021 Notes. As these transactions meet certain accounting criteria, the convertible note hedges and warrants are recorded in stockholders' equity and are not accounted for as derivatives. The net cost incurred in connection with the convertible note hedge and warrant transactions was recorded as a reduction to additional paid-in capital on the consolidated balance sheet.

### ***2022 Notes, Bond Hedges and Warrant Transactions***

In March 2017, we issued \$977.5 million in aggregate principal amount of 2.375% Convertible Senior Notes due in March 2022 in a public offering. The net proceeds from the issuance, after deducting transaction costs, were \$965.9 million.

Each \$1,000 of principal of the 2022 Notes is initially convertible into 3.0534 shares of our common stock, which is equivalent to an initial conversion price of \$327.50 per share, subject to adjustment upon the occurrence of specified events. Holders of the 2022 Notes may convert, at their option, on or after December 15, 2021. Further, holders of the 2022 Notes may convert, at their option, prior to December 15, 2021 only under the following circumstances: (1) during any quarter beginning after June 30, 2017, if the closing price of our common stock for at least 20 trading days (whether or not consecutive) during the last 30 consecutive trading days immediately preceding the quarter is greater than or equal to 130% of the conversion price; (2) during the five-business day period following any five-consecutive trading day period in which the trading price of the 2022 Notes is less than 98% of the product of the closing price of our common stock for each day during such five-consecutive trading day period or (3) if we make specified distributions to holders of our common stock or if specified corporate transactions occur. Upon a conversion, we would pay cash for the principal amount and, if applicable, deliver shares of our common stock (subject to our right to deliver cash in lieu of all or a portion of such shares of our common stock) based on a daily conversion value. If a fundamental change occurs prior to the maturity date, holders of the 2022 Notes may require us to repurchase all or a portion of their 2022 Notes for cash at a repurchase price equal to 100% of the principal amount plus any accrued and unpaid interest. In addition, if specific corporate events occur prior to the maturity date, we would increase the conversion rate for a holder who elects to convert its 2022 Notes in connection with such an event in certain circumstances. As of December 31, 2018, none of the conditions permitting the holders of the 2022 Notes to early convert had been met. Therefore, the 2022 Notes are classified as long-term.

In accordance with GAAP relating to embedded conversion features, we initially valued and bifurcated the conversion feature associated with the 2022 Notes. We recorded to stockholders' equity \$145.6 million for the conversion feature. The resulting debt discount is being amortized to interest expense at an effective interest rate of 6.00%.

In connection with the offering of the 2022 Notes, we entered into convertible note hedge transactions whereby we have the option to purchase initially (subject to adjustment for certain specified events) 3.0 million shares of our common stock at a price of \$327.50 per share. The cost of the convertible note hedge transactions was \$204.1 million. In addition, we sold warrants whereby the holders of the warrants have the option to purchase initially (subject to adjustment for certain specified events) 3.0 million shares of our common stock at a price of \$655.00 per share. We received \$52.9 million in cash proceeds from the sale of these warrants. Taken together, the purchase of the convertible note hedges and the sale of the warrants are intended to reduce potential dilution from the conversion of the 2022 Notes and to effectively increase the overall conversion price from \$327.50 to \$655.00 per share. As these transactions meet certain accounting criteria, the convertible note hedges and warrants are recorded in stockholders' equity and are not accounted for as derivatives. The net cost incurred in connection with the convertible note hedge and warrant transactions was recorded as a reduction to additional paid-in capital on the consolidated balance sheet.

### **2025 Notes**

In August 2017, we issued \$1.80 billion in aggregate principal amount of unsecured 5.30% Senior Notes due in August 2025 pursuant to Rule 144A and Regulation S under the Securities Act. The net proceeds from the issuance, after deducting transaction costs, were \$1.77 billion.

### **Credit Agreement**

In June 2015, we entered into a senior asset-based revolving credit agreement (as amended from time to time, the "Credit Agreement") with a syndicate of banks. Borrowed funds bear interest, at our option, at an annual rate of (a) 1% plus LIBOR or (b) the highest of (i) the federal funds rate plus 0.50%, (ii) the lenders' "prime rate" or (iii) 1% plus LIBOR. The fee for undrawn amounts is 0.25% per annum. The Credit Agreement is secured by certain of our accounts receivable, inventory and equipment. Availability under the Credit Agreement is based on the value of such assets, as reduced by certain reserves.

On May 3, 2018, the Company entered into the Ninth Amendment (the "Ninth Amendment") to the Credit Agreement. The Ninth Amendment amended the Credit Agreement to permit Tesla to include in its discretion: (i) the Fremont Factory facilities in the U.S. borrowing base and/or (ii) vehicles in and in-transit to Belgium in the Dutch borrowing base.

### ***Vehicle and Other Loans***

We have entered into various vehicle and other loan agreements with various financial institutions. The vehicle loans are secured by the vehicles financed and used vehicles owned by us.

### ***2.75% Convertible Senior Notes due in 2018***

In October 2013, SolarCity issued \$230.0 million in aggregate principal amount of 2.75% Convertible Senior Notes due on November 1, 2018 in a public offering.

Each \$1,000 of principal of the convertible senior notes is now convertible into 1.7838 shares of our common stock, which is equivalent to a conversion price of \$560.64 per share (subject to adjustment upon the occurrence of specified events related to dividends, tender offers or exchange offers). Holders of the convertible senior notes may convert, at their option, at any time up to and including the second trading day prior to the maturity date. If certain events that would constitute a make-whole fundamental change (such as significant changes in ownership, corporate structure or tradability of our common stock) occur prior to the maturity date, we would increase the conversion rate for a holder who elects to convert its convertible senior notes in connection with such an event in certain circumstances. The maximum conversion rate is capped at 2.3635 shares for each \$1,000 of principal of the convertible senior notes, which is equivalent to a minimum conversion price of \$423.10 per share. The convertible senior notes do not have a cash conversion option. The convertible senior note holders may require us to repurchase their convertible senior notes for cash only under certain defined fundamental changes.

In November 2018, the 2.75% Convertible Senior Notes due in 2018 matured and aggregate outstanding principal of \$230.0 million was fully paid off.

### ***1.625% Convertible Senior Notes due in 2019***

In September 2014, SolarCity issued \$500.0 million and in October 2014, SolarCity issued an additional \$66.0 million in aggregate principal amount of 1.625% Convertible Senior Notes due on November 1, 2019 in a private placement.

Each \$1,000 of principal of the convertible senior notes is now convertible into 1.3169 shares of our common stock, which is equivalent to a conversion price of \$759.36 per share (subject to adjustment upon the occurrence of specified events related to dividends, tender offers or exchange offers). The maximum conversion rate is capped at 1.7449 shares for each \$1,000 of principal of the convertible senior notes, which is equivalent to a minimum conversion price of \$573.10 per share. The convertible senior notes do not have a cash conversion option. The convertible senior note holders may require us to repurchase their convertible senior notes for cash only under certain defined fundamental changes.

In connection with the issuance of the convertible senior notes in September and October 2014, SolarCity entered into capped call option agreements to reduce the potential dilution upon the conversion of the convertible senior notes. Specifically, upon the exercise of the capped call options, we would now receive shares of our common stock equal to 745,377 shares multiplied by (a) (i) the lower of \$1,146.18 or the then market price of our common stock less (ii) \$759.36 and divided by (b) the then market price of our common stock. The results of this formula are that we would receive more shares as the market price of our common stock exceeds \$759.36 and approaches \$1,146.18, but we would receive less shares as the market price of our common stock exceeds \$1,146.18. Consequently, if the convertible senior notes are converted, then the number of shares to be issued by us would be effectively partially offset by the shares received by us under the capped call options. We can also elect to receive the equivalent value of cash in lieu of shares. The capped call options expire on various dates ranging from September 4, 2019 to October 29, 2019, and the formula above would be adjusted in the event of a merger; a tender offer; nationalization; insolvency; delisting of our common stock; changes in law; failure to deliver; insolvency filing; stock splits, combinations, dividends, repurchases or similar events or an announcement of certain of the preceding actions. Although intended to reduce the net number of shares issued after a conversion of the convertible senior notes, the capped call options were separately negotiated transactions, are not a part of the terms of the convertible senior notes, do not affect the rights of the convertible senior note holders and take effect regardless of whether the convertible senior notes are actually converted. The capped call options meet the criteria for equity classification because they are indexed to our common stock and we always control whether settlement will be in shares or cash.

### ***Zero-Coupon Convertible Senior Notes due in 2020***

In December 2015, SolarCity issued \$113.0 million in aggregate principal amount of Zero-Coupon Convertible Senior Notes due on December 1, 2020 in a private placement. \$13.0 million of the convertible senior notes were issued to related parties (see Note 21, *Related Party Transactions*).

Each \$1,000 of principal of the convertible senior notes is now convertible into 3.3333 shares of our common stock, which is equivalent to a conversion price of \$300.00 per share (subject to adjustment upon the occurrence of specified events related to dividends, tender offers or exchange offers). The maximum conversion rate is capped at 4.2308 shares for each \$1,000 of principal of the convertible senior notes, which is equivalent to a minimum conversion price of \$236.36 per share. The convertible senior notes do not have a cash conversion option. The convertible senior note holders may require us to repurchase their convertible senior notes for cash only under certain defined fundamental changes. On or after June 30, 2017, the convertible senior notes are redeemable by us in the event that the closing price of our common stock exceeds 200% of the conversion price for 45 consecutive trading days ending within three trading days of such redemption notice at a redemption price equal to 100% of the principal amount plus any accrued and unpaid interest.

### ***Related Party Promissory Notes***

In April, 2017, our CEO, SolarCity's former CEO and SolarCity's former Chief Technology Officer exchanged their \$100.0 million (collectively) in aggregate principal amount of 6.50% Solar Bonds due in February 2018 for promissory notes in the same amounts and with substantially the same terms.

During the year ended December 31, 2018, we fully repaid the \$100.0 million in aggregate principal amount of 6.50% promissory notes held by our CEO, SolarCity's former CEO and SolarCity's former Chief Technology Officer.

### ***Solar Bonds***

Solar Bonds are senior unsecured obligations that are structurally subordinate to the indebtedness and other liabilities of our subsidiaries. Solar Bonds were issued under multiple series with various terms and interest rates. See Note 21, *Related Party Transactions*, for Solar Bonds issued to related parties.

### ***Warehouse Agreements***

In August 2016, our subsidiaries entered into the a loan and security agreement (the "2016 Warehouse Agreement") for borrowings secured by the future cash flows arising from certain leases and the associated leased vehicles. On August 17, 2017, the 2016 Warehouse Agreement was amended to modify the interest rates and extend the availability period and the maturity date, and our subsidiaries entered into another loan and security agreement (the "2017 Warehouse Agreement") with substantially the same terms as and that shares the same committed amount with the 2016 Warehouse Agreement. On August 16, 2018, the 2016 Warehouse Agreement and 2017 Warehouse Agreement were amended to extend the availability period from August 17, 2018 to August 16, 2019 and extend the maturity date from September 2019 to September 2020. On December 28, 2018, our subsidiaries terminated the 2017 Warehouse Agreement after having fully repaid all obligations thereunder, and entered into a third loan and security agreement with substantially the same terms as and that shares the same committed amount with the 2016 Warehouse Agreement. We refer to these agreements together as the "Warehouse Agreements." Amounts drawn under the Warehouse Agreements generally bear interest at a fixed margin above (i) LIBOR or (ii) the commercial paper rate. The Warehouse Agreements are non-recourse to our other assets.

Pursuant to the Warehouse Agreements, an undivided beneficial interest in the future cash flows arising from certain leases and the related leased vehicles has been sold for legal purposes but continues to be reported in the consolidated financial statements. The interest in the future cash flows arising from these leases and the related vehicles is not available to pay the claims of our creditors other than pursuant to obligations to the lenders under the Warehouse Agreements. Any excess cash flows not required to pay obligations under the Warehouse Agreements are available for distributions.

During the year ended December 31, 2018, we repaid \$1.16 billion of the principal outstanding under the Warehouse Agreements.

### ***Canada Credit Facility***

In December 2016, one of our subsidiaries entered into a credit agreement (the “Canada Credit Facility”) with a bank for borrowings secured by our interests in certain vehicle leases. In December 2017 and December 2018, the Canada Credit Facility was amended to add our interests in additional vehicle leases as collateral, allowing us to draw additional funds. Amounts drawn under the Canada Credit Facility bear interest at fixed rates. The Canada Credit Facility is non-recourse to our other assets.

### ***Term Loan due in 2019***

In March 2016, a subsidiary of SolarCity entered into an agreement for a term loan. The term loan bears interest at an annual rate of the lender’s cost of funds plus 3.25%. The fee for undrawn commitments is 0.85% per annum. On March 31, 2017, the agreement was amended to upsize the committed amount, extend the availability period and extend the maturity date. The term loan is secured by substantially all of the assets of the subsidiary and is non-recourse to our other assets. The term loan had an original maturity date of December 2018 and on December 19, 2018, the maturity date was extended to January 2019. On January 30, 2019, the maturity date of the term loan was further extended to April 2019.

### ***Term Loan due in 2021***

In January 2016, a subsidiary of SolarCity entered into an agreement with a syndicate of banks for a term loan. The term loan bears interest at an annual rate of three-month LIBOR plus 3.50%. The term loan is secured by substantially all of the assets of the subsidiary, including its interests in certain financing funds, and is non-recourse to our other assets.

### ***Revolving Aggregation Credit Facility***

In May 2015, a subsidiary of SolarCity entered into an agreement with a syndicate of banks for a revolving aggregation credit facility. On March 23, 2016 and June 23, 2017, the agreement was amended to modify the interest rates and extend the availability period and the maturity date. The revolving aggregation credit facility bears interest at an annual rate of 2.75% plus (i) for commercial paper loans, the commercial paper rate and (ii) for LIBOR loans, at our option, three-month LIBOR or daily LIBOR. The revolving aggregation credit facility is secured by certain assets of certain of our subsidiaries and was non-recourse to our other assets. On December 28, 2018, the aggregate outstanding principal amount of \$210.2 million was repaid and the Revolving Aggregation Credit Facility was terminated.

### ***Cash Equity Debt I***

In connection with the cash equity financing on May 2, 2016, SolarCity issued \$121.7 million in aggregate principal amount of debt that bears interest at a fixed rate. This debt is secured by, among other things, our interests in certain financing funds and is non-recourse to our other assets.

### ***Cash Equity Debt II***

In connection with the cash equity financing on September 8, 2016, SolarCity issued \$210.0 million in aggregate principal amount of debt that bears interest at a fixed rate. This debt is secured by, among other things, our interests in certain financing funds and is non-recourse to our other assets.

### ***Cash Equity Debt III***

In connection with the cash equity financing on December 16, 2016, we issued \$170.0 million in aggregate principal amount of debt that bears interest at a fixed rate. This debt is secured by, among other things, our interests in certain financing funds and is non-recourse to our other assets.

### ***Solar Asset-backed Notes, Series 2013-1***

In November 2013, SolarCity pooled and transferred qualifying solar energy systems and the associated customer contracts into a Special Purpose Entity (“SPE”) and issued \$54.4 million in aggregate principal amount of Solar Asset-backed Notes, Series 2013-1, backed by these solar assets to investors. The SPE is wholly owned by us and is consolidated in the financial statements. As of December 31, 2018, these solar assets had a carrying value of \$85.1 million and are included within solar energy systems, leased and to be leased, net, on the consolidated balance sheets. The Solar Asset-backed Notes were issued at a discount of 0.05%. The cash flows generated by these solar assets are used to service the monthly principal and interest payments on the Solar Asset-backed Notes and satisfy the SPE’s expenses, and any remaining cash is distributed to one of our wholly owned subsidiaries. We recognize revenue earned from the associated customer contracts in accordance with our revenue recognition policy. The SPE’s assets and cash flows are not available to our other creditors, and the creditors of the SPE, including the Solar Asset-backed Note holders, have no recourse to our other assets. SolarCity contracted with the SPE to provide operations & maintenance and administrative services for the solar energy systems.

In connection with the pooling of the solar assets that were transferred to the SPE in November 2013, SolarCity terminated a lease pass-through arrangement with an investor. The lease pass-through arrangement had been accounted for as a borrowing, and the amount outstanding under the lease pass-through arrangement was recorded as a lease pass-through financing obligation. The balance that was then outstanding under the lease pass-through arrangement was \$56.4 million. SolarCity paid the investor an aggregate of \$40.2 million, and the remaining balance is paid over time using the net cash flows generated by the assets previously leased under the lease pass-through arrangement, after payment of the principal and interest on the Solar Asset-backed Notes and expenses related to the assets and the Solar Asset-backed Notes; this was contractually documented as a right to participate in the future cash flows of the SPE (“participation interest”). The participation interest was recorded as a component of other long-term liabilities for the non-current portion and accrued liabilities for the current portion. We account for the participation interest as a liability because the investor has no voting or management rights in the SPE, the participation interest would terminate upon the investor achieving a specified return and the investor has the option to put the participation interest to us on August 3, 2021 for the amount necessary for the investor to achieve the specified return, which would require us to settle the participation interest in cash. In addition, under the terms of the participation interest, we have the option to purchase the participation interest from the investor for the amount necessary for the investor to achieve the specified return.

### ***Solar Asset-backed Notes, 2014-1***

In April 2014, SolarCity pooled and transferred qualifying solar energy systems and the associated customer contracts into a SPE and issued \$70.2 million in aggregate principal amount of Solar Asset-backed Notes, Series 2014-1, backed by these solar assets to investors. The SPE is wholly owned by us and is consolidated in the financial statements. As of December 31, 2018, these solar assets had a carrying value of \$104.4 million and are included within solar energy systems, leased and to be leased, net, in the consolidated balance sheets. The Solar Asset-backed Notes were issued at a discount of 0.01%. The cash flows generated by these solar assets are used to service the monthly principal and interest payments on the Solar Asset-backed Notes and satisfy the SPE’s expenses, and any remaining cash is distributed to one of our wholly owned subsidiaries. We recognize revenue earned from the associated customer contracts in accordance with our revenue recognition policy. The SPE’s assets and cash flows are not available to our other creditors, and the creditors of the SPE, including the Solar Asset-backed Note holders, have no recourse to our other assets. SolarCity contracted with the SPE to provide operations & maintenance and administrative services for the solar energy systems.



#### ***Solar Asset-backed Notes, Series 2014-2***

In July 2014, SolarCity pooled and transferred qualifying solar energy systems and the associated customer contracts into a SPE and issued \$160.0 million in aggregate principal amount of Solar Asset-backed Notes, Series 2014-2, Class A, and \$41.5 million in aggregate principal amount of Solar Asset-backed Notes, Series 2014-2, Class B, backed by these solar assets to investors. The SPE is wholly owned by us and is consolidated in the financial statements. As of December 31, 2018, these solar assets had a carrying value of \$244.5 million and are included within solar energy systems, leased and to be leased, net, in the consolidated balance sheets. The Solar Asset-backed Notes were issued at a discount of 0.01%. These solar assets and the associated customer contracts are leased to an investor under a lease pass-through arrangement that we have accounted for as a borrowing. The rent paid by the investor under the lease pass-through arrangement is used (and following the expiration of the lease pass-through arrangement, the cash generated by these solar assets will be used) to service the semi-annual principal and interest payments on the Solar Asset-backed Notes and satisfy the SPE's expenses, and any remaining cash is distributed to one of our wholly owned subsidiaries. We recognize revenue earned from the associated customer contracts in accordance with our revenue recognition policy. The SPE's assets and cash flows are not available to our other creditors, and the creditors of the SPE, including the Solar Asset-backed Note holders, have no recourse to our other assets. SolarCity contracted with the SPE to provide operations & maintenance and administrative services for certain of the solar energy systems.

#### ***Solar Asset-backed Notes, Series 2015-1***

In August 2015, SolarCity pooled and transferred its interests in certain financing funds into a SPE and issued \$103.5 million in aggregate principal amount of Solar Asset-backed Notes, Series 2015-1, Class A, and \$20.0 million in aggregate principal amount of Solar Asset-backed Notes, Series 2015-1, Class B, backed by these solar assets to investors. The SPE is wholly owned by us and is consolidated in the financial statements. The Solar Asset-backed Notes were issued at a discount of 0.05% for Class A and 1.46% for Class B. The cash distributed by the underlying financing funds to the SPE are used to service the semi-annual principal and interest payments on the Solar Asset-backed Notes and satisfy the SPE's expenses, and any remaining cash is distributed to one of our wholly owned subsidiaries. The SPE's assets and cash flows are not available to our other creditors, and the creditors of the SPE, including the Solar Asset-backed Note holders, have no recourse to our other assets.

#### ***Solar Asset-backed Notes, Series 2016-1***

In February 2016, SolarCity transferred qualifying solar energy systems and the associated customer contracts into a SPE and issued \$52.2 million in aggregate principal amount of Solar Asset-backed Notes, Series 2016-1, backed by these solar assets to investors. The SPE is wholly owned by us and is consolidated in the financial statements. As of December 31, 2018, these solar assets had a carrying value of \$80.3 million and are included within solar energy systems, leased and to be leased, net, on the consolidated balance sheets. The Solar Asset-backed Notes were issued at a discount of 6.71%. These solar assets and the associated customer contracts are leased to an investor under a lease pass-through arrangement that we have accounted for as a borrowing. The rent paid by the investor under the lease pass-through arrangement is used (and following the expiration of the lease pass-through arrangement, the cash generated by these solar assets will be used) to service the semi-annual principal and interest payments on the Solar Asset-backed Notes and satisfy the SPE's expenses, and any remaining cash is distributed to one of our wholly owned subsidiaries. We recognize revenue earned from the associated customer contracts in accordance with our revenue recognition policy. The SPE's assets and cash flows are not available to our other creditors, and the creditors of the SPE, including the Solar Asset-backed Note holders, have no recourse to our other assets. SolarCity contracted with the SPE to provide operations & maintenance and administrative services for certain of the solar energy systems.

### ***Solar Asset-backed Notes, Series 2017-1***

In November 2017, we pooled and transferred our interests in certain financing funds into a SPE and issued \$265.0 million in aggregate principal amount of Solar Asset-backed Notes, Series 2017-1, Class A, and \$75.0 million in aggregate principal amount of Solar Asset-backed Notes, Series 2017-1, Class B, backed by these solar assets to investors. The SPE is wholly owned by us and is consolidated in the financial statements. The Solar Asset-backed Notes were issued at a discount of 0.01% for Class A and 0.04% for Class B. The cash distributed by the underlying financing funds to the SPE are used to service the semi-annual principal and interest payments on the Solar Asset-backed Notes and satisfy the SPE's expenses, and any remaining cash is distributed to one of our wholly owned subsidiaries. The SPE's assets and cash flows are not available to our other creditors, and the creditors of the SPE, including the Solar Asset-backed Note holders, have no recourse to our other assets.

### ***Solar Asset-backed Notes, Series 2017-2***

In December 2017, we transferred qualifying solar energy systems and the associated customer contracts into a SPE and issued \$99.0 million in aggregate principal amount of Solar Asset-backed Notes, Series 2017-2, Class A, and \$31.9 million in aggregate principal amount of Solar Asset-backed Notes, Series 2017-2, Class B, backed by these solar assets to investors. The SPE is wholly owned by us and is consolidated in the financial statements. As of December 31, 2018, these solar assets had a carrying value of \$204.7 million and are included within solar energy systems, leased and to be leased, net, on the consolidated balance sheets. The Solar Asset-backed Notes were issued at a discount of 0.01% for Class A and 0.04% for Class B. Most of these solar assets and the associated customer contracts are leased to investors under lease pass-through arrangements that we have accounted for as borrowings. The rent paid by the investors under the lease pass-through arrangements is used (and following the expiration of the lease pass-through arrangements, the cash generated by these solar assets will be used) to service the semi-annual principal and interest payments on the Solar Asset-backed Notes and satisfy the SPE's expenses, and any remaining cash is distributed to one of our wholly owned subsidiaries. We recognize revenue earned from the associated customer contracts in accordance with our revenue recognition policy. The SPE's assets and cash flows are not available to our other creditors, and the creditors of the SPE, including the Solar Asset-backed Note holders, have no recourse to our other assets. We contracted with the SPE to provide operations & maintenance and administrative services for certain of the solar energy systems.

### ***Solar Asset-backed Notes, Series 2018-1***

In December 2018, we pooled and transferred our interests in certain financing funds into a SPE and issued \$334.1 million in aggregate principal amount of Solar Asset-backed Notes, Series 2018-1 backed by these solar assets to investors. The SPE is wholly owned by us and is consolidated in the financial statements. The Solar Asset-backed Notes were issued at par value. The cash distributed by the underlying financing funds to the SPE are used to service the semi-annual principal and interest payments on the Solar Asset-backed Notes and satisfy the SPE's expenses, and any remaining cash is distributed to one of our wholly owned subsidiaries. The SPE's assets and cash flows are not available to our other creditors, and the creditors of the SPE, including the Solar Asset-backed Note holders, have no recourse to our other assets.

### ***Solar Loan-backed Notes, Series 2016-A***

In January 2016, SolarCity pooled and transferred certain MyPower customer notes receivable into a SPE and issued \$151.6 million in aggregate principal amount of Solar Loan-backed Notes, Series 2016-A, Class A, and \$33.4 million in aggregate principal amount of Solar Loan-backed Notes, Series 2016-A, Class B, backed by these notes receivable to investors. The SPE is wholly owned by us and is consolidated in the financial statements. The Solar Loan-backed Notes were issued at a discount of 3.22% for Class A and 15.90% for Class B. The payments received by the SPE from these notes receivable are used to service the semi-annual principal and interest payments on the Solar Loan-backed Notes and satisfy the SPE's expenses, and any remaining cash is distributed to one of our wholly owned subsidiaries. The SPE's assets and cash flows are not available to our other creditors, and the creditors of the SPE, including the Solar Loan-backed Note holders, have no recourse to our other assets.

***Solar Loan-backed Notes, Series 2017-A***

In January 2017, we pooled and transferred certain MyPower customer notes receivable into a SPE and issued \$123.0 million in aggregate principal amount of Solar Loan-backed Notes, Series 2017-A, Class A; \$8.8 million in aggregate principal amount of Solar Loan-backed Notes, Series 2017-A, Class B, and \$13.2 million in aggregate principal amount of Solar Loan-backed Notes, Series 2017-A, Class C, backed by these notes receivable to investors. The SPE is wholly owned by us and is consolidated in the financial statements. Accordingly, we did not recognize a gain or loss on the transfer of these notes receivable. The Solar Loan-backed Notes were issued at a discount of 1.87% for Class A, 1.86% for Class B and 8.13% for Class C. The payments received by the SPE from these notes receivable are used to service the semi-annual principal and interest payments on the Solar Loan-backed Notes and satisfy the SPE's expenses, and any remaining cash is distributed to one of our wholly owned subsidiaries. The SPE's assets and cash flows are not available to our other creditors, and the creditors of the SPE, including the Solar Loan-backed Note holders, have no recourse to our other assets.

***Automotive Asset-backed Notes, Series 2018-A***

In February 2018, we transferred receivables related to certain leased vehicles into a SPE and issued \$546.1 million in aggregate principal amount of Automotive Asset-backed Notes, Series 2018-A, backed by these automotive assets to investors. The SPE is wholly owned by us and is consolidated in the financial statements. The proceeds from the issuance, net of discounts and fees, were \$543.1 million. The cash flows generated by these automotive assets are used to service the monthly principal and interest payments on the Automotive Asset-backed Notes and satisfy the SPE's expenses, and any remaining cash is distributed to one of our wholly owned subsidiaries. We recognize revenue earned from the associated customer lease contracts in accordance with our revenue recognition policy. The SPE's assets and cash flows are not available to our other creditors, and the creditors of the SPE, including the Automotive Asset-backed Note holders, have no recourse to our other assets. A third-party contracted with us to provide administrative and collection services for these automotive assets.

***Automotive Asset-backed Notes, Series 2018-B***

In December 2018, we transferred receivables related to certain leased vehicles into a SPE and issued \$837.4 million in aggregate principal amount of Automotive Asset-backed Notes, Series 2018-B, backed by these automotive assets to investors. The SPE is wholly owned by us and is consolidated in the financial statements. The proceeds from the issuance, net of discounts and fees, were \$833.1 million. The cash flows generated by these automotive assets are used to service the monthly principal and interest payments on the Automotive Asset-backed Notes and satisfy the SPE's expenses, and any remaining cash is distributed to one of our wholly owned subsidiaries. We recognize revenue earned from the associated customer lease contracts in accordance with our revenue recognition policy. The SPE's assets and cash flows are not available to our other creditors, and the creditors of the SPE, including the Automotive Asset-backed Note holders, have no recourse to our other assets. A third-party contracted with us to provide administrative and collection services for these automotive assets.

***Solar Renewable Energy Credit and other Loans***

We have entered into various solar renewable energy credit and other loan agreements with various financial institutions. The solar renewable energy credit loan facility is secured by substantially all of the assets of one of our wholly owned subsidiaries, including its rights under forward contracts to sell solar renewable energy credits, and is non-recourse to our other assets.

### ***Interest Expense***

The following table presents the interest expense related to the contractual interest coupon, the amortization of debt issuance costs and the amortization of debt discounts on our convertible senior notes with cash conversion features, which include the 2018 Notes, the 2019 Notes, the 2021 Notes and the 2022 Notes (in thousands):

	Year Ended December 31,		
	2018	2017	2016
Contractual interest coupon	\$ 42,694	\$ 39,129	\$ 27,060
Amortization of debt issuance costs	6,629	6,932	8,567
Amortization of debt discounts	123,560	114,023	99,811
Total	<u>\$ 172,883</u>	<u>\$ 160,084</u>	<u>\$ 135,438</u>

### ***Pledged Assets***

As of December 31, 2018 and 2017, we had pledged or restricted \$5.23 billion and \$4.05 billion of our assets (consisted principally of restricted cash, receivables, inventory, SRECs, solar energy systems, property and equipment) as collateral for our outstanding debt.

### **Note 14 – Common Stock**

In May 2016, we completed a public offering of common stock and sold a total of 7,915,004 shares of our common stock for total cash proceeds of approximately \$1.7 billion, net of underwriting discounts and offering costs.

On November 21, 2016, we completed the acquisition of SolarCity (see Note 3, *Business Combinations*) and exchanged 11,124,497 shares of our common stock for 101,131,791 shares of SolarCity common stock in accordance with the terms of the Merger Agreement.

In March 2017, we completed a public offering of our common stock and issued a total of 1,536,259 shares for total cash proceeds of \$399.6 million (including 95,420 shares purchased by our CEO for \$25.0 million), net of underwriting discounts and offering costs.

In April 2017, our CEO exercised his right under the indenture to convert all of his Zero-Coupon Convertible Senior Notes due in 2020, which had an aggregate principal amount of \$10.0 million. As a result, on April 26, 2017, we issued 33,333 shares of our common stock to our CEO in accordance with the specified conversion rate, and we recorded an increase to additional paid-in capital of \$10.3 million (see Note 13, *Long-Term Debt Obligations*).

During 2017, we issued 1,510,274 shares of our common stock and paid \$32.7 million in cash pursuant to conversions by or exchange agreements entered into with holders of \$199.5 million in aggregate principal amount of the 2018 Notes (see Note 13, *Long-Term Debt Obligations*). As a result, we recorded an increase to additional paid-in capital of \$163.0 million. In addition, we settled portions of the bond hedges and warrants entered into in connection with the 2018 Notes, resulting in a net cash inflow of \$56.8 million (which was recorded as an increase to additional paid-in capital), the issuance of 34,393 shares of our common stock and the receipt of 169,890 shares of our common stock.

During the fourth quarter of 2017, we issued 34,772 shares of our common stock as part of the purchase consideration for an acquisition.

During the year ended 2018, \$5.2 million in aggregate principal amount of the 2018 Notes were converted for \$5.2 million in cash and 25,745 shares of our common stock. We also settled bond hedges entered into in connection with the 2018 Notes, resulting in the receipt of 25,745 shares of our common stock. Additionally, we settled the remaining warrants entered into in connection with the 2018 Notes by issuing 238,195 shares of our common stock.

In November 2018, our CEO purchased from us 56,915 shares of our common stock in a private placement at a per share price equal to the last closing price of our stock prior to the execution of the purchase agreement for an aggregate \$20.0 million.

## Note 15 – Equity Incentive Plans

In 2010, we adopted the 2010 Equity Incentive Plan (the “2010 Plan”). The 2010 Plan provides for the granting of stock options, RSUs and stock purchase rights to our employees, directors and consultants. Stock options granted under the 2010 Plan may be either incentive stock options or nonqualified stock options. Incentive stock options may only be granted to our employees. Nonqualified stock options may be granted to our employees, directors and consultants. Generally, our stock options and RSUs vest over four years and are exercisable over a maximum period of 10 years from their grant dates. Vesting typically terminates when the employment or consulting relationship ends. In addition, as a result of our acquisition of SolarCity, we assumed its equity award plans and its outstanding equity awards as of the Acquisition Date. SolarCity’s outstanding equity awards were converted into equity awards to acquire our common stock in share amounts and prices based on the Exchange Ratio, with the equity awards retaining the same vesting and other terms and conditions as in effect immediately prior to the acquisition. The vesting and other terms and conditions of the assumed equity awards are substantially the same as those of the 2010 Plan.

As of December 31, 2018, 9,089,194 shares were reserved and available for issuance under the 2010 Plan.

The following table summarizes our stock option and RSU activity:

	Stock Options				RSUs	
	Number of Options	Weighted-Average Exercise Price	Weighted-Average Remaining Contractual Life (Years)	Aggregate Intrinsic Value (Billions)	Number of RSUs	Weighted-Average Grant Date Fair Value
Balance, December 31, 2017	10,881,025	\$ 105.56			4,689,310	\$ 265.43
Granted	22,535,566	\$ 346.56			3,043,155	\$ 316.46
Exercised or released	(1,386,509)	\$ 120.40			(1,724,395)	\$ 258.51
Cancelled	(822,228)	\$ 315.48			(1,349,156)	\$ 278.10
Balance, December 31, 2018	31,207,854	\$ 273.40	7.6	\$ 2.25	4,658,914	\$ 294.63
Vested and expected to vest, December 31, 2018	15,312,577	\$ 206.44	6.4	\$ 2.07	4,656,864	\$ 294.62
Exercisable and vested, December 31, 2018	7,877,652	\$ 83.45	3.9	\$ 1.99		

The weighted-average grant date fair value of RSUs in the years ended December 31, 2018, 2017, and 2016 was \$316.46, \$308.71 and \$202.59, respectively. The aggregate release date fair value of RSUs in the years ended December 31, 2018, 2017 and 2016 was \$545.6 million, \$491.0 million and \$203.9 million, respectively.

The aggregate intrinsic value of options exercised in the years ended December 31, 2018, 2017, and 2016 was \$293.2 million, \$544.1 million and \$1.68 billion, respectively.

## Fair Value Assumptions

We use the fair value method in recognizing stock-based compensation expense. Under the fair value method, we estimate the fair value of each stock option award with service or service and performance conditions and the ESPP on the grant date generally using the Black-Scholes option pricing model and the weighted-average assumptions in the following table:

	Year Ended December 31,		
	2018	2017	2016
Risk-free interest rate:			
Stock options	2.5%	1.8%	1.5%
ESPP	2.0%	1.1%	0.6%
Expected term (in years):			
Stock options	4.7	5.1	6.2
ESPP	0.5	0.5	0.5
Expected volatility:			
Stock options	42%	42%	47%
ESPP	43%	35%	41%
Dividend yield:			
Stock options	0.0%	0.0%	0.0%
ESPP	0.0%	0.0%	0.0%
Grant date fair value per share:			
Stock options	\$ 121.92	\$ 122.25	\$ 98.70
ESPP	\$ 84.37	\$ 75.05	\$ 51.31

The fair value of RSUs with service or service and performance conditions is measured on the grant date based on the closing fair market value of our common stock. The risk-free interest rate is based on the U.S. Treasury yield for zero-coupon U.S. Treasury notes with maturities approximating each grant's expected life. Prior to the fourth quarter of 2017, given our then limited history with employee grants, we used the "simplified" method in estimating the expected term of our employee grants; the simplified method utilizes the average of the time-to-vesting and the contractual life of the employee grant. Beginning with the fourth quarter of 2017, we use our historical data in estimating the expected term of our employee grants. The expected volatility is based on the average of the implied volatility of publicly traded options for our common stock and the historical volatility of our common stock.

## 2018 CEO Performance Award

In March 2018, our stockholders approved the Board of Directors' grant of 20,264,042 stock option awards to our CEO (the "2018 CEO Performance Award"). The 2018 CEO Performance Award consists of 12 vesting tranches with a vesting schedule based entirely on the attainment of both operational milestones (performance conditions) and market conditions, assuming continued employment either as the CEO or as both Executive Chairman and Chief Product Officer and service through each vesting date. Each of the 12 vesting tranches of the 2018 CEO Performance Award will vest upon certification by the Board of Directors that both (i) the market capitalization milestone for such tranche, which begins at \$100 billion for the first tranche and increases by increments of \$50 billion thereafter, and (ii) any one of the following eight operational milestones focused on revenue or eight operational milestones focused on Adjusted EBITDA have been met for the previous four consecutive fiscal quarters on an annualized basis. Adjusted EBITDA is defined as net income (loss) attributable to common stockholders before interest expense, provision (benefit) for income taxes, depreciation and amortization and stock-based compensation.

<b>Total Annualized Revenue (in billions)</b>	<b>Annualized Adjusted EBITDA (in billions)</b>
\$20.0	\$1.5
\$35.0	\$3.0
\$55.0	\$4.5
\$75.0	\$6.0
\$100.0	\$8.0
\$125.0	\$10.0
\$150.0	\$12.0
\$ 175.0	\$14.0

As of December 31, 2018, the following operational milestones were considered probable of achievement:

- Total revenue of \$20.0 billion;
- Adjusted EBITDA of \$1.5 billion; and
- Adjusted EBITDA of \$3.0 billion.

Stock-based compensation expense associated with the 2018 CEO Performance Award is recognized over the longer of the expected achievement period for each pair of market capitalization or operational milestones, beginning at the point in time when the relevant operational milestone is considered probable of being met. If additional operational milestones become probable, stock-based compensation expense will be recorded in the period it becomes probable including cumulative catch-up expense for the service provided since the grant date. The market capitalization milestone period and the valuation of each tranche are determined using a Monte Carlo simulation and is used as the basis for determining the expected achievement period. The probability of meeting an operational milestone is based on a subjective assessment of our future financial projections. Even though no tranches of the 2018 CEO Performance Award vest unless a market capitalization and a matching operational milestone are both achieved, stock-based compensation expense is recognized only when an operational milestone is considered probable of achievement regardless of how much additional market capitalization must be achieved in order for a tranche to vest. At our current market capitalization, even the first tranche of the 2018 CEO Performance Award will not vest unless our market capitalization were to approximately double from the current level and stay at that increased level for a sustained period of time. Additionally, stock-based compensation represents a non-cash expense and is recorded as a selling, general, and administrative operating expense in our consolidated statement of operations.

As of December 31, 2018, we had \$598.0 million of total unrecognized stock-based compensation expense for the operational milestones that were considered probable of achievement, which will be recognized over a weighted-average period of 3.1 years. As of December 31, 2018, we had unrecognized stock-based compensation expense of \$1.51 billion for the operational milestones that were considered not probable of achievement. From March 21, 2018, when the grant was approved by our stockholders, through December 31, 2018, we recorded stock-based compensation expense of \$174.9 million related to the 2018 CEO Performance Award.

## **2014 Performance-Based Stock Option Awards**

In 2014, to create incentives for continued long-term success beyond the Model S program and to closely align executive pay with our stockholders' interests in the achievement of significant milestones by us, the Compensation Committee of our Board of Directors granted stock option awards to certain employees (excluding our CEO) to purchase an aggregate of 1,073,000 shares of our common stock. Each award consisted of the following four vesting tranches with the vesting schedule based entirely on the attainment of the future performance milestones, assuming continued employment and service through each vesting date:

- 1/4th of each award vests upon completion of the first Model X production vehicle;
- 1/4th of each award vests upon achieving aggregate production of 100,000 vehicles in a trailing 12-month period;
- 1/4th of each award vests upon completion of the first Model 3 production vehicle; and
- 1/4th of each award vests upon achieving an annualized gross margin of greater than 30% for any three-year period.

As of December 31, 2018, the following performance milestones had been achieved:

- Completion of the first Model X production vehicle;
- Completion of the first Model 3 production vehicle; and
- Aggregate production of 100,000 vehicles in a trailing 12-month period.

We begin recognizing stock-based compensation expense as each performance milestone becomes probable of achievement. As of December 31, 2018, we had unrecognized stock-based compensation expense of \$10.9 million for the performance milestone that was considered not probable of achievement. For the year ended December 31, 2018, we did not record any additional stock-based compensation related to these awards. For the years ended December 2017 and 2016, we recorded stock-based compensation expense of \$6.8 million and \$25.3 million, respectively, related to these awards.

## **2012 CEO Performance Award**

In August 2012, our Board of Directors granted 5,274,901 stock option awards to our CEO (the "2012 CEO Performance Award"). The 2012 CEO Performance Award consists of 10 vesting tranches with a vesting schedule based entirely on the attainment of both performance conditions and market conditions, assuming continued employment and service through each vesting date. Each vesting tranche requires a combination of a pre-determined performance milestone and an incremental increase in our market capitalization of \$4.00 billion, as compared to our initial market capitalization of \$3.20 billion at the time of grant. As of December 31, 2018, the market capitalization conditions for all of the vesting tranches and the following performance milestones had been achieved:

- Successful completion of the Model X alpha prototype;
- Successful completion of the Model X beta prototype;
- Completion of the first Model X production vehicle;
- Aggregate production of 100,000 vehicles;
- Successful completion of the Model 3 alpha prototype;
- Successful completion of the Model 3 beta prototype;
- Completion of the first Model 3 production vehicle;
- Aggregate production of 200,000 vehicles; and
- Aggregate production of 300,000 vehicles.



We begin recognizing stock-based compensation expense as each milestone becomes probable of achievement. As of December 31, 2018, we had unrecognized stock-based compensation expense of \$5.7 million for the performance milestone that was considered not probable of achievement. For the years ended December 31, 2018, 2017 and 2016, we recorded stock-based compensation expense of \$0.1 million, \$5.1 million and \$15.8 million, respectively, related to the 2012 CEO Grant.

Our CEO earns a base salary that reflects the currently applicable minimum wage requirements under California law, and he is subject to income taxes based on such base salary. However, he has never accepted and currently does not accept his salary.

### Summary Stock-Based Compensation Information

The following table summarizes our stock-based compensation expense by line item in the consolidated statements of operations (in thousands):

	Year Ended December 31,		
	2018	2017	2016
Cost of revenues	\$ 85,742	\$ 43,845	\$ 30,400
Research and development	261,079	217,616	154,632
Selling, general and administrative	398,326	205,299	149,193
Restructuring and other	3,877	—	—
Total	<u>\$ 749,024</u>	<u>\$ 466,760</u>	<u>\$ 334,225</u>

We realized no income tax benefit from stock option exercises in each of the periods presented due to cumulative losses and valuation allowances. As of December 31, 2018, we had \$1.57 billion of total unrecognized stock-based compensation expense related to non-performance awards, which will be recognized over a weighted-average period of 3.0 years.

### ESPP

Our employees are eligible to purchase our common stock through payroll deductions of up to 15% of their eligible compensation, subject to any plan limitations. The purchase price would be 85% of the lower of the fair market value on the first and last trading days of each six-month offering period. During the years ended December 31, 2018, 2017 and 2016, we issued 399,936, 370,173 and 321,788 shares under the ESPP for \$108.8 million, \$71.0 million and \$51.7 million, respectively. There were 2,023,954 shares available for issuance under the ESPP as of December 31, 2018.

### Note 16 – Income Taxes

A provision for income taxes of \$57.8 million, \$31.5 million and \$26.7 million has been recognized for the years ended December 31, 2018, 2017 and 2016, respectively, related primarily to our subsidiaries located outside of the U.S. Our loss before provision for income taxes for the years ended December 31, 2018, 2017 and 2016 was as follows (in thousands):

	Year Ended December 31,		
	2018	2017	2016
Domestic	\$ 412,133	\$ 993,113	\$ 130,718
Noncontrolling interest and redeemable noncontrolling interest	86,491	279,178	98,132
Foreign	506,121	936,741	517,498
Loss before income taxes	<u>\$ 1,004,745</u>	<u>\$ 2,209,032</u>	<u>\$ 746,348</u>

The components of the provision for income taxes for the years ended December 31, 2018, 2017 and 2016 consisted of the following (in thousands):

	Year Ended December 31,		
	2018	2017	2016
Current:			
Federal	\$ (901)	\$ (9,552)	\$ —
State	2,792	2,029	568
Foreign	23,622	42,715	53,962
Total current	<u>25,513</u>	<u>35,192</u>	<u>54,530</u>
Deferred:			
Federal	—	—	—
State	—	—	—
Foreign	32,324	(3,646)	(27,832)
Total deferred	<u>32,324</u>	<u>(3,646)</u>	<u>(27,832)</u>
Total provision for income taxes	<u>\$ 57,837</u>	<u>\$ 31,546</u>	<u>\$ 26,698</u>

On December 22, 2017, the 2017 Tax Cuts and Jobs Act (“Tax Act”) was enacted into law making significant changes to the Internal Revenue Code. Changes include, but are not limited to, a federal corporate tax rate decrease from 35% to 21% for tax years beginning after December 31, 2017, the transition of U.S. international taxation from a worldwide tax system to a territorial system and a one-time transition tax on the mandatory deemed repatriation of foreign earnings. We were required to recognize the effect of the tax law changes in the period of enactment, such as re-measuring our U.S. deferred tax assets and liabilities as well as reassessing the net realizability of our deferred tax assets and liabilities. The Tax Act did not give rise to any material impact on the consolidated balance sheets and consolidated statements of operations due to our historical worldwide loss position and the full valuation allowance on our net U.S. deferred tax assets.

In December 2017, the Securities and Exchange Commission staff issued Staff Accounting Bulletin No. 118, Income Tax Accounting Implications of the Tax Cuts and Jobs Act (“SAB 118”), which allowed us to record provisional amounts during a measurement period not to extend beyond one year from the enactment date. As such, in accordance with SAB 118, we completed our analysis during the fourth quarter of 2018 considering current legislation and guidance resulting in no material adjustments from the provisional amounts recorded during the prior year.

Deferred tax assets (liabilities) as of December 31, 2018 and 2017 consisted of the following (in thousands):

	December 31, 2018	December 31, 2017
<b>Deferred tax assets:</b>		
Net operating loss carry-forwards	\$ 1,759,716	\$ 1,575,952
Research and development credits	376,556	306,808
Other tax credits	127,813	117,997
Deferred revenue	155,757	200,531
Inventory and warranty reserves	165,262	74,578
Stock-based compensation	102,256	96,916
Investment in certain financing funds	—	24,471
Accruals and others	28,295	26,416
Total deferred tax assets	2,715,655	2,423,669
Valuation allowance	(1,805,648)	(1,843,713)
Deferred tax assets, net of valuation allowance	910,007	579,956
<b>Deferred tax liabilities:</b>		
Depreciation and amortization	(860,611)	(537,613)
Other	(23,850)	(18,734)
Investment in certain financing funds	(33,493)	—
Total deferred tax liabilities	(917,954)	(556,347)
Deferred tax liabilities, net of valuation allowance	\$ (7,947)	\$ 23,609
and deferred tax assets		

As of December 31, 2018, we recorded a valuation allowance of \$1.81 billion for the portion of the deferred tax asset that we do not expect to be realized. The valuation allowance on our net deferred taxes decreased by \$38.1 million, increased by \$821.0 million, and increased by \$354.3 million during the years ended December 31, 2018, 2017 and 2016, respectively. The changes in valuation allowance are primarily due to additional U.S. deferred tax assets and liabilities incurred in the respective year. The 2017 additional U.S. deferred tax assets are net of re-measurement from 35% to 21% as a result of the Tax Act. There have been no material releases of the valuation allowance. Management believes that based on the available information, it is more likely than not that the U.S. deferred tax assets will not be realized, such that a full valuation allowance is required against all U.S. deferred tax assets. We have net \$30.2 million of deferred tax assets in foreign jurisdictions, which management believes are more-likely-than-not to be fully realized given the expectation of future earnings in these jurisdictions.

The reconciliation of taxes at the federal statutory rate to our provision for income taxes for the years ended December 31, 2018, 2017 and 2016 was as follows (in thousands):

	Year Ended December 31,		
	2018	2017	2016
Tax at statutory federal rate	\$ (210,996)	\$ (773,162)	\$ (261,222)
State tax, net of federal benefit	2,792	2,029	568
Nondeductible expenses	65,375	30,138	26,547
Excess tax benefits related to stock based compensation (1)	(43,977)	(1,013,196)	—
Foreign income rate differential	160,370	364,699	206,470
U.S. tax credits	(79,565)	(109,501)	(162,865)
Noncontrolling interests and redeemable noncontrolling interests adjustment	31,858	65,920	21,964
Effect of U.S. tax law change (2)	—	722,646	—
Bargain in purchase gain	—	20,211	(31,055)
Other reconciling items	960	3,178	785
Change in valuation allowance	131,020	718,584	225,506
Provision for income taxes	<u>\$ 57,837</u>	<u>\$ 31,546</u>	<u>\$ 26,698</u>

- As of January 1, 2017, upon the adoption of ASU No. 2016-09, Improvements to Employee Share-based Payment Accounting, excess tax benefits from share-based award activity incurred from the prior and current years are reflected as a reduction of the provision for income taxes. The excess tax benefits result in an increase to our gross U.S. deferred tax assets that is offset by a corresponding increase to our valuation allowance.
- (1) Due to the Tax Act, our U.S. deferred tax assets and liabilities as of December 31, 2017 were re-measured from 35% to 21%. The change in tax rate resulted in a decrease to our gross U.S. deferred tax assets which is offset by a corresponding decrease to our valuation allowance.
- (2)

As of December 31, 2018, we had \$7.30 billion of federal and \$5.37 billion of state net operating loss carry-forwards available to offset future taxable income, which will not begin to significantly expire until 2024 for federal and 2028 for state purposes. A portion of these losses were generated by SolarCity prior to our acquisition in 2016 and, therefore, are subject to change of control provisions, which limit the amount of acquired tax attributes that can be utilized in a given tax year. We do not expect these change of control limitations to significantly impact our ability to utilize these attributes.

As of December 31, 2018, we had research and development tax credits of \$256.1 million and \$276.2 million for federal and state income tax purposes, respectively. If not utilized, the federal research and development tax credits will expire in various amounts beginning in 2024. However, the state research and development tax credits can be carried forward indefinitely. In addition, we have other general business tax credits of \$126.8 million for federal income tax purposes, which will not begin to significantly expire until 2033.

Collectively, we had no foreign earnings as of December 31, 2018 and therefore was not subject to the mandatory repatriation tax provisions of the Tax Act. However, some of our foreign subsidiaries do have accumulated earnings. No deferred tax liabilities for foreign withholding taxes have been recorded relating to the earnings of our foreign subsidiaries since all such earnings are intended to be indefinitely reinvested. The amount of the unrecognized deferred tax liability associated with these earnings is immaterial.

Federal and state laws can impose substantial restrictions on the utilization of net operating loss and tax credit carry-forwards in the event of an “ownership change”, as defined in Section 382 of the Internal Revenue Code. We have determined that no significant limitation would be placed on the utilization of our net operating loss and tax credit carry-forwards due to prior ownership changes.

## Uncertain Tax Positions

The changes to our gross unrecognized tax benefits were as follows (in thousands):

December 31, 2015	\$ 99,127
Increases in balances related to prior year tax positions	28,677
Increases in balances related to current year tax positions	62,805
Assumed uncertain tax positions through acquisition	13,327
December 31, 2016	203,936
Decrease in balances related to prior year tax positions	(31,493)
Increases in balances related to current year tax positions	84,352
Change in balances related to effect of U.S. tax law change	(58,050)
December 31, 2017	198,745
Decrease in balances related to prior year tax positions	(6,347)
Increases in balances related to current year tax positions	60,960
December 31, 2018	<u>\$ 253,357</u>

As of December 31, 2018, accrued interest and penalties related to unrecognized tax benefits are classified as income tax expense and were immaterial. Unrecognized tax benefits of \$243.8 million, if recognized, would not affect our effective tax rate since the tax benefits would increase a deferred tax asset that is currently fully offset by a full valuation allowance.

We file income tax returns in the U.S., California and various state and foreign jurisdictions. We are currently under examination by the IRS for the years 2015 and 2016. Additional tax years within the period 2004 to 2017 remain subject to examination for federal income tax purposes, and tax years 2004 to 2017 remain subject to examination for California income tax purposes. All net operating losses and tax credits generated to date are subject to adjustment for U.S. federal and California income tax purposes. Tax years 2008 to 2017 remain subject to examination in other U.S. state and foreign jurisdictions.

The potential outcome of the current examination could result in a change to unrecognized tax benefits within the next twelve months. However, we cannot reasonably estimate possible adjustments at this time.

The U.S. Tax Court issued a decision in *Altera Corp v. Commissioner* related to the treatment of stock-based compensation expense in a cost-sharing arrangement. As this decision can be overturned upon appeal, we have not recorded any impact as of December 31, 2018. In addition, any potential tax benefits would increase our U.S. deferred tax asset, which is currently offset with a full valuation allowance.

## Note 17 – Commitments and Contingencies

### *Non-Cancellable Leases*

We have entered into various non-cancellable operating lease agreements for certain of our offices, manufacturing and warehouse facilities, retail and service locations, equipment, vehicles, solar energy systems and Supercharger sites, throughout the world. Included within the lease commitment table below are payments due under operating leases that have been accounted for as build-to-suit lease arrangements, which are included in property, plant and equipment on the consolidated balance sheets. Rent expense for the years ended December 31, 2018, 2017, and 2016 was \$182.6 million, \$177.7 million and \$116.8 million, respectively.

We have entered into various agreements to lease equipment under capital leases up to 60 months. The equipment under the leases are collateral for the lease obligations and are included within property, plant and equipment on the consolidated balance sheets.

Future minimum commitments for leases as of December 31, 2018 were as follows (in thousands):

	<b>Operating Leases</b>	<b>Capital Leases</b>
2019	\$ 275,654	\$ 416,952
2020	256,931	503,545
2021	230,406	506,197
2022	182,911	23,828
2023	157,662	4,776
Thereafter	524,590	5,938
Total minimum lease payments	<u>\$ 1,628,154</u>	<u>1,461,236</u>
Less: Amounts representing interest not yet incurred		122,340
Present value of capital lease obligations		1,338,896
Less: Current portion		345,714
Long-term portion of capital lease obligations		<u>\$ 993,182</u>

#### ***Build-to-Suit Lease Arrangement in Buffalo, New York***

We have a build-to-suit lease arrangement with the Research Foundation for the State University of New York (the “SUNY Foundation”) where the SUNY Foundation will construct a solar cell and panel manufacturing facility, referred to as Gigafactory 2, with our participation in the design and construction, install certain utilities and other improvements and acquire certain manufacturing equipment designated by us to be used in the manufacturing facility. The SUNY Foundation covers (i) construction costs related to the manufacturing facility up to \$350.0 million, (ii) the acquisition and commissioning of the manufacturing equipment in an amount up to \$274.7 million and (iii) \$125.3 million for additional specified scope costs, in cases (i) and (ii) only, subject to the maximum funding allocation from the State of New York; and we are responsible for any construction or equipment costs in excess of such amounts. The SUNY Foundation will own the manufacturing facility and the manufacturing equipment purchased by the SUNY Foundation. Following completion of the manufacturing facility, we will lease the manufacturing facility and the manufacturing equipment owned by the SUNY Foundation for an initial period of 10 years, with an option to renew, for \$2.00 per year plus utilities. During the three months ended March 31, 2018, we began production at the manufacturing facility, although construction has not been fully completed as of December 31, 2018.

Under the terms of the build-to-suit lease arrangement, we are required to achieve specific operational milestones during the initial lease term; which include employing a certain number of employees at the manufacturing facility, within western New York and within the State of New York within specified periods following the completion of the manufacturing facility. We are also required to spend or incur \$5.00 billion in combined capital, operational expenses and other costs in the State of New York within 10 years following the achievement of full production. On an annual basis during the initial lease term, as measured on each anniversary of the commissioning of the manufacturing facility, if we fail to meet these specified investment and job creation requirements, then we would be obligated to pay a \$41.2 million “program payment” to the SUNY Foundation for each year that we fail to meet these requirements. Furthermore, if the arrangement is terminated due to a material breach by us, then additional amounts might become payable by us.

The non-cash investing and financing activities related to the arrangement during the years ended December 31, 2018 and 2017 amounted to \$8.0 million and \$86.1 million. The non-cash investing and financing activities related to the arrangement from the Acquisition Date through December 31, 2016 amounted to \$5.6 million.

#### ***Environmental Liabilities***

In connection with our factory located in Fremont, California, we are obligated to pay for the remediation of certain environmental conditions existing at the time we purchased the property from New United Motor Manufacturing, Inc. (“NUMMI”). In particular, we are responsible for the first \$15.0 million of remediation costs, any remediation costs in excess of \$30.0 million and any remediation costs incurred after 10 years from the purchase date. NUMMI is responsible for any remediation costs between \$15.0 million and \$30.0 million for up to 10 years after the purchase date.

## ***Legal Proceedings***

### ***Securities Litigation Relating to SolarCity's Financial Statements and Guidance***

On March 28, 2014, a purported stockholder class action was filed in the U.S. District Court for the Northern District of California against SolarCity and two of its officers. The complaint alleges violations of federal securities laws and seeks unspecified compensatory damages and other relief on behalf of a purported class of purchasers of SolarCity's securities from March 6, 2013 to March 18, 2014. After a series of amendments to the original complaint, the District Court dismissed the amended complaint and entered a judgment in our favor on August 9, 2016. The plaintiffs filed a notice of appeal, and on December 4, 2017, the Court heard oral argument on the appeal. On March 8, 2018, the Court upheld the District Court ruling of dismissal and judgment in our favor. The case is concluded.

### ***Securities Litigation Relating to the SolarCity Acquisition***

Between September 1, 2016 and October 5, 2016, seven lawsuits were filed in the Court of Chancery of the State of Delaware by purported stockholders of Tesla challenging our acquisition of SolarCity. Following consolidation, the lawsuit names as defendants the members of Tesla's board of directors as then constituted and alleges, among other things, that board members breached their fiduciary duties in connection with the acquisition. The complaint asserts both derivative claims and direct claims on behalf of a purported class and seeks, among other relief, unspecified monetary damages, attorneys' fees, and costs. On January 27, 2017, defendants filed a motion to dismiss the operative complaint. Rather than respond to the defendants' motion, the plaintiffs filed an amended complaint. On March 17, 2017, defendants filed a motion to dismiss the amended complaint. On December 13, 2017, the Court heard oral argument on the motion. On March 28, 2018, the Court denied defendants' motion to dismiss. Defendants filed a request for interlocutory appeal, but the Delaware Supreme Court denied that request, electing not to hear an appeal at this early stage of the case. Defendants filed their answer on May 18, 2018. The parties are proceeding with discovery. The case is set for trial in March 2020.

These plaintiffs and others filed parallel actions in the U.S. District Court for the District of Delaware on April 21, 2017. Those actions have been consolidated and are stayed pending the Chancery Court litigation. They include claims for violations of the federal securities laws and breach of fiduciary duties by Tesla's board of directors. That action is stayed pending the Chancery Court litigation.

We believe that claims challenging the SolarCity acquisition are without merit and intend to defend against them vigorously. We are unable to estimate the possible loss or range of loss, if any, associated with these claims.

### ***Securities Litigation Relating to Production of Model 3 Vehicles***

On October 10, 2017, a purported stockholder class action was filed in the U.S. District Court for the Northern District of California against Tesla, two of its current officers, and a former officer. The complaint alleges violations of federal securities laws and seeks unspecified compensatory damages and other relief on behalf of a purported class of purchasers of Tesla securities from May 4, 2016 to October 6, 2017. The lawsuit claims that Tesla supposedly made materially false and misleading statements regarding the Company's preparedness to produce Model 3 vehicles. Plaintiffs filed an amended complaint on March 23, 2018, and defendants filed a motion to dismiss on May 25, 2018. The court granted defendant's motion to dismiss with leave to amend. Plaintiffs filed their amended complaint on September 28, 2018. We will file a motion to dismiss the amended complaint on February 15, 2019. The hearing on the motion to dismiss is set for March 1, 2019. We believe that the claims are without merit and intend to defend against this lawsuit vigorously. We are unable to estimate the possible loss or range of loss, if any, associated with this lawsuit.

On October 26, 2018, in a similar action, a purported stockholder class action was filed in the Superior Court of California in Santa Clara County against Tesla, Elon Musk and seven initial purchasers in an offering of debt securities by Tesla in August 2017. The complaint alleges misrepresentations made by Tesla regarding the number of Model 3 vehicles Tesla expected to produce by the end of 2017 in connection with such offering, and seeks unspecified compensatory damages and other relief on behalf of a purported class of purchasers of Tesla securities in such offering. Tesla thereafter removed the case to federal court. On January 22, 2019, plaintiff abandoned its effort to proceed in state court, instead filing an amended complaint against Tesla, Elon Musk and seven initial purchasers in the debt offering before the same judge in the U.S. District Court for the Northern District of California who is hearing the above-referenced earlier filed federal court case. On February 5, 2019, the Court stayed this new case pending a ruling on the motion to dismiss the complaint in the above earlier filed case. We believe that the claims are without merit and intend to defend against this lawsuit vigorously. We are unable to estimate the possible loss or range of loss, if any, associated with this lawsuit.

#### *Litigation Relating to 2018 CEO Performance Award*

On June 4, 2018, a purported Tesla stockholder filed a putative class and derivative action in the Delaware Court of Chancery against Mr. Musk and the members of Tesla's board of directors as then constituted, alleging that such board members breached their fiduciary duties by approving the stock-based compensation plan. The complaint seeks, among other things, monetary damages and rescission or reformation of the stock-based compensation plan. On August 31, 2018, defendants filed a motion to dismiss the complaint; plaintiff filed its opposition brief on November 1, 2018 and defendants filed a reply brief on December 13, 2018. The hearing on the motion to dismiss is set for May 9, 2019. We believe the claims asserted in this lawsuit are without merit and intend to defend against them vigorously.

#### *Securities Litigation related to Potential Going Private Transaction*

Between August 10, 2018 and September 6, 2018, nine purported stockholder class actions were filed against Tesla and Elon Musk in connection with Elon Musk's August 7, 2018 Twitter post that he was considering taking Tesla private. All of the suits are now pending in the United States District Court for the Northern District of California. Although the complaints vary in certain respects, they each purport to assert claims for violations of federal securities laws related to Mr. Musk's statement and seek unspecified compensatory damages and other relief on behalf of a purported class of purchasers of Tesla's securities. Plaintiffs filed their consolidated complaint on January 16, 2019 and added as defendants the members of Tesla's board of directors. Defendants plan to file a motion to dismiss the complaint on or before March 7, 2019. The hearing on the motion to dismiss is tentatively set for June 20, 2019. We believe that the claims have no merit and intend to defend against them vigorously. We are unable to estimate the potential loss, or range of loss, associated with these claims.

Between October 17, 2018 and November 9, 2018, five derivative lawsuits were filed in the Delaware Court of Chancery against Mr. Musk and the members of Tesla's board of directors as then constituted in relation to statements made and actions connected to a potential going private transaction. These cases have been stayed pending resolution of the stockholder class action. In addition to these cases, on October 25, 2018, another derivative lawsuit was filed in federal court in Delaware against Mr. Musk and the members of the Tesla board of directors as then constituted, and the parties have agreed to also stay this case pending resolution of the stockholder class action; the parties' proposed stipulation regarding the stay is pending with the Court. We believe that the claims have no merit and intend to defend against them vigorously. The Company is unable to estimate the potential loss, or range of loss, associated with these claims.

#### *Settlement with SEC related to Potential Going Private Transaction*

On October 16, 2018, the U.S. District Court for the Southern District of New York entered a final judgment approving the terms of a settlement filed with the Court on September 29, 2018, in connection with the actions taken by the U.S. Securities and Exchange Commission (the "SEC") relating to Elon Musk's prior statement that he was considering taking Tesla private. Without admitting or denying any of the SEC's allegations, and with no restriction on Mr. Musk's ability to serve as an officer or director on the Board (other than as its Chair), among other things, we and Mr. Musk paid civil penalties of \$20 million each and agreed that an independent director will serve as Chair of the Board for at least three years, and we appointed such an independent Chair of the Board and two additional independent directors to the Board, and further enhanced our disclosure controls and other corporate governance-related matters.



### *Certain Investigations and Other Matters*

We receive requests for information from regulators and governmental authorities, such as the National Highway Traffic Safety Administration, the National Transportation Safety Board, the SEC, the Department of Justice (“DOJ”) and various state, federal and international agencies. We routinely cooperate with such regulatory and governmental requests.

In particular, the SEC has issued subpoenas to Tesla in connection with (a) Mr. Musk’s prior statement that he was considering taking Tesla private and (b) certain projections that we made for Model 3 production rates during 2017 and other public statements relating to Model 3 production. The DOJ has also asked us to voluntarily provide it with information about each of these matters and is investigating. Aside from the settlement with the SEC relating to Mr. Musk’s statement that he was considering taking Tesla private, there have not been any developments in these matters that we deem to be material, and to our knowledge no government agency in any ongoing investigation has concluded that any wrongdoing occurred. As is our normal practice, we have been cooperating and will continue to cooperate with government authorities. We cannot predict the outcome or impact of any ongoing matters. Should the government decide to pursue an enforcement action, there exists the possibility of a material adverse impact on our business, results of operation, prospects, cash flows, and financial position.

We are also subject to various other legal proceedings and claims that arise from the normal course of business activities. If an unfavorable ruling or development were to occur, there exists the possibility of a material adverse impact on our business, results of operations, prospects, cash flows, financial position and brand.

### ***Indemnification and Guaranteed Returns***

We are contractually obligated to compensate certain fund investors for any losses that they may suffer in certain limited circumstances resulting from reductions in U.S. Treasury grants or ITCs. Generally, such obligations would arise as a result of reductions to the value of the underlying solar energy systems as assessed by the U.S. Treasury Department for purposes of claiming U.S. Treasury grants or as assessed by the IRS for purposes of claiming ITCs or U.S. Treasury grants. For each balance sheet date, we assess and recognize, when applicable, a distribution payable for the potential exposure from this obligation based on all the information available at that time, including any guidelines issued by the U.S. Treasury Department on solar energy system valuations for purposes of claiming U.S. Treasury grants and any audits undertaken by the IRS. We believe that any payments to the fund investors in excess of the amounts already recognized by us, which were immaterial, for this obligation are not probable based on the facts known at the filing date.

The maximum potential future payments that we could have to make under this obligation would depend on the difference between the fair values of the solar energy systems sold or transferred to the funds as determined by us and the values that the U.S. Treasury Department would determine as fair value for the systems for purposes of claiming U.S. Treasury grants or the values the IRS would determine as the fair value for the systems for purposes of claiming ITCs or U.S. Treasury grants. We claim U.S. Treasury grants based on guidelines provided by the U.S. Treasury department and the statutory regulations from the IRS. We use fair values determined with the assistance of independent third-party appraisals commissioned by us as the basis for determining the ITCs that are passed-through to and claimed by the fund investors. Since we cannot determine future revisions to U.S. Treasury Department guidelines governing solar energy system values or how the IRS will evaluate system values used in claiming ITCs or U.S. Treasury grants, we are unable to reliably estimate the maximum potential future payments that it could have to make under this obligation as of each balance sheet date.

We are eligible to receive certain state and local incentives that are associated with renewable energy generation. The amount of incentives that can be claimed is based on the projected or actual solar energy system size and/or the amount of solar energy produced. We also currently participate in one state’s incentive program that is based on either the fair market value or the tax basis of solar energy systems placed in service. State and local incentives received are allocated between us and fund investors in accordance with the contractual provisions of each fund. We are not contractually obligated to indemnify any fund investor for any losses they may incur due to a shortfall in the amount of state or local incentives actually received.

Our lease pass-through financing funds have a one-time lease payment reset mechanism that occurs after the installation of all solar energy systems in a fund. As a result of this mechanism, we may be required to refund master lease prepayments previously received from investors. Any refunds of master lease prepayments would reduce the lease pass-through financing obligation.

### ***Letters of Credit***

As of December 31, 2018, we had \$219.6 million of unused letters of credit outstanding.

### **Note 18 – Variable Interest Entity Arrangements**

We have entered into various arrangements with investors to facilitate the funding and monetization of our solar energy systems and vehicles. In particular, our wholly owned subsidiaries and fund investors have formed and contributed cash and assets into various financing funds and entered into related agreements. We have determined that the funds are variable interest entities (“VIEs”) and we are the primary beneficiary of these VIEs by reference to the power and benefits criterion under ASC 810, *Consolidation*. We have considered the provisions within the agreements, which grant us the power to manage and make decisions that affect the operation of these VIEs, including determining the solar energy systems or vehicles and the associated customer contracts to be sold or contributed to these VIEs, redeploying solar energy systems or vehicles and managing customer receivables. We consider that the rights granted to the fund investors under the agreements are more protective in nature rather than participating.

As the primary beneficiary of these VIEs, we consolidate in the financial statements the financial position, results of operations and cash flows of these VIEs, and all intercompany balances and transactions between us and these VIEs are eliminated in the consolidated financial statements. Cash distributions of income and other receipts by a fund, net of agreed upon expenses, estimated expenses, tax benefits and detriments of income and loss and tax credits, are allocated to the fund investor and our subsidiary as specified in the agreements.

Generally, our subsidiary has the option to acquire the fund investor’s interest in the fund for an amount based on the market value of the fund or the formula specified in the agreements.

Upon the sale or liquidation of a fund, distributions would occur in the order and priority specified in the agreements.

Pursuant to management services, maintenance and warranty arrangements, we have been contracted to provide services to the funds, such as operations and maintenance support, accounting, lease servicing and performance reporting. In some instances, we have guaranteed payments to the fund investors as specified in the agreements. A fund’s creditors have no recourse to our general credit or to that of other funds. None of the assets of the funds had been pledged as collateral for their obligations.

The aggregate carrying values of the VIEs' assets and liabilities, after elimination of any intercompany transactions and balances, in the consolidated balance sheets were as follows (in thousands):

	December 31, 2018	December 31, 2017
<b>Assets</b>		
Current assets		
Cash and cash equivalents	\$ 75,203	\$ 55,425
Restricted cash	130,927	33,656
Accounts receivable, net	18,702	18,204
Prepaid expenses and other current assets	10,262	9,018
Total current assets	235,094	116,303
Operating lease vehicles, net	155,439	337,089
Solar energy systems, leased and to be leased, net	5,116,728	5,075,321
Restricted cash, net of current portion	65,262	36,999
Other assets	55,554	29,555
Total assets	\$ 5,628,077	\$ 5,595,267
<b>Liabilities</b>		
Current liabilities		
Accounts payable	\$ 32	\$ 32
Accrued liabilities and other	132,774	51,652
Deferred revenue	21,345	59,412
Customer deposits	—	726
Current portion of long-term	662,988	196,531

debt and capital leases		
Total current liabilities	817,139	308,353
Deferred revenue, net of current portion	177,451	323,919
Long-term debt and capital leases, net of current portion	1,237,707	625,934
Other long-term liabilities	26,400	30,536
Total liabilities	\$ 2,258,697	\$ 1,288,742

#### Note 19 – Lease Pass-Through Financing Obligation

Through December 31, 2018, we had entered into eight transactions referred to as “lease pass-through fund arrangements”. Under these arrangements, our wholly owned subsidiaries finance the cost of solar energy systems with investors through arrangements contractually structured as master leases for an initial term ranging between 10 and 25 years. These solar energy systems are subject to lease or PPAs with customers with an initial term not exceeding 25 years. These solar energy systems are included within solar energy systems, leased and to be leased, net on the consolidated balance sheet.

The cost of the solar energy systems under lease pass-through fund arrangements as of December 31, 2018 and 2017 was \$1.05 billion and \$1.09 billion, respectively. The accumulated depreciation on these assets as of December 31, 2018 and 2017 was \$66.1 million and \$30.9 million, respectively. The total lease pass-through financing obligation as of December 31, 2018 was \$111.9 million, of which \$61.8 million was classified as a current liability. The total lease pass-through financing obligation as of December 31, 2017 was \$134.8 million, of which \$67.3 million was classified as a current liability. Lease pass-through financing obligation is included in accrued liabilities and other for the current portion and other long-term liabilities for the long-term portion on the consolidated balance sheet.

Under a lease pass-through fund arrangement, the investor makes a large upfront payment to the lessor, which is one of our subsidiaries, and in some cases, subsequent periodic payments. We allocate a portion of the aggregate investor payments to the fair value of the assigned ITCs, which is estimated by discounting the projected cash flow impact of the ITCs using a market interest rate and is accounted for separately (see Note 2, *Summary of Significant Accounting Policies*). We account for the remainder of the investor payments as a borrowing by recording the proceeds received as a lease pass-through financing obligation, which is repaid from the future customer lease payments and any incentive rebates. A portion of the amounts received by the investor is allocated to interest expense using the effective interest rate method.

The lease pass-through financing obligation is non-recourse once the associated solar energy systems have been placed in-service and the associated customer arrangements have been assigned to the investors. However, we are required to comply with certain financial covenants specified in the contractual agreements, which we had met as of December 31, 2018. In addition, we are responsible for any warranties, performance guarantees, accounting and performance reporting. Furthermore, we continue to account for the customer arrangements and any incentive rebates in the consolidated financial statements, regardless of whether the cash is received by us or directly by the investors.

As of December 31, 2018, the future minimum master lease payments to be received from investors, for each of the next five years and thereafter, were as follows (in thousands):

2019	\$ 42,775
2020	42,100
2021	41,147
2022	33,055
2023	26,152
Thereafter	468,490
Total	<u>\$ 653,719</u>

For two of the lease pass-through fund arrangements, our subsidiaries have pledged its assets to the investors as security for its obligations under the contractual agreements.

Each lease pass-through fund arrangement has a one-time master lease prepayment adjustment mechanism that occurs when the capacity and the placed-in-service dates of the associated solar energy systems are finalized or on an agreed-upon date. As part of this mechanism, the master lease prepayment amount is updated, and we may be obligated to refund a portion of a master lease prepayment or entitled to receive an additional master lease prepayment. Any additional master lease prepayments are recorded as an additional lease pass-through financing obligation while any master lease prepayment refunds would reduce the lease pass-through financing obligation.

#### Note 20 – Defined Contribution Plan

We have a 401(k) savings plan that qualifies as a deferred salary arrangement under Section 401(k) of the Internal Revenue Code. Under the 401(k) savings plan, participating employees may elect to contribute up to 100% of their eligible compensation, subject to certain limitations. Participants are fully vested in their contributions. We did not make any contributions to the 401(k) savings plan during the years ended December 31, 2018, 2017 and 2016.

#### Note 21 – Related Party Transactions

Related party balances were comprised of the following (in thousands):

	<u>December 31, 2018</u>	<u>December 31, 2017</u>
Solar Bonds issued to related parties	\$ 100	\$ 100
Convertible senior notes due to related parties	\$ 2,674	\$ 2,519
Promissory notes due to related parties	\$ —	\$ 100,000

The related party transactions were primarily from debt held by our CEO, SolarCity's former CEO and SolarCity's former Chief Technology Officer. During the year ended December 31, 2018, the promissory notes payable to such parties were fully repaid. Refer to Note 13, *Long-Term Debt Obligations*.

Our convertible senior notes are not re-measured at fair value (refer to Note 5, *Fair Value of Financial Instruments*). As of December 31, 2018 and 2017, the unpaid principal balance of convertible senior notes due to related parties is \$3.0 million.



In November 2018, our CEO purchased from us 56,915 shares of our common stock in a private placement at a per share price equal to the last closing price of our stock prior to the execution of the purchase agreement for an aggregate \$20.0 million.

## Note 22 – Segment Reporting and Information about Geographic Areas

We have two operating and reportable segments: (i) automotive and (ii) energy generation and storage. The automotive segment includes the design, development, manufacturing, sales, and leasing of electric vehicles as well as sales of automotive regulatory credits. Additionally, the automotive segment is also comprised of services and other, which includes non-warranty after-sales vehicle services, sales of used vehicles, sales of electric vehicle components and systems to other manufacturers, retail merchandise, and sales by our acquired subsidiaries to third party customers. The energy generation and storage segment includes the design, manufacture, installation, sales, and leasing of solar energy generation and energy storage products. Our CODM does not evaluate operating segments using asset or liability information. The following table presents revenues and gross margins by reportable segment (in thousands):

	Year Ended December 31,		
	2018	2017	2016
Automotive segment			
Revenues	\$ 19,906,024	\$ 10,642,485	\$ 6,818,738
Gross profit	\$ 3,851,673	\$ 1,980,759	\$ 1,596,195
Energy generation and storage segment			
Revenues	\$ 1,555,244	\$ 1,116,266	\$ 181,394
Gross profit	\$ 190,348	\$ 241,728	\$ 3,062

The following table presents revenues by geographic area based on the sales location of our products (in thousands):

	Year Ended December 31,		
	2018	2017	2016
United States	\$ 14,871,507	\$ 6,221,439	\$ 4,200,706
China	1,757,147	2,027,062	1,065,255
Netherlands	965,596	330,343	305,184
Norway	812,730	823,081	335,572
Other	3,054,288	2,356,826	1,093,415
Total	<u>\$ 21,461,268</u>	<u>\$ 11,758,751</u>	<u>\$ 7,000,132</u>

The following table presents long-lived assets by geographic area (in thousands):

	December 31,	December 31,
	2018	2017
United States	\$ 16,741,409	\$ 15,587,979
International	860,064	787,033
Total	<u>\$ 17,601,473</u>	<u>\$ 16,375,012</u>

### Note 23 – Restructuring and Other

During 2018, we carried-out certain restructuring actions in order to reduce costs and improve efficiency and recognized \$36.6 million of employee termination expenses and estimated losses from sub-leasing a certain facility. The employee termination cash expenses of \$27.3 million were substantially paid by the end of 2018, while the remaining amounts were non-cash. Also included within restructuring and other activities was \$55.2 million of expenses (materially all of which were non-cash) from restructuring the energy generation and storage segment, which comprised of disposals of certain tangible assets, the shortening of the useful life of a trade name intangible asset and a contract termination penalty. In addition, we concluded that a small portion of the IPR&D asset is not commercially feasible. Consequently, we recognized an impairment loss of \$13.3 million (see Note 4, *Intangible Assets*).

In October 2018, a final court order was entered approving the terms of a settlement in connection with the SEC's legal actions relating to Elon Musk's prior consideration during the third quarter of 2018 of a take-private proposal for Tesla. Consequently, we recognized settlement and legal expenses of \$30.1 million in the year ended December 31, 2018 (see Note 17, *Commitments and Contingencies*). These expenses were substantially paid by the end of 2018.

### Note 24 – Subsequent Events

On February 3, 2019, we entered into a definitive agreement to acquire Maxwell Technologies, Inc. ("Maxwell"). Pursuant to the definitive agreement, each issued and outstanding share of Maxwell common stock will be exchanged for a fraction of a share of our common stock equal to the lesser of: (i) \$4.75 divided by an average value of one share of our common stock as calculated pursuant to the definitive agreement, and (ii) 0.0193, provided that cash will be paid in lieu of any fractional shares of our common stock. The closing of the transaction is subject to the successful tender of a specified minimum number of Maxwell common stock in an exchange offer to be commenced by our wholly-owned subsidiary, certain regulatory approvals and customary closing conditions.

### Note 25 – Quarterly Results of Operations (Unaudited)

The following table presents selected quarterly results of operations data for the years ended December 31, 2018 and 2017 (in thousands, except per share amounts):

	Three Months Ended			
	March 31	June 30	September 30	December 31
<b>2018</b>				
Total revenues	\$3,408,751	\$4,002,231	\$6,824,413	\$7,225,873
Gross profit	\$ 456,526	\$ 618,930	\$1,523,665	\$1,442,900
Net (loss) income attributable to common stockholders	\$ (709,551)	\$ (717,539)	\$ 311,516	\$ 139,483
Net (loss) income per share of common stock attributable to common stockholders, basic	\$ (4.19)	\$ (4.22)	\$ 1.82	\$ 0.81
Net (loss) income per share of common stock attributable to common stockholders, diluted	\$ (4.19)	\$ (4.22)	\$ 1.75	\$ 0.78
<b>2017</b>				
Total revenues	\$2,696,270	\$2,789,557	\$2,984,675	\$3,288,249
Gross profit	\$ 667,946	\$ 666,615	\$ 449,140	\$ 438,786
Net loss attributable to common stockholders	\$ (330,277)	\$ (336,397)	\$ (619,376)	\$ (675,350)
Net loss per share of common stock attributable to common stockholders, basic	\$ (2.04)	\$ (2.04)	\$ (3.70)	\$ (4.01)
Net loss per share of common stock attributable to common stockholders, diluted	\$ (2.04)	\$ (2.04)	\$ (3.70)	\$ (4.01)



**ITEM 9. CHANGES IN AND DISAGREEMENTS WITH ACCOUNTANTS ON ACCOUNTING AND FINANCIAL DISCLOSURE**

None

**ITEM 9A. CONTROLS AND PROCEDURES**

*Evaluation of Disclosure Controls and Procedures*

We conducted an evaluation as of December 31, 2018, under the supervision and with the participation of our management, including our Chief Executive Officer and Chief Financial Officer, of the effectiveness of the design and operation of our disclosure controls and procedures. Based upon that evaluation, our Chief Executive Officer and Chief Financial Officer concluded that, as of December 31, 2018, our disclosure controls and procedures were effective to provide reasonable assurance.

During the fourth quarter of 2018, we further enhanced our disclosure controls in accordance with the September 29, 2018 settlement with the SEC regarding Elon Musk's social media posts on August 7, 2018.

*Management's Report on Internal Control over Financial Reporting*

Our management is responsible for establishing and maintaining adequate internal control over financial reporting. Internal control over financial reporting is a process designed by, or under the supervision of, our Chief Executive Officer and Chief Financial Officer to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles and includes those policies and procedures that (1) pertain to the maintenance of records that in reasonable detail accurately and fairly reflect the transactions and dispositions of our assets; (2) provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with generally accepted accounting principles, and that our receipts and expenditures are being made only in accordance with authorizations of our management and directors and (3) provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use or disposition of our assets that could have a material effect on the financial statements.

Under the supervision and with the participation of our management, including our Chief Executive Officer and Chief Financial Officer, we conducted an evaluation of the effectiveness of our internal control over financial reporting based on criteria established in *Internal Control – Integrated Framework (2013)* issued by the Committee of Sponsoring Organizations of the Treadway Commission ("COSO"). Our management concluded that our internal control over financial reporting was effective as of December 31, 2018.

Our independent registered public accounting firm, PricewaterhouseCoopers LLP, has audited the effectiveness of our internal control over financial reporting as of December 31, 2018, as stated in their report which is included herein.

*Limitations on the Effectiveness of Controls*

Because of inherent limitations, internal control over financial reporting may not prevent or detect misstatements and projections of any evaluation of effectiveness to future periods are subject to the risk that controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate.

*Changes in Internal Control over Financial Reporting*

There was no change in our internal control over financial reporting that occurred during the fourth fiscal quarter of the year ended December 31, 2018, which has materially affected, or is reasonably likely to materially affect, our internal control over financial reporting.

**ITEM 9B. OTHER INFORMATION**

None

## **PART III**

### **ITEM 10. DIRECTORS, EXECUTIVE OFFICERS AND CORPORATE GOVERNANCE**

The information required by this Item 10 of Form 10-K will be included in our 2019 Proxy Statement to be filed with the Securities and Exchange Commission in connection with the solicitation of proxies for our 2019 Annual Meeting of Stockholders and is incorporated herein by reference. The 2019 Proxy Statement will be filed with the Securities and Exchange Commission within 120 days after the end of the fiscal year to which this report relates.

### **ITEM 11. EXECUTIVE COMPENSATION**

The information required by this Item 11 of Form 10-K will be included in our 2019 Proxy Statement and is incorporated herein by reference.

### **ITEM 12. SECURITY OWNERSHIP OF CERTAIN BENEFICIAL OWNERS AND MANAGEMENT AND RELATED STOCKHOLDER MATTERS**

The information required by this Item 12 of Form 10-K will be included in our 2019 Proxy Statement and is incorporated herein by reference.

### **ITEM 13. CERTAIN RELATIONSHIPS AND RELATED TRANSACTIONS AND DIRECTOR INDEPENDENCE**

The information required by this Item 13 of Form 10-K will be included in our 2019 Proxy Statement and is incorporated herein by reference.

### **ITEM 14. PRINCIPAL ACCOUNTANT FEES AND SERVICES**

The information required by this Item 14 of Form 10-K will be included in our 2019 Proxy Statement and is incorporated herein by reference.

### **ITEM 15. EXHIBITS AND FINANCIAL STATEMENT SCHEDULES**

1. Financial statements (see *Index to Consolidated Financial Statements* in Part II, Item 8 of this report)
2. All financial statement schedules have been omitted since the required information was not applicable or was not present in amounts sufficient to require submission of the schedules, or because the information required is included in the consolidated financial statements or the accompanying notes
3. The exhibits listed in the following *Index to Exhibits* are filed or incorporated by reference as part of this report

## INDEX TO EXHIBITS

Exhibit Number	Exhibit Description	Incorporated by Reference				Filed Herewith
		Form	File No.	Exhibit	Filing Date	
3.1	<a href="#"><u>Amended and Restated Certificate of Incorporation of the Registrant.</u></a>	10-K	001-34756	3.1	March 1, 2017	
3.2	<a href="#"><u>Certificate of Amendment to the Amended and Restated Certificate of Incorporation of the Registrant.</u></a>	10-K	001-34756	3.2	March 1, 2017	
3.3	<a href="#"><u>Amended and Restated Bylaws of the Registrant.</u></a>	8-K	001-34756	3.2	February 1, 2017	
4.1	<a href="#"><u>Specimen common stock certificate of the Registrant.</u></a>	10-K	001-34756	4.1	March 1, 2017	
4.2	<a href="#"><u>Fifth Amended and Restated Investors' Rights Agreement, dated as of August 31, 2009, between Registrant and certain holders of the Registrant's capital stock named therein.</u></a>	S-1	333-164593	4.2	January 29, 2010	
4.3	<a href="#"><u>Amendment to Fifth Amended and Restated Investors' Rights Agreement, dated as of May 20, 2010, between Registrant and certain holders of the Registrant's capital stock named therein.</u></a>	S-1/A	333-164593	4.2A	May 27, 2010	
4.4	<a href="#"><u>Amendment to Fifth Amended and Restated Investors' Rights Agreement between Registrant, Toyota Motor Corporation and certain holders of the Registrant's capital stock named therein.</u></a>	S-1/A	333-164593	4.2B	May 27, 2010	
4.5	<a href="#"><u>Amendment to Fifth Amended and Restated Investor's Rights Agreement, dated as of June 14, 2010, between Registrant and certain holders of the Registrant's capital stock named therein.</u></a>	S-1/A	333-164593	4.2C	June 15, 2010	
4.6	<a href="#"><u>Amendment to Fifth Amended and Restated Investor's Rights Agreement, dated as of November 2, 2010, between Registrant and certain holders of the Registrant's capital stock named therein.</u></a>	8-K	001-34756	4.1	November 4, 2010	
4.7	<a href="#"><u>Waiver to Fifth Amended and Restated Investor's Rights Agreement, dated as of May 22, 2011, between Registrant and certain holders of the Registrant's capital stock named therein.</u></a>	S-1/A	333-174466	4.2E	June 2, 2011	

Exhibit Number	Exhibit Description	Incorporated by Reference				Filed Herewith
		Form	File No.	Exhibit	Filing Date	
4.8	<a href="#"><u>Amendment to Fifth Amended and Restated Investor's Rights Agreement, dated as of May 30, 2011, between Registrant and certain holders of the Registrant's capital stock named therein.</u></a>	8-K	001-34756	4.1	June 1, 2011	
4.9	<a href="#"><u>Sixth Amendment to Fifth Amended and Restated Investors' Rights Agreement, dated as of May 15, 2013 among the Registrant, the Elon Musk Revocable Trust dated July 22, 2003 and certain other holders of the capital stock of the Registrant named therein.</u></a>	8-K	001-34756	4.1	May 20, 2013	
4.10	<a href="#"><u>Waiver to Fifth Amended and Restated Investor's Rights Agreement, dated as of May 14, 2013, between the Registrant and certain holders of the capital stock of the Registrant named therein.</u></a>	8-K	001-34756	4.2	May 20, 2013	
4.11	<a href="#"><u>Waiver to Fifth Amended and Restated Investor's Rights Agreement, dated as of August 13, 2015, between the Registrant and certain holders of the capital stock of the Registrant named therein.</u></a>	8-K	001-34756	4.1	August 19, 2015	
4.12	<a href="#"><u>Waiver to Fifth Amended and Restated Investors' Rights Agreement, dated as of May 18, 2016, between the Registrant and certain holders of the capital stock of the Registrant named therein.</u></a>	8-K	001-34756	4.1	May 24, 2016	
4.13	<a href="#"><u>Waiver to Fifth Amended and Restated Investors' Rights Agreement, dated as of March 15, 2017, between the Registrant and certain holders of the capital stock of the Registrant named therein.</u></a>	8-K	001-34756	4.1	March 17, 2017	
4.14	<a href="#"><u>Indenture, dated as of May 22, 2013, by and between the Registrant and U.S. Bank National Association.</u></a>	8-K	001-34756	4.1	May 22, 2013	
4.15	<a href="#"><u>Second Supplemental Indenture, dated as of March 5, 2014, by and between the Registrant and U.S. Bank National Association.</u></a>	8-K	001-34756	4.2	March 5, 2014	
4.16	<a href="#"><u>Form of 0.25% Convertible Senior Note Due March 1, 2019 (included in Exhibit 4.17).</u></a>	8-K	001-34756	4.2	March 5, 2014	

Exhibit Number	Exhibit Description	Incorporated by Reference				Filed Herewith
		Form	File No.	Exhibit	Filing Date	
4.17	<a href="#"><u>Third Supplemental Indenture, dated as of March 5, 2014, by and between the Registrant and U.S. Bank National Association.</u></a>	8-K	001-34756	4.4	March 5, 2014	
4.18	<a href="#"><u>Form of 1.25% Convertible Senior Note Due March 1, 2021 (included in Exhibit 4.19).</u></a>	8-K	001-34756	4.4	March 5, 2014	
4.19	<a href="#"><u>Fourth Supplemental Indenture, dated as of March 22, 2017, by and between the Registrant and U.S. Bank National Association.</u></a>	8-K	001-34756	4.2	March 22, 2017	
4.20	<a href="#"><u>Form of 2.375% Convertible Senior Note Due March 15, 2022 (included in Exhibit 4.21).</u></a>	8-K	001-34756	4.2	March 22, 2017	
4.21	<a href="#"><u>Indenture, dated as of August 18, 2017, by and among the Registrant, SolarCity, and U.S. Bank National Association, as trustee.</u></a>	8-K	001-34756	4.1	August 23, 2017	
4.22	<a href="#"><u>Form of 5.30% Senior Note due August 15, 2025.</u></a>	8-K	001-34756	4.2	August 23, 2017	
4.23	<a href="#"><u>Indenture, dated as of September 30, 2014, between SolarCity and Wells Fargo Bank, National Association</u></a>	8-K(1)	001-35758	4.1	October 6, 2014	
4.24	<a href="#"><u>First Supplemental Indenture, dated as of November 21, 2016, between SolarCity and Wells Fargo Bank, National Association, as trustee to the Indenture, dated as of September 30, 2014, between SolarCity and Wells Fargo Bank, National Association, as trustee.</u></a>	8-K	001-34756	4.2	November 21, 2016	
4.25	<a href="#"><u>Indenture, dated as of December 7, 2015, between SolarCity and Wells Fargo Bank, National Association</u></a>	8-K(1)	001-35758	4.1	December 7, 2015	
4.26	<a href="#"><u>First Supplemental Indenture, dated as of November 21, 2016, between SolarCity and Wells Fargo Bank, National Association, as trustee to the Indenture, dated as of December 7, 2015, between SolarCity and Wells Fargo Bank, National Association, as trustee.</u></a>	8-K	001-34756	4.3	November 21, 2016	
4.27	<a href="#"><u>Indenture, dated as of October 15, 2014, between SolarCity and U.S. Bank National Association, as trustee.</u></a>	S-3ASR(1)	333-199321	4.1	October 15, 2014	

Exhibit Number	Exhibit Description	Incorporated by Reference				Filed Herewith
		Form	File No.	Exhibit	Filing Date	
4.28	<a href="#"><u>Third Supplemental Indenture, dated as of October 15, 2014, by and between SolarCity and the Trustee, related to SolarCity's 3.00% Solar Bonds, Series 2014/3-3.</u></a>	8-K(1)	001-35758	4.4	October 15, 2014	
4.29	<a href="#"><u>Fourth Supplemental Indenture, dated as of October 15, 2014, by and between SolarCity and the Trustee, related to SolarCity's 4.00% Solar Bonds, Series 2014/4-7</u></a>	8-K(1)	001-35758	4.5	October 15, 2014	
4.30	<a href="#"><u>Seventh Supplemental Indenture, dated as of January 29, 2015, by and between SolarCity and the Trustee, related to SolarCity's 3.00% Solar Bonds, Series 2015/3-3.</u></a>	8-K(1)	001-35758	4.4	January 29, 2015	
4.31	<a href="#"><u>Eighth Supplemental Indenture, dated as of January 29, 2015, by and between SolarCity and the Trustee, related to SolarCity's 4.00% Solar Bonds, Series 2015/4-7.</u></a>	8-K(1)	001-35758	4.5	January 29, 2015	
4.32	<a href="#"><u>Ninth Supplemental Indenture, dated as of March 9, 2015, by and between SolarCity and the Trustee, related to SolarCity's 4.00% Solar Bonds, Series 2015/5-5.</u></a>	8-K(1)	001-35758	4.2	March 9, 2015	
4.33	<a href="#"><u>Tenth Supplemental Indenture, dated as of March 9, 2015, by and between SolarCity and the Trustee, related to SolarCity's 5.00% Solar Bonds, Series 2015/6-10.</u></a>	8-K(1)	001-35758	4.3	March 9, 2015	
4.34	<a href="#"><u>Eleventh Supplemental Indenture, dated as of March 9, 2015, by and between SolarCity and the Trustee, related to SolarCity's 5.75% Solar Bonds, Series 2015/7-15.</u></a>	8-K(1)	001-35758	4.4	March 9, 2015	
4.35	<a href="#"><u>Thirteenth Supplemental Indenture, dated as of March 19, 2015, by and between SolarCity and the Trustee, related to SolarCity's 2.60% Solar Bonds, Series 2015/C2-3.</u></a>	8-K(1)	001-35758	4.3	March 19, 2015	
4.36	<a href="#"><u>Fourteenth Supplemental Indenture, dated as of March 19, 2015, by and between SolarCity and the Trustee, related to SolarCity's 3.60% Solar Bonds, Series 2015/C3-5.</u></a>	8-K(1)	001-35758	4.4	March 19, 2015	

Exhibit Number	Exhibit Description	Incorporated by Reference				Filed Herewith
		Form	File No.	Exhibit	Filing Date	
4.37	<a href="#"><u>Fifteenth Supplemental Indenture, dated as of March 19, 2015, by and between SolarCity and the Trustee, related to SolarCity's 4.70% Solar Bonds, Series 2015/C4-10.</u></a>	8-K(1)	001-35758	4.5	March 19, 2015	
4.38	<a href="#"><u>Sixteenth Supplemental Indenture, dated as of March 19, 2015, by and between SolarCity and the Trustee, related to SolarCity's 5.45% Solar Bonds, Series 2015/C5-15.</u></a>	8-K(1)	001-35758	4.6	March 19, 2015	
4.39	<a href="#"><u>Eighteenth Supplemental Indenture, dated as of March 26, 2015, by and between SolarCity and the Trustee, related to SolarCity's 2.65% Solar Bonds, Series 2015/C7-3.</u></a>	8-K(1)	001-35758	4.3	March 26, 2015	
4.40	<a href="#"><u>Nineteenth Supplemental Indenture, dated as of March 26, 2015, by and between SolarCity and the Trustee, related to SolarCity's 3.60% Solar Bonds, Series 2015/C8-5.</u></a>	8-K(1)	001-35758	4.4	March 26, 2015	
4.41	<a href="#"><u>Twentieth Supplemental Indenture, dated as of March 26, 2015, by and between SolarCity and the Trustee, related to SolarCity's 4.70% Solar Bonds, Series 2015/C9-10.</u></a>	8-K(1)	001-35758	4.5	March 26, 2015	
4.42	<a href="#"><u>Twenty-First Supplemental Indenture, dated as of March 26, 2015, by and between SolarCity and the Trustee, related to SolarCity's 5.45% Solar Bonds, Series 2015/C10-15.</u></a>	8-K(1)	001-35758	4.6	March 26, 2015	
4.43	<a href="#"><u>Twenty-Fourth Supplemental Indenture, dated as of April 2, 2015, by and between SolarCity and the Trustee, related to SolarCity's 2.65% Solar Bonds, Series 2015/C12-3.</u></a>	8-K(1)	001-35758	4.3	April 2, 2015	
4.44	<a href="#"><u>Twenty-Fifth Supplemental Indenture, dated as of April 2, 2015, by and between SolarCity and the Trustee, related to SolarCity's 3.60% Solar Bonds, Series 2015/C13-5.</u></a>	8-K(1)	001-35758	4.4	April 2, 2015	
4.45	<a href="#"><u>Twenty-Sixth Supplemental Indenture, dated as of April 2, 2015, by and between SolarCity and the Trustee, related to SolarCity's 4.70% Solar Bonds, Series 2015/C14-10.</u></a>	8-K(1)	001-35758	4.5	April 2, 2015	

Exhibit Number	Exhibit Description	Incorporated by Reference				Filed Herewith
		Form	File No.	Exhibit	Filing Date	
4.46	<a href="#"><u>Twenty-Eighth Supplemental Indenture, dated as of April 9, 2015, by and between SolarCity and the Trustee, related to SolarCity's 2.65% Solar Bonds, Series 2015/C17-3.</u></a>	8-K(1)	001-35758	4.3	April 9, 2015	
4.47	<a href="#"><u>Twenty-Ninth Supplemental Indenture, dated as of April 9, 2015, by and between SolarCity and the Trustee, related to SolarCity's 3.60% Solar Bonds, Series 2015/C18-5.</u></a>	8-K(1)	001-35758	4.4	April 9, 2015	
4.48	<a href="#"><u>Thirtieth Supplemental Indenture, dated as of April 9, 2015, by and between SolarCity and the Trustee, related to SolarCity's 4.70% Solar Bonds, Series 2015/C19-10.</u></a>	8-K(1)	001-35758	4.5	April 9, 2015	
4.49	<a href="#"><u>Thirty-First Supplemental Indenture, dated as of April 9, 2015, by and between SolarCity and the Trustee, related to SolarCity's 5.45% Solar Bonds, Series 2015/C20-15.</u></a>	8-K(1)	001-35758	4.6	April 9, 2015	
4.50	<a href="#"><u>Thirty-Third Supplemental Indenture, dated as of April 14, 2015, by and between SolarCity and the Trustee, related to SolarCity's 2.65% Solar Bonds, Series 2015/C22-3.</u></a>	8-K(1)	001-35758	4.3	April 14, 2015	
4.51	<a href="#"><u>Thirty-Fourth Supplemental Indenture, dated as of April 14, 2015, by and between SolarCity and the Trustee, related to SolarCity's 3.60% Solar Bonds, Series 2015/C23-5.</u></a>	8-K(1)	001-35758	4.4	April 14, 2015	
4.52	<a href="#"><u>Thirty-Fifth Supplemental Indenture, dated as of April 14, 2015, by and between SolarCity and the Trustee, related to SolarCity's 4.70% Solar Bonds, Series 2015/C24-10.</u></a>	8-K(1)	001-35758	4.5	April 14, 2015	
4.53	<a href="#"><u>Thirty-Sixth Supplemental Indenture, dated as of April 14, 2015, by and between SolarCity and the Trustee, related to SolarCity's 5.45% Solar Bonds, Series 2015/C25-15.</u></a>	8-K(1)	001-35758	4.6	April 14, 2015	
4.54	<a href="#"><u>Thirty-Eighth Supplemental Indenture, dated as of April 21, 2015, by and between SolarCity and the Trustee, related to SolarCity's 4.70% Solar Bonds, Series 2015/C27-10.</u></a>	8-K(1)	001-35758	4.3	April 21, 2015	



Exhibit Number	Exhibit Description	Incorporated by Reference				Filed Herewith
		Form	File No.	Exhibit	Filing Date	
4.55	<a href="#"><u>Thirty-Ninth Supplemental Indenture, dated as of April 21, 2015, by and between SolarCity and the Trustee, related to SolarCity's 5.45% Solar Bonds, Series 2015/C28-15.</u></a>	8-K(1)	001-35758	4.4	April 21, 2015	
4.56	<a href="#"><u>Forty-First Supplemental Indenture, dated as of April 27, 2015, by and between SolarCity and the Trustee, related to SolarCity's 2.65% Solar Bonds, Series 2015/C30-3.</u></a>	8-K(1)	001-35758	4.3	April 27, 2015	
4.57	<a href="#"><u>Forty-Second Supplemental Indenture, dated as of April 27, 2015, by and between SolarCity and the Trustee, related to SolarCity's 3.60% Solar Bonds, Series 2015/C31-5.</u></a>	8-K(1)	001-35758	4.4	April 27, 2015	
4.58	<a href="#"><u>Forty-Third Supplemental Indenture, dated as of April 27, 2015, by and between SolarCity and the Trustee, related to SolarCity's 4.70% Solar Bonds, Series 2015/C32-10.</u></a>	8-K(1)	001-35758	4.5	April 27, 2015	
4.59	<a href="#"><u>Forty-Fourth Supplemental Indenture, dated as of April 27, 2015, by and between SolarCity and the Trustee, related to SolarCity's 5.45% Solar Bonds, Series 2015/C33-15.</u></a>	8-K(1)	001-35758	4.6	April 27, 2015	
4.60	<a href="#"><u>Forty-Sixth Supplemental Indenture, dated as of May 1, 2015, by and between SolarCity and the Trustee, related to SolarCity's 3.00% Solar Bonds, Series 2015/10-3.</u></a>	8-K(1)	001-35758	4.3	May 1, 2015	
4.61	<a href="#"><u>Forty-Seventh Supplemental Indenture, dated as of May 1, 2015, by and between SolarCity and the Trustee, related to SolarCity's 4.00% Solar Bonds, Series 2015/11-5.</u></a>	8-K(1)	001-35758	4.4	May 1, 2015	
4.62	<a href="#"><u>Forty-Eighth Supplemental Indenture, dated as of May 1, 2015, by and between SolarCity and the Trustee, related to SolarCity's 5.00% Solar Bonds, Series 2015/12-10.</u></a>	8-K(1)	001-35758	4.5	May 1, 2015	
4.63	<a href="#"><u>Forty-Ninth Supplemental Indenture, dated as of May 1, 2015, by and between SolarCity and the Trustee, related to SolarCity's 5.75% Solar Bonds, Series 2015/13-15.</u></a>	8-K(1)	001-35758	4.6	May 1, 2015	

Exhibit Number	Exhibit Description	Incorporated by Reference				Filed Herewith
		Form	File No.	Exhibit	Filing Date	
4.64	<a href="#"><u>Fiftieth Supplemental Indenture, dated as of May 11, 2015, by and between SolarCity and the Trustee, related to SolarCity's 2.65% Solar Bonds, Series 2015/C34-3.</u></a>	8-K(1)	001-35758	4.2	May 11, 2015	
4.65	<a href="#"><u>Fifty-First Supplemental Indenture, dated as of May 11, 2015, by and between SolarCity and the Trustee, related to SolarCity's 3.60% Solar Bonds, Series 2015/C35-5.</u></a>	8-K(1)	001-35758	4.3	May 11, 2015	
4.66	<a href="#"><u>Fifty-Second Supplemental Indenture, dated as of May 11, 2015, by and between SolarCity and the Trustee, related to SolarCity's 4.70% Solar Bonds, Series 2015/C36-10.</u></a>	8-K(1)	001-35758	4.4	May 11, 2015	
4.67	<a href="#"><u>Fifty-Third Supplemental Indenture, dated as of May 11, 2015, by and between SolarCity and the Trustee, related to SolarCity's 5.45% Solar Bonds, Series 2015/C37-15.</u></a>	8-K(1)	001-35758	4.5	May 11, 2015	
4.68	<a href="#"><u>Fifty-Fourth Supplemental Indenture, dated as of May 14, 2015, by and between SolarCity and the Trustee, related to SolarCity's 2.50% Solar Bonds, Series 2015/14-2.</u></a>	8-K(1)	001-35758	4.2	May 14, 2015	
4.69	<a href="#"><u>Fifty-Fifth Supplemental Indenture, dated as of May 18, 2015, by and between SolarCity and the Trustee, related to SolarCity's 2.65% Solar Bonds, Series 2015/C38-3.</u></a>	8-K(1)	001-35758	4.2	May 18, 2015	
4.70	<a href="#"><u>Fifty-Sixth Supplemental Indenture, dated as of May 18, 2015, by and between SolarCity and the Trustee, related to SolarCity's 3.60% Solar Bonds, Series 2015/C39-5.</u></a>	8-K(1)	001-35758	4.3	May 18, 2015	
4.71	<a href="#"><u>Fifty-Seventh Supplemental Indenture, dated as of May 18, 2015, by and between SolarCity and the Trustee, related to SolarCity's 4.70% Solar Bonds, Series 2015/C40-10.</u></a>	8-K(1)	001-35758	4.4	May 18, 2015	
4.72	<a href="#"><u>Fifty-Eighth Supplemental Indenture, dated as of May 18, 2015, by and between SolarCity and the Trustee, related to SolarCity's 5.45% Solar Bonds, Series 2015/C41-15.</u></a>	8-K(1)	001-35758	4.5	May 18, 2015	

Exhibit Number	Exhibit Description	Incorporated by Reference				Filed Herewith
		Form	File No.	Exhibit	Filing Date	
4.73	<a href="#"><u>Fifty-Ninth Supplemental Indenture, dated as of May 26, 2015, by and between SolarCity and the Trustee, related to SolarCity's 2.65% Solar Bonds, Series 2015/C42-3.</u></a>	8-K(1)	001-35758	4.2	May 26, 2015	
4.74	<a href="#"><u>Sixtieth Supplemental Indenture, dated as of May 26, 2015, by and between SolarCity and the Trustee, related to SolarCity's 3.60% Solar Bonds, Series 2015/C43-5.</u></a>	8-K(1)	001-35758	4.3	May 26, 2015	
4.75	<a href="#"><u>Sixty-First Supplemental Indenture, dated as of May 26, 2015, by and between SolarCity and the Trustee, related to SolarCity's 4.70% Solar Bonds, Series 2015/C44-10.</u></a>	8-K(1)	001-35758	4.4	May 26, 2015	
4.76	<a href="#"><u>Sixty-Second Supplemental Indenture, dated as of May 26, 2015, by and between SolarCity and the Trustee, related to SolarCity's 5.45% Solar Bonds, Series 2015/C45-15.</u></a>	8-K(1)	001-35758	4.5	May 26, 2015	
4.77	<a href="#"><u>Sixty-Fourth Supplemental Indenture, dated as of June 8, 2015, by and between SolarCity and the Trustee, related to SolarCity's 2.65% Solar Bonds, Series 2015/C46-3.</u></a>	8-K(1)	001-35758	4.2	June 10, 2015	
4.78	<a href="#"><u>Sixty-Fifth Supplemental Indenture, dated as of June 8, 2015, by and between SolarCity and the Trustee, related to SolarCity's 3.60% Solar Bonds, Series 2015/C47-5.</u></a>	8-K(1)	001-35758	4.3	June 10, 2015	
4.79	<a href="#"><u>Sixty-Sixth Supplemental Indenture, dated as of June 8, 2015, by and between SolarCity and the Trustee, related to SolarCity's 4.70% Solar Bonds, Series 2015/C48-10.</u></a>	8-K(1)	001-35758	4.4	June 10, 2015	
4.80	<a href="#"><u>Sixty-Seventh Supplemental Indenture, dated as of June 8, 2015, by and between SolarCity and the Trustee, related to SolarCity's 5.45% Solar Bonds, Series 2015/C49-15.</u></a>	8-K(1)	001-35758	4.5	June 10, 2015	
4.81	<a href="#"><u>Sixty-Eighth Supplemental Indenture, dated as of June 16, 2015, by and between SolarCity and the Trustee, related to SolarCity's 2.65% Solar Bonds, Series 2015/C50-3.</u></a>	8-K(1)	001-35758	4.2	June 16, 2015	

Exhibit Number	Exhibit Description	Incorporated by Reference				Filed Herewith
		Form	File No.	Exhibit	Filing Date	
4.82	<a href="#"><u>Sixty-Ninth Supplemental Indenture, dated as of June 16, 2015, by and between SolarCity and the Trustee, related to SolarCity's 3.60% Solar Bonds, Series 2015/C51-5.</u></a>	8-K(1)	001-35758	4.3	June 16, 2015	
4.83	<a href="#"><u>Seventieth Supplemental Indenture, dated as of June 16, 2015, by and between SolarCity and the Trustee, related to SolarCity's 4.70% Solar Bonds, Series 2015/C52-10.</u></a>	8-K(1)	001-35758	4.4	June 16, 2015	
4.84	<a href="#"><u>Seventy-First Supplemental Indenture, dated as of June 16, 2015, by and between SolarCity and the Trustee, related to SolarCity's 5.45% Solar Bonds, Series 2015/C53-15.</u></a>	8-K(1)	001-35758	4.5	June 16, 2015	
4.85	<a href="#"><u>Seventy-Second Supplemental Indenture, dated as of June 22, 2015, by and between SolarCity and the Trustee, related to SolarCity's 2.65% Solar Bonds, Series 2015/C54-3.</u></a>	8-K(1)	001-35758	4.2	June 23, 2015	
4.86	<a href="#"><u>Seventy-Third Supplemental Indenture, dated as of June 22, 2015, by and between SolarCity and the Trustee, related to SolarCity's 3.60% Solar Bonds, Series 2015/C55-5.</u></a>	8-K(1)	001-35758	4.3	June 23, 2015	
4.87	<a href="#"><u>Seventy-Fourth Supplemental Indenture, dated as of June 22, 2015, by and between SolarCity and the Trustee, related to SolarCity's 4.70% Solar Bonds, Series 2015/C56-10.</u></a>	8-K(1)	001-35758	4.4	June 23, 2015	
4.88	<a href="#"><u>Seventy-Fifth Supplemental Indenture, dated as of June 22, 2015, by and between SolarCity and the Trustee, related to SolarCity's 5.45% Solar Bonds, Series 2015/C57-15.</u></a>	8-K(1)	001-35758	4.5	June 23, 2015	
4.89	<a href="#"><u>Seventy-Eighth Supplemental Indenture, dated as of June 29, 2015, by and between SolarCity and the Trustee, related to SolarCity's 2.65% Solar Bonds, Series 2015/C59-3.</u></a>	8-K(1)	001-35758	4.3	June 29, 2015	
4.90	<a href="#"><u>Seventy-Ninth Supplemental Indenture, dated as of June 29, 2015, by and between SolarCity and the Trustee, related to SolarCity's 3.60% Solar Bonds, Series 2015/C60-5.</u></a>	8-K(1)	001-35758	4.4	June 29, 2015	

Exhibit Number	Exhibit Description	Incorporated by Reference				Filed Herewith
		Form	File No.	Exhibit	Filing Date	
4.91	<a href="#"><u>Eightieth Supplemental Indenture, dated as of June 29, 2015, by and between SolarCity and the Trustee, related to SolarCity's 4.70% Solar Bonds, Series 2015/C61-10.</u></a>	8-K(1)	001-35758	4.5	June 29, 2015	
4.92	<a href="#"><u>Eighty-First Supplemental Indenture, dated as of June 29, 2015, by and between SolarCity and the Trustee, related to SolarCity's 5.45% Solar Bonds, Series 2015/C62-15.</u></a>	8-K(1)	001-35758	4.6	June 29, 2015	
4.93	<a href="#"><u>Eighty-Third Supplemental Indenture, dated as of July 14, 2015, by and between SolarCity and the Trustee, related to SolarCity's 2.65% Solar Bonds, Series 2015/C64-3.</u></a>	8-K(1)	001-35758	4.3	July 14, 2015	
4.94	<a href="#"><u>Eighty-Fourth Supplemental Indenture, dated as of July 14, 2015, by and between SolarCity and the Trustee, related to SolarCity's 3.60% Solar Bonds, Series 2015/C65-5.</u></a>	8-K(1)	001-35758	4.4	July 14, 2015	
4.95	<a href="#"><u>Eighty-Fifth Supplemental Indenture, dated as of July 14, 2015, by and between SolarCity and the Trustee, related to SolarCity's 4.70% Solar Bonds, Series 2015/C66-10.</u></a>	8-K(1)	001-35758	4.5	July 14, 2015	
4.196	<a href="#"><u>Eighty-Sixth Supplemental Indenture, dated as of July 14, 2015, by and between SolarCity and the Trustee, related to SolarCity's 5.45% Solar Bonds, Series 2015/C67-15.</u></a>	8-K(1)	001-35758	4.6	July 14, 2015	
4.97	<a href="#"><u>Eighty-Eighth Supplemental Indenture, dated as of July 20, 2015, by and between SolarCity and the Trustee, related to SolarCity's 2.65% Solar Bonds, Series 2015/C69-3.</u></a>	8-K(1)	001-35758	4.3	July 21, 2015	
4.98	<a href="#"><u>Eighty-Ninth Supplemental Indenture, dated as of July 20, 2015, by and between SolarCity and the Trustee, related to SolarCity's 3.60% Solar Bonds, Series 2015/C70-5.</u></a>	8-K(1)	001-35758	4.4	July 21, 2015	
4.99	<a href="#"><u>Ninetieth Supplemental Indenture, dated as of July 20, 2015, by and between SolarCity and the Trustee, related to SolarCity's 4.70% Solar Bonds, Series 2015/C71-10.</u></a>	8-K(1)	001-35758	4.5	July 21, 2015	

Exhibit Number	Exhibit Description	Incorporated by Reference				Filed Herewith
		Form	File No.	Exhibit	Filing Date	
4.100	<a href="#"><u>Ninety-First Supplemental Indenture, dated as of July 20, 2015, by and between SolarCity and the Trustee, related to SolarCity's 5.45% Solar Bonds, Series 2015/C72-15.</u></a>	8-K(1)	001-35758	4.6	July 21, 2015	
4.101	<a href="#"><u>Ninety-Third Supplemental Indenture, dated as of July 31, 2015, by and between SolarCity and the Trustee, related to SolarCity's 3.00% Solar Bonds, Series 2015/18-3.</u></a>	8-K(1)	001-35758	4.3	July 31, 2015	
4.102	<a href="#"><u>Ninety-Fourth Supplemental Indenture, dated as of July 31, 2015, by and between SolarCity and the Trustee, related to SolarCity's 4.00% Solar Bonds, Series 2015/19-5.</u></a>	8-K(1)	001-35758	4.4	July 31, 2015	
4.103	<a href="#"><u>Ninety-Fifth Supplemental Indenture, dated as of July 31, 2015, by and between SolarCity and the Trustee, related to SolarCity's 5.00% Solar Bonds, Series 2015/20-10.</u></a>	8-K(1)	001-35758	4.5	July 31, 2015	
4.104	<a href="#"><u>Ninety-Sixth Supplemental Indenture, dated as of July 31, 2015, by and between SolarCity and the Trustee, related to SolarCity's 5.75% Solar Bonds, Series 2015/21-15.</u></a>	8-K(1)	001-35758	4.6	July 31, 2015	
4.105	<a href="#"><u>Ninety-Eighth Supplemental Indenture, dated as of August 3, 2015, by and between SolarCity and the Trustee, related to SolarCity's 2.65% Solar Bonds, Series 2015/C74-3.</u></a>	8-K(1)	001-35758	4.3	August 3, 2015	
4.106	<a href="#"><u>Ninety-Ninth Supplemental Indenture, dated as of August 3, 2015, by and between SolarCity and the Trustee, related to SolarCity's 3.60% Solar Bonds, Series 2015/C75-5.</u></a>	8-K(1)	001-35758	4.4	August 3, 2015	
4.107	<a href="#"><u>One Hundredth Supplemental Indenture, dated as of August 3, 2015, by and between SolarCity and the Trustee, related to SolarCity's 4.70% Solar Bonds, Series 2015/C76-10.</u></a>	8-K(1)	001-35758	4.5	August 3, 2015	
4.108	<a href="#"><u>One Hundred-and-First Supplemental Indenture, dated as of August 3, 2015, by and between SolarCity and the Trustee, related to SolarCity's 5.45% Solar Bonds, Series 2015/C77-15.</u></a>	8-K(1)	001-35758	4.6	August 3, 2015	

Exhibit Number	Exhibit Description	Incorporated by Reference				Filed Herewith
		Form	File No.	Exhibit	Filing Date	
4.109	<a href="#"><u>One Hundred-and-Third Supplemental Indenture, dated as of August 10, 2015, by and between SolarCity and the Trustee, related to SolarCity's 2.65% Solar Bonds, Series 2015/C79-3.</u></a>	8-K(1)	001-35758	4.3	August 10, 2015	
4.110	<a href="#"><u>One Hundred-and-Fourth Supplemental Indenture, dated as of August 10, 2015, by and between SolarCity and the Trustee, related to SolarCity's 3.60% Solar Bonds, Series 2015/C80-5.</u></a>	8-K(1)	001-35758	4.4	August 10, 2015	
4.111	<a href="#"><u>One Hundred-and-Fifth Supplemental Indenture, dated as of August 10, 2015, by and between SolarCity and the Trustee, related to SolarCity's 4.70% Solar Bonds, Series 2015/C81-10.</u></a>	8-K(1)	001-35758	4.5	August 10, 2015	
4.112	<a href="#"><u>One Hundred-and-Sixth Supplemental Indenture, dated as of August 10, 2015, by and between SolarCity and the Trustee, related to SolarCity's 5.45% Solar Bonds, Series 2015/C82-15.</u></a>	8-K(1)	001-35758	4.6	August 10, 2015	
4.113	<a href="#"><u>One Hundred-and-Eighth Supplemental Indenture, dated as of August 17, 2015, by and between SolarCity and the Trustee, related to SolarCity's 2.65% Solar Bonds, Series 2015/C84-3.</u></a>	8-K(1)	001-35758	4.3	August 17, 2015	
4.114	<a href="#"><u>One Hundred-and-Ninth Supplemental Indenture, dated as of August 17, 2015, by and between SolarCity and the Trustee, related to SolarCity's 3.60% Solar Bonds, Series 2015/C85-5.</u></a>	8-K(1)	001-35758	4.4	August 17, 2015	
4.115	<a href="#"><u>One Hundred-and-Tenth Supplemental Indenture, dated as of August 17, 2015, by and between SolarCity and the Trustee, related to SolarCity's 4.70% Solar Bonds, Series 2015/C86-10.</u></a>	8-K(1)	001-35758	4.5	August 17, 2015	
4.116	<a href="#"><u>One Hundred-and-Eleventh Supplemental Indenture, dated as of August 17, 2015, by and between SolarCity and the Trustee, related to SolarCity's 5.45% Solar Bonds, Series 2015/C87-15.</u></a>	8-K(1)	001-35758	4.6	August 17, 2015	

Exhibit Number	Exhibit Description	Incorporated by Reference				Filed Herewith
		Form	File No.	Exhibit	Filing Date	
4.117	<a href="#"><u>One Hundred-and-Thirteenth Supplemental Indenture, dated as of August 24, 2015, by and between SolarCity and the Trustee, related to SolarCity's 2.65% Solar Bonds, Series 2015/C89-3.</u></a>	8-K(1)	001-35758	4.3	August 24, 2015	
4.118	<a href="#"><u>One Hundred-and-Fourteenth Supplemental Indenture, dated as of August 24, 2015, by and between SolarCity and the Trustee, related to SolarCity's 3.60% Solar Bonds, Series 2015/C90-5.</u></a>	8-K(1)	001-35758	4.4	August 24, 2015	
4.119	<a href="#"><u>One Hundred-and-Fifteenth Supplemental Indenture, dated as of August 24, 2015, by and between SolarCity and the Trustee, related to SolarCity's 4.70% Solar Bonds, Series 2015/C91-10.</u></a>	8-K(1)	001-35758	4.5	August 24, 2015	
4.120	<a href="#"><u>One Hundred-and-Sixteenth Supplemental Indenture, dated as of August 24, 2015, by and between SolarCity and the Trustee, related to SolarCity's 5.45% Solar Bonds, Series 2015/C92-15.</u></a>	8-K(1)	001-35758	4.6	August 24, 2015	
4.121	<a href="#"><u>One Hundred-and-Eighteenth Supplemental Indenture, dated as of August 31, 2015, by and between SolarCity and the Trustee, related to SolarCity's 2.65% Solar Bonds, Series 2015/C94-3.</u></a>	8-K(1)	001-35758	4.3	August 31, 2015	
4.122	<a href="#"><u>One Hundred-and-Nineteenth Supplemental Indenture, dated as of August 31, 2015, by and between SolarCity and the Trustee, related to SolarCity's 3.60% Solar Bonds, Series 2015/C95-5.</u></a>	8-K(1)	001-35758	4.4	August 31, 2015	
4.123	<a href="#"><u>One Hundred-and-Twentieth Supplemental Indenture, dated as of August 31, 2015, by and between SolarCity and the Trustee, related to SolarCity's 4.70% Solar Bonds, Series 2015/C96-10.</u></a>	8-K(1)	001-35758	4.5	August 31, 2015	
4.124	<a href="#"><u>One Hundred-and-Twenty-First Supplemental Indenture, dated as of August 31, 2015, by and between SolarCity and the Trustee, related to SolarCity's 5.45% Solar Bonds, Series 2015/C97-15.</u></a>	8-K(1)	001-35758	4.6	August 31, 2015	



Exhibit Number	Exhibit Description	Incorporated by Reference				Filed Herewith
		Form	File No.	Exhibit	Filing Date	
4.125	<a href="#"><u>One Hundred-and-Twenty-Second Supplemental Indenture, dated as of September 11, 2015, by and between SolarCity and the Trustee, related to SolarCity's Solar Bonds, Series 2015/R1.</u></a>	8-K(1)	001-35758	4.2	September 11, 2015	
4.126	<a href="#"><u>One Hundred-and-Twenty-Third Supplemental Indenture, dated as of September 11, 2015, by and between SolarCity and the Trustee, related to SolarCity's Solar Bonds, Series 2015/R2.</u></a>	8-K(1)	001-35758	4.3	September 11, 2015	
4.127	<a href="#"><u>One Hundred-and-Twenty-Fourth Supplemental Indenture, dated as of September 11, 2015, by and between SolarCity and the Trustee, related to SolarCity's Solar Bonds, Series 2015/R3.</u></a>	8-K(1)	001-35758	4.4	September 11, 2015	
4.128	<a href="#"><u>One Hundred-and-Twenty-Sixth Supplemental Indenture, dated as of September 14, 2015, by and between SolarCity and the Trustee, related to SolarCity's 2.65% Solar Bonds, Series 2015/C99-3.</u></a>	8-K(1)	001-35758	4.3	September 15, 2015	
4.129	<a href="#"><u>One Hundred-and-Twenty-Seventh Supplemental Indenture, dated as of September 14, 2015, by and between SolarCity and the Trustee, related to SolarCity's 3.60% Solar Bonds, Series 2015/C100-5.</u></a>	8-K(1)	001-35758	4.4	September 15, 2015	
4.130	<a href="#"><u>One Hundred-and-Twenty-Eighth Supplemental Indenture, dated as of September 14, 2015, by and between SolarCity and the Trustee, related to SolarCity's 4.70% Solar Bonds, Series 2015/C101-10.</u></a>	8-K(1)	001-35758	4.5	September 15, 2015	
4.131	<a href="#"><u>One Hundred-and-Twenty-Ninth Supplemental Indenture, dated as of September 14, 2015, by and between SolarCity and the Trustee, related to SolarCity's 5.45% Solar Bonds, Series 2015/C102-15.</u></a>	8-K(1)	001-35758	4.6	September 15, 2015	
4.132	<a href="#"><u>One Hundred-and-Thirty-First Supplemental Indenture, dated as of September 28, 2015, by and between SolarCity and the Trustee, related to SolarCity's 2.65% Solar Bonds, Series 2015/C104-3.</u></a>	8-K(1)	001-35758	4.3	September 29, 2015	

Exhibit Number	Exhibit Description	Incorporated by Reference				Filed Herewith
		Form	File No.	Exhibit	Filing Date	
4.133	<a href="#"><u>One Hundred-and-Thirty-Second Supplemental Indenture, dated as of September 28, 2015, by and between SolarCity and the Trustee, related to SolarCity's 3.60% Solar Bonds, Series 2015/C105-5.</u></a>	8-K(1)	001-35758	4.4	September 29, 2015	
4.134	<a href="#"><u>One Hundred-and-Thirty-Third Supplemental Indenture, dated as of September 28, 2015, by and between SolarCity and the Trustee, related to SolarCity's 4.70% Solar Bonds, Series 2015/C106-10.</u></a>	8-K(1)	001-35758	4.5	September 29, 2015	
4.135	<a href="#"><u>One Hundred-and-Thirty-Fourth Supplemental Indenture, dated as of September 28, 2015, by and between SolarCity and the Trustee, related to SolarCity's 5.45% Solar Bonds, Series 2015/C107-15.</u></a>	8-K(1)	001-35758	4.6	September 29, 2015	
4.136	<a href="#"><u>One Hundred-and-Thirty-Sixth Supplemental Indenture, dated as of October 13, 2015, by and between SolarCity and the Trustee, related to SolarCity's 2.65% Solar Bonds, Series 2015/C109-3.</u></a>	8-K(1)	001-35758	4.3	October 13, 2015	
4.137	<a href="#"><u>One Hundred-and-Thirty-Seventh Supplemental Indenture, dated as of October 13, 2015, by and between SolarCity and the Trustee, related to SolarCity's 3.60% Solar Bonds, Series 2015/C110-5.</u></a>	8-K(1)	001-35758	4.4	October 13, 2015	
4.138	<a href="#"><u>One Hundred-and-Thirty-Eighth Supplemental Indenture, dated as of October 13, 2015, by and between SolarCity and the Trustee, related to SolarCity's 4.70% Solar Bonds, Series 2015/C111-10.</u></a>	8-K(1)	001-35758	4.5	October 13, 2015	
4.139	<a href="#"><u>One Hundred-and-Thirty-Ninth Supplemental Indenture, dated as of October 13, 2015, by and between SolarCity and the Trustee, related to SolarCity's 5.45% Solar Bonds, Series 2015/C112-15.</u></a>	8-K(1)	001-35758	4.6	October 13, 2015	
4.140	<a href="#"><u>One Hundred-and-Forty-First Supplemental Indenture, dated as of October 30, 2015, by and between SolarCity and the Trustee, related to SolarCity's 3.00% Solar Bonds, Series 2015/23-3.</u></a>	8-K(1)	001-35758	4.3	October 30, 2015	

Exhibit Number	Exhibit Description	Incorporated by Reference				Filed Herewith
		Form	File No.	Exhibit	Filing Date	
4.141	<a href="#"><u>One Hundred-and-Forty-Second Supplemental Indenture, dated as of October 30, 2015, by and between SolarCity and the Trustee, related to SolarCity's 4.00% Solar Bonds, Series 2015/24-5.</u></a>	8-K(1)	001-35758	4.4	October 30, 2015	
4.142	<a href="#"><u>One Hundred-and-Forty-Third Supplemental Indenture, dated as of October 30, 2015, by and between SolarCity and the Trustee, related to SolarCity's 5.00% Solar Bonds, Series 2015/25-10.</u></a>	8-K(1)	001-35758	4.5	October 30, 2015	
4.143	<a href="#"><u>One Hundred-and-Forty-Fourth Supplemental Indenture, dated as of October 30, 2015, by and between SolarCity and the Trustee, related to SolarCity's 5.75% Solar Bonds, Series 2015/26-15.</u></a>	8-K(1)	001-35758	4.6	October 30, 2015	
4.144	<a href="#"><u>One Hundred-and-Forty-Sixth Supplemental Indenture, dated as of November 4, 2015, by and between SolarCity and the Trustee, related to SolarCity's 2.65% Solar Bonds, Series 2015/C114-3.</u></a>	8-K(1)	001-35758	4.3	November 4, 2015	
4.145	<a href="#"><u>One Hundred-and-Forty-Seventh Supplemental Indenture, dated as of November 4, 2015, by and between SolarCity and the Trustee, related to SolarCity's 3.60% Solar Bonds, Series 2015/C115-5.</u></a>	8-K(1)	001-35758	4.4	November 4, 2015	
4.146	<a href="#"><u>One Hundred-and-Forty-Eighth Supplemental Indenture, dated as of November 4, 2015, by and between SolarCity and the Trustee, related to SolarCity's 4.70% Solar Bonds, Series 2015/C116-10.</u></a>	8-K(1)	001-35758	4.5	November 4, 2015	
4.147	<a href="#"><u>One Hundred-and-Forty-Ninth Supplemental Indenture, dated as of November 4, 2015, by and between SolarCity and the Trustee, related to SolarCity's 5.45% Solar Bonds, Series 2015/C117-15.</u></a>	8-K(1)	001-35758	4.6	November 4, 2015	
4.148	<a href="#"><u>One Hundred-and-Fifty-First Supplemental Indenture, dated as of November 16, 2015, by and between SolarCity and the Trustee, related to SolarCity's 2.65% Solar Bonds, Series 2015/C119-3.</u></a>	8-K(1)	001-35758	4.3	November 17, 2015	

Exhibit Number	Exhibit Description	Incorporated by Reference				Filed Herewith
		Form	File No.	Exhibit	Filing Date	
4.149	<a href="#"><u>One Hundred-and-Fifty-Second Supplemental Indenture, dated as of November 16, 2015, by and between SolarCity and the Trustee, related to SolarCity's 3.60% Solar Bonds, Series 2015/C120-5.</u></a>	8-K(1)	001-35758	4.4	November 17, 2015	
4.150	<a href="#"><u>One Hundred-and-Fifty-Third Supplemental Indenture, dated as of November 16, 2015, by and between SolarCity and the Trustee, related to SolarCity's 4.70% Solar Bonds, Series 2015/C121-10.</u></a>	8-K(1)	001-35758	4.5	November 17, 2015	
4.151	<a href="#"><u>One Hundred-and-Fifty-Fourth Supplemental Indenture, dated as of November 16, 2015, by and between SolarCity and the Trustee, related to SolarCity's 5.45% Solar Bonds, Series 2015/C122-15.</u></a>	8-K(1)	001-35758	4.6	November 17, 2015	
4.152	<a href="#"><u>One Hundred-and-Fifty-Sixth Supplemental Indenture, dated as of November 30, 2015, by and between SolarCity and the Trustee, related to SolarCity's 2.65% Solar Bonds, Series 2015/C124-3.</u></a>	8-K(1)	001-35758	4.3	November 30, 2015	
4.153	<a href="#"><u>One Hundred-and-Fifty-Seventh Supplemental Indenture, dated as of November 30, 2015, by and between SolarCity and the Trustee, related to SolarCity's 3.60% Solar Bonds, Series 2015/C125-5.</u></a>	8-K(1)	001-35758	4.4	November 30, 2015	
4.154	<a href="#"><u>One Hundred-and-Fifty-Eighth Supplemental Indenture, dated as of November 30, 2015, by and between SolarCity and the Trustee, related to SolarCity's 4.70% Solar Bonds, Series 2015/C126-10.</u></a>	8-K(1)	001-35758	4.5	November 30, 2015	
4.155	<a href="#"><u>One Hundred-and-Fifty-Ninth Supplemental Indenture, dated as of November 30, 2015, by and between SolarCity and the Trustee, related to SolarCity's 5.45% Solar Bonds, Series 2015/C127-15.</u></a>	8-K(1)	001-35758	4.6	November 30, 2015	
4.156	<a href="#"><u>One Hundred-and-Sixty-First Supplemental Indenture, dated as of December 14, 2015, by and between SolarCity and the Trustee, related to SolarCity's 2.65% Solar Bonds, Series 2015/C129-3.</u></a>	8-K(1)	001-35758	4.3	December 14, 2015	

Exhibit Number	Exhibit Description	Incorporated by Reference				Filed Herewith
		Form	File No.	Exhibit	Filing Date	
4.157	<a href="#"><u>One Hundred-and-Sixty-Second Supplemental Indenture, dated as of December 14, 2015, by and between SolarCity and the Trustee, related to SolarCity's 3.60% Solar Bonds, Series 2015/C130-5.</u></a>	8-K(1)	001-35758	4.4	December 14, 2015	
4.158	<a href="#"><u>One Hundred-and-Sixty-Third Supplemental Indenture, dated as of December 14, 2015, by and between SolarCity and the Trustee, related to SolarCity's 4.70% Solar Bonds, Series 2015/C131-10.</u></a>	8-K(1)	001-35758	4.5	December 14, 2015	
4.159	<a href="#"><u>One Hundred-and-Sixty-Fourth Supplemental Indenture, dated as of December 14, 2015, by and between SolarCity and the Trustee, related to SolarCity's 5.45% Solar Bonds, Series 2015/C132-15.</u></a>	8-K(1)	001-35758	4.6	December 14, 2015	
4.160	<a href="#"><u>One Hundred-and-Sixty-Sixth Supplemental Indenture, dated as of December 28, 2015, by and between SolarCity and the Trustee, related to SolarCity's 2.65% Solar Bonds, Series 2015/C134-3.</u></a>	8-K(1)	001-35758	4.3	December 28, 2015	
4.161	<a href="#"><u>One Hundred-and-Sixty-Seventh Supplemental Indenture, dated as of December 28, 2015, by and between SolarCity and the Trustee, related to SolarCity's 3.60% Solar Bonds, Series 2015/C135-5.</u></a>	8-K(1)	001-35758	4.4	December 28, 2015	
4.162	<a href="#"><u>One Hundred-and-Sixty-Eighth Supplemental Indenture, dated as of December 28, 2015, by and between SolarCity and the Trustee, related to SolarCity's 4.70% Solar Bonds, Series 2015/C136-10.</u></a>	8-K(1)	001-35758	4.5	December 28, 2015	
4.163	<a href="#"><u>One Hundred-and-Sixty-Ninth Supplemental Indenture, dated as of December 28, 2015, by and between SolarCity and the Trustee, related to SolarCity's 5.45% Solar Bonds, Series 2015/C137-15.</u></a>	8-K(1)	001-35758	4.6	December 28, 2015	
4.164	<a href="#"><u>One Hundred-and-Seventy-First Supplemental Indenture, dated as of January 29, 2016, by and between SolarCity and the Trustee, related to SolarCity's 3.00% Solar Bonds, Series 2016/2-3.</u></a>	8-K(1)	001-35758	4.3	January 29, 2016	

Exhibit Number	Exhibit Description	Incorporated by Reference				Filed Herewith
		Form	File No.	Exhibit	Filing Date	
4.165	<a href="#"><u>One Hundred-and-Seventy-Second Supplemental Indenture, dated as of January 29, 2016, by and between SolarCity and the Trustee, related to SolarCity's 4.00% Solar Bonds, Series 2016/3-5.</u></a>	8-K(1)	001-35758	4.4	January 29, 2016	
4.166	<a href="#"><u>One Hundred-and-Seventy-Third Supplemental Indenture, dated as of January 29, 2016, by and between SolarCity and the Trustee, related to SolarCity's 5.00% Solar Bonds, Series 2016/4-10.</u></a>	8-K(1)	001-35758	4.5	January 29, 2016	
4.167	<a href="#"><u>One Hundred-and-Seventy-Fourth Supplemental Indenture, dated as of January 29, 2016, by and between SolarCity and the Trustee, related to SolarCity's 5.75% Solar Bonds, Series 2016/5-15.</u></a>	8-K(1)	001-35758	4.6	January 29, 2016	
4.168	<a href="#"><u>One Hundred-and-Seventy-Sixth Supplemental Indenture, dated as of February 26, 2016, by and between SolarCity and the Trustee, related to SolarCity's 4.50% Solar Bonds, Series 2016/7-3.</u></a>	8-K(1)	001-35758	4.3	February 26, 2016	
4.169	<a href="#"><u>One Hundred-and-Seventy-Seventh Supplemental Indenture, dated as of February 26, 2016, by and between SolarCity and the Trustee, related to SolarCity's 5.25% Solar Bonds, Series 2016/8-5.</u></a>	8-K(1)	001-35758	4.4	February 26, 2016	
4.170	<a href="#"><u>One Hundred-and-Seventy-Eighth Supplemental Indenture, dated as of March 21, 2016, by and between SolarCity and the Trustee, related to SolarCity's 4.40% Solar Bonds, Series 2016/9-1.</u></a>	8-K(1)	001-35758	4.2	March 21, 2016	
4.171	<a href="#"><u>One Hundred-and-Seventy-Ninth Supplemental Indenture, dated as of March 21, 2016, by and between SolarCity and the Trustee, related to SolarCity's 5.25% Solar Bonds, Series 2016/10-5.</u></a>	8-K(1)	001-35758	4.3	March 21, 2016	
4.172	<a href="#"><u>One Hundred-and-Eightieth Supplemental Indenture, dated as of June 10, 2016, by and between SolarCity and the Trustee, related to SolarCity's 4.40% Solar Bonds, Series 2016/11-1.</u></a>	8-K(1)	001-35758	4.2	June 10, 2016	

Exhibit Number	Exhibit Description	Incorporated by Reference				Filed Herewith
		Form	File No.	Exhibit	Filing Date	
4.173	<a href="#">One Hundred-and-Eighty-First Supplemental Indenture, dated as of June 10, 2016, by and between SolarCity and the Trustee, related to SolarCity's 5.25% Solar Bonds, Series 2016/12-5.</a>	8-K(1)	001-35758	4.3	June 10, 2016	
4.174	<a href="#">One Hundred-and-Eighty-Second Supplemental Indenture, dated as of August 17, 2016, by and between SolarCity and the Trustee, related to SolarCity's 6.50% Solar Bonds, Series 2016/13-18M.</a>	8-K(1)	001-35758	4.2	August 17, 2016	
10.1**	<a href="#">Form of Indemnification Agreement between the Registrant and its directors and officers.</a>	S-1/A	333-164593	10.1	June 15, 2010	
10.2**	<a href="#">2003 Equity Incentive Plan.</a>	S-1/A	333-164593	10.2	May 27, 2010	
10.3**	<a href="#">Form of Stock Option Agreement under 2003 Equity Incentive Plan.</a>	S-1	333-164593	10.3	January 29, 2010	
10.4**	<a href="#">Amended and Restated 2010 Equity Incentive Plan.</a>	10-K	001-34756	10.4	February 23, 2018	
10.5**	<a href="#">Form of Stock Option Agreement under 2010 Equity Incentive Plan.</a>	10-K	001-34756	10.6	March 1, 2017	
10.6**	<a href="#">Form of Restricted Stock Unit Award Agreement under 2010 Equity Incentive Plan.</a>	10-K	001-34756	10.7	March 1, 2017	
10.7**	<a href="#">Amended and Restated 2010 Employee Stock Purchase Plan, effective as of February 1, 2017.</a>	10-K	001-34756	10.8	March 1, 2017	
10.8**	<a href="#">2007 SolarCity Stock Plan and form of agreements used thereunder.</a>	S-1(1)	333-184317	10.2	October 5, 2012	
10.9**	<a href="#">2012 SolarCity Equity Incentive Plan and form of agreements used thereunder.</a>	S-1(1)	333-184317	10.3	October 5, 2012	
10.10**	<a href="#">2010 Zep Solar, Inc. Equity Incentive Plan and form of agreements used thereunder.</a>	S-8(1)	333-192996	4.5	December 20, 2013	
10.11**	<a href="#">Offer Letter between the Registrant and Elon Musk dated October 13, 2008.</a>	S-1	333-164593	10.9	January 29, 2010	
10.12**	<a href="#">Performance Stock Option Agreement between the Registrant and Elon Musk dated January 21, 2018.</a>	DEF 14A	001-34756	Appendix A	February 8, 2018	

Exhibit Number	Exhibit Description	Incorporated by Reference				Filed Herewith
		Form	File No.	Exhibit	Filing Date	
10.13**	<a href="#">Offer Letter between the Registrant and Jeffrey B. Straubel dated May 6, 2004.</a>	S-1	333-164593	10.12	January 29, 2010	
10.14**	<a href="#">Offer Letter between the Registrant and Deepak Ahuja dated February 21, 2017.</a>	10-Q	001-34756	10.7	May 10, 2017	
10.15	<a href="#">Indemnification Agreement, dated as of February 27, 2014, by and between the Registrant and J.P. Morgan Securities LLC.</a>	8-K	001-34756	10.1	March 5, 2014	
10.16	<a href="#">Form of Call Option Confirmation relating to 0.25% Convertible Senior Notes Due March 1, 2019.</a>	8-K	001-34756	10.2	March 5, 2014	
10.17	<a href="#">Form of Call Option Confirmation relating to 1.25% Convertible Senior Notes Due March 1, 2021.</a>	8-K	001-34756	10.3	March 5, 2014	
10.18	<a href="#">Form of Warrant Confirmation relating to 0.25% Convertible Senior Notes Due March 1, 2019.</a>	8-K	001-34756	10.4	March 5, 2014	
10.19	<a href="#">Form of Warrant Confirmation relating to 1.25% Convertible Senior Notes Due March 1, 2021.</a>	8-K	001-34756	10.5	March 5, 2014	
10.20	<a href="#">Form of Call Option Confirmation relating to 2.375% Convertible Notes due March 15, 2022.</a>	8-K	001-34756	10.1	March 22, 2017	
10.21	<a href="#">Form of Warrant Confirmation relating to 2.375% Convertible Notes due March 15, 2022.</a>	8-K	001-34756	10.2	March 22, 2017	
10.22†	<a href="#">Supply Agreement between Panasonic Corporation and the Registrant dated October 5, 2011.</a>	10-K	-001-34756	10.50	February 27, 2012	
10.23†	<a href="#">Amendment No. 1 to Supply Agreement between Panasonic Corporation and the Registrant dated October 29, 2013.</a>	10-K	001-34756	10.35A	February 26, 2014	
10.24	<a href="#">Agreement between Panasonic Corporation and the Registrant dated July 31, 2014.</a>	10-Q	001-34756	10.1	November 7, 2014	
10.25†	<a href="#">General Terms and Conditions between Panasonic Corporation and the Registrant dated October 1, 2014.</a>	8-K	001-34756	10.2	October 11, 2016	



Exhibit Number	Exhibit Description	Incorporated by Reference				Filed Herewith
		Form	File No.	Exhibit	Filing Date	
10.26	<a href="#"><u>Letter Agreement, dated as of February 24, 2015, regarding addition of co-party to General Terms and Conditions, Production Pricing Agreement and Investment Letter Agreement between Panasonic Corporation and the Registrant.</u></a>	10-K	001-34756	10.25A	February 24, 2016	
10.27†	<a href="#"><u>Amendment to Gigafactory General Terms, dated March 1, 2016, by and among the Registrant, Panasonic Corporation and Panasonic Energy Corporation of North America.</u></a>	8-K	001-34756	10.1	October 11, 2016	
10.28†	<a href="#"><u>Production Pricing Agreement between Panasonic Corporation and the Registrant dated October 1, 2014.</u></a>	10-Q	001-34756	10.3	November 7, 2014	
10.29†	<a href="#"><u>Investment Letter Agreement between Panasonic Corporation and the Registrant dated October 1, 2014.</u></a>	10-Q	001-34756	10.4	November 7, 2014	
10.30	<a href="#"><u>Amendment to Gigafactory Documents, dated April 5, 2016, by and among the Registrant, Panasonic Corporation, Panasonic Corporation of North America and Panasonic Energy Corporation of North America.</u></a>	10-Q	001-34756	10.2	May 10, 2016	
10.31	<a href="#"><u>ABL Credit Agreement, dated as of June 10, 2015, by and among the Registrant, Tesla Motors Netherlands B.V., certain of the Registrant's and Tesla Motors Netherlands B.V.'s direct or indirect subsidiaries from time to time party thereto, as borrowers, Wells Fargo Bank, National Association, as documentation agent, JPMorgan Chase Bank, N.A., Goldman Sachs Bank USA, Morgan Stanley Senior Funding Inc. and Bank of America, N.A., as syndication agents, the lenders from time to time party thereto, and Deutsche Bank AG New York Branch, as administrative agent and collateral agent.</u></a>	8-K	001-34756	10.1	June 12, 2015	

Exhibit Number	Exhibit Description	Incorporated by Reference				Filed Herewith
		Form	File No.	Exhibit	Filing Date	
10.32	<a href="#"><u>First Amendment, dated as of November 3, 2015, to ABL Credit Agreement, dated as of June 10, 2015, by and among the Registrant, Tesla Motors Netherlands B.V., certain of the Registrant's and Tesla Motors Netherlands B.V.'s direct or indirect subsidiaries from time to time party thereto, as borrowers, and the documentation agent, syndication agents, administrative agent, collateral agent and lenders from time to time party thereto.</u></a>	10-Q	001-34756	10.1	November 5, 2015	
10.33	<a href="#"><u>Second Amendment, dated as of December 31, 2015, to ABL Credit Agreement, dated as of June 10, 2015, by and among the Registrant, Tesla Motors Netherlands B.V., certain of the Registrant's and Tesla Motors Netherlands B.V.'s direct or indirect subsidiaries from time to time party thereto, as borrowers, and the documentation agent, syndication agents, administrative agent, collateral agent and lenders from time to time party thereto.</u></a>	10-K	001-34756	10.28B	February 24, 2016	
10.34	<a href="#"><u>Third Amendment, dated as of February 9, 2016, to ABL Credit Agreement, dated as of June 10, 2015, by and among the Registrant, Tesla Motors Netherlands B.V., certain of the Registrant's and Tesla Motors Netherlands B.V.'s direct or indirect subsidiaries from time to time party thereto, as borrowers, and the documentation agent, syndication agents, administrative agent, collateral agent and lenders from time to time party thereto.</u></a>	10-K	001-34756	10.28C	February 24, 2016	
10.35	<a href="#"><u>Fourth Amendment to Credit Agreement, dated as of July 31, 2016, by and among the Registrant, Tesla Motors Netherlands B.V., the lenders party thereto and Deutsche Bank AG New York Branch, as administrative agent and collateral agent.</u></a>	8-K	001-34756	10.1	August 1, 2016	

Exhibit Number	Exhibit Description	Incorporated by Reference				Filed Herewith
		Form	File No.	Exhibit	Filing Date	
10.36	<a href="#"><u>Fifth Amendment to Credit Agreement, dated as of December 15, 2016, among the Registrant, Tesla Motors Netherlands B.V., the lenders party thereto and Deutsche Bank AG, New York Branch, as administrative agent and collateral agent.</u></a>	8-K	001-34756	10.1	December 20, 2016	
10.37	<a href="#"><u>Sixth Amendment to Credit Agreement, dated as of June 19, 2017, among the Registrant, Tesla Motors Netherlands B.V., the lenders party thereto and Deutsche Bank AG, New York Branch, as administrative agent and collateral agent.</u></a>	10-Q	001-34756	10.1	August 4, 2017	
10.38	<a href="#"><u>Seventh Amendment to the ABL Credit Agreement, dated as of August 11, 2017, by and among the Registrant, Tesla Motors Netherlands B.V., Deutsche Bank AG New York Branch, as administrative agent and collateral agent, and the other agents party thereto.</u></a>	8-K	001-34756	10.2	August 23, 2017	
10.39	<a href="#"><u>Eighth Amendment to the ABL Credit Agreement, dated as of March 12, 2018, by and among the Registrant, Tesla Motors Netherlands B.V., Deutsche Bank AG New York Branch, as administrative agent and collateral agent, and the other agents party thereto.</u></a>	10-Q	001-34756	10.2	May 7, 2018	
10.40	<a href="#"><u>Ninth Amendment to the ABL Credit Agreement, dated as of May 3, 2018, by and among the Registrant, Tesla Motors Netherlands B.V., Deutsche Bank AG New York Branch, as administrative agent and collateral agent, and the other agents party thereto.</u></a>	10-Q	001-34756	10.3	May 7, 2018	
10.41	<a href="#"><u>Tenth Amendment to the ABL Credit Agreement, dated as of December 10, 2018, by and among the Registrant, Tesla Motors Netherlands B.V., Deutsche Bank AG New York Branch, as administrative agent and collateral agent, and the other agents party thereto.</u></a>	—	—	—	—	X

Exhibit Number	Exhibit Description	Incorporated by Reference				Filed Herewith
		Form	File No.	Exhibit	Filing Date	
10.42†	<a href="#"><u>Agreement for Tax Abatement and Incentives, dated as of May 7, 2015, by and between Tesla Motors, Inc. and the State of Nevada, acting by and through the Nevada Governor's Office of Economic Development.</u></a>	10-Q	001-34756	10.1	August 7, 2015	
10.43†	<a href="#"><u>Amended and Restated Loan and Security Agreement, dated as of August 17, 2017, by and among Tesla 2014 Warehouse SPV LLC, Tesla Finance LLC, the Lenders and Group Agents from time to time party thereto, and Deutsche Bank AG, New York Branch, as Administrative Agent.</u></a>	10-Q	001-34756	10.3	November 3, 2017	
10.44†	<a href="#"><u>Amendment No. 1 to Amended and Restated Loan and Security Agreement, dated as of October 18, 2017, by and among Tesla 2014 Warehouse SPV LLC, Tesla Finance LLC, the Lenders and Group Agents from time to time party thereto, Deutsche Bank AG, New York Branch, as Administrative Agent, and Deutsche Bank Trust Company Americas, as Paying Agent.</u></a>	10-K	001-34756	10.44	February 23, 2018	
10.45	<a href="#"><u>Amendment No. 2 to Amended and Restated Loan and Security Agreement, dated as of March 23, 2018, by and among Tesla 2014 Warehouse SPV LLC, Tesla Finance LLC, the Lenders and Group Agents from time to time party thereto, Deutsche Bank AG, New York Branch, as Administrative Agent, and Deutsche Bank Trust Company Americas, as Paying Agent.</u></a>	10-Q	001-34756	10.4	May 7, 2018	
10.46	<a href="#"><u>Amendment No. 3 to Amended and Restated Loan and Security Agreement, dated as of May 4, 2018, by and among Tesla 2014 Warehouse SPV LLC, Tesla Finance LLC, the Lenders and Group Agents from time to time party thereto, Deutsche Bank AG, New York Branch as Administrative Agent, and Deutsche Bank Trust Company Americas, as Paying Agent.</u></a>	10-Q	001-34756	10.1	November 2, 2018	

Exhibit Number	Exhibit Description	Incorporated by Reference				Filed Herewith
		Form	File No.	Exhibit	Filing Date	
10.47†	<a href="#"><u>Amendment No. 4 to Amended and Restated Loan and Security Agreement, dated as of August 16, 2018, by and among Tesla 2014 Warehouse SPV LLC, Tesla Finance LLC, the Lenders and Group Agents from time to time party thereto, Deutsche Bank AG, New York Branch as Administrative Agent and Deutsche Bank Trust Company Americas, as Paying Agent.</u></a>	10-Q	001-34756	10.3	November 2, 2018	
10.48†	<a href="#"><u>Amendment No. 5 to Amended and Restated Loan and Security Agreement, executed on December 28, 2018, by and among Tesla 2014 Warehouse SPV LLC, Tesla Finance LLC, the Lenders and Group Agents from time to time party thereto, Deutsche Bank AG, New York Branch as Administrative Agent and Deutsche Bank Trust Company Americas, as Paying Agent.</u></a>	—	—	—	—	X
10.49†	<a href="#"><u>Loan and Security Agreement, dated as of August 17, 2017, by and among LML Warehouse SPV, LLC, Tesla Finance LLC, the Lenders and Group Agents from time to time party thereto, and Deutsche Bank AG, New York Branch, as Administrative Agent.</u></a>	10-Q	001-34756	10.4	November 3, 2017	
10.50†	<a href="#"><u>Amendment No. 1 to Loan and Security Agreement, dated as of October 18, 2017, by and among LML Warehouse SPV, LLC, Tesla Finance LLC, the Lenders and Group Agents from time to time party thereto, Deutsche Bank AG, New York Branch, as Administrative Agent, and Deutsche Bank Trust Company Americas, as Paying Agent.</u></a>	10-K	001-34756	10.46	February 23, 2018	
10.51	<a href="#"><u>Amendment No. 2 to Loan and Security Agreement, dated as of March 23, 2018, by and among LML Warehouse SPV, LLC, Tesla Finance LLC, the Lenders and Group Agents from time to time party thereto, Deutsche Bank AG, New York Branch, as Administrative Agent, and Deutsche Bank Trust Company Americas, as Paying Agent.</u></a>	10-Q	001-34756	10.5	May 7, 2018	

Exhibit Number	Exhibit Description	Incorporated by Reference				Filed Herewith
		Form	File No.	Exhibit	Filing Date	
10.52	<a href="#"><u>Amendment No. 3 to Loan and Security Agreement, dated as of May 4, 2018, by and among LML Warehouse SPV, LLC, the Lenders and Group Agents from time to time party thereto, and Deutsche Bank AG, New York Branch, as Administrative Agent.</u></a>	10-Q	001-34756	10.2	November 2, 2018	
10.53†	<a href="#"><u>Amendment No. 4 to Loan and Security Agreement, dated as of August 16, 2018, by and among LML Warehouse SPV, LLC, the Lenders and Group Agents from time to time party thereto, and Deutsche Bank AG, New York Branch, as Administrative Agent.</u></a>	10-Q	001-34756	10.4	November 2, 2018	
10.54†	<a href="#"><u>Payoff and Termination Letter, executed on December 28, 2018, by and among LML Warehouse SPV, LLC, the Lenders and Group Agents from time to time party thereto, and Deutsche Bank AG, New York Branch, as Administrative Agent, relating to Loan and Security Agreement.</u></a>	—	—	—	—	X
10.55†	<a href="#"><u>Loan and Security Agreement, executed on December 28, 2018, by and among LML 2018 Warehouse SPV, LLC, Tesla Finance LLC, the Lenders and Group Agents from time to time party thereto, Deutsche Bank Trust Company Americas, as Paying Agent, and Deutsche Bank AG, New York Branch, as Administrative Agent.</u></a>	—	—	—	—	X
10.56	<a href="#"><u>Purchase Agreement, dated as of August 11, 2017, by and among the Registrant, SolarCity and Goldman Sachs &amp; Co. LLC and Morgan Stanley &amp; Co. LLC as representatives of the several initial purchasers named therein.</u></a>	8-K	001-34756	10.1	August 23, 2017	

Exhibit Number	Exhibit Description	Incorporated by Reference				Filed Herewith
		Form	File No.	Exhibit	Filing Date	
10.57	<a href="#"><u>Amended and Restated Agreement For Research &amp; Development Alliance on Triex Module Technology, effective as of September 2, 2014, by and between The Research Foundation For The State University of New York, on behalf of the College of Nanoscale Science and Engineering of the State University of New York, and Silevo, Inc.</u></a>	10-Q(1)	001-35758	10.16	November 6, 2014	
10.58	<a href="#"><u>First Amendment to Amended and Restated Agreement For Research &amp; Development Alliance on Triex Module Technology, effective as of October 31, 2014, by and between The Research Foundation For The State University of New York, on behalf of the College of Nanoscale Science and Engineering of the State University of New York, and Silevo, Inc.</u></a>	10-K(1)	001-35758	10.16a	February 24, 2015	
10.59	<a href="#"><u>Second Amendment to Amended and Restated Agreement For Research &amp; Development Alliance on Triex Module Technology, effective as of December 15, 2014, by and between The Research Foundation For The State University of New York, on behalf of the College of Nanoscale Science and Engineering of the State University of New York, and Silevo, Inc.</u></a>	10-K(1)	001-35758	10.16b	February 24, 2015	
10.60	<a href="#"><u>Third Amendment to Amended and Restated Agreement For Research &amp; Development Alliance on Triex Module Technology, effective as of February 12, 2015, by and between The Research Foundation For The State University of New York, on behalf of the College of Nanoscale Science and Engineering of the State University of New York, and Silevo, Inc.</u></a>	10-Q(1)	001-35758	10.16c	May 6, 2015	

Exhibit Number	Exhibit Description	Incorporated by Reference				Filed Herewith
		Form	File No.	Exhibit	Filing Date	
10.61	<a href="#"><u>Fourth Amendment to Amended and Restated Agreement For Research &amp; Development Alliance on Triex Module Technology, effective as of March 30, 2015, by and between The Research Foundation For The State University of New York, on behalf of the College of Nanoscale Science and Engineering of the State University of New York, and Silevo, Inc.</u></a>	10-Q(1)	001-35758	10.16d	May 6, 2015	
10.62	<a href="#"><u>Fifth Amendment to Amended and Restated Agreement For Research &amp; Development Alliance on Triex Module Technology, effective as of June 30, 2015, by and between The Research Foundation For The State University of New York, on behalf of the College of Nanoscale Science and Engineering of the State University of New York, and Silevo, LLC.</u></a>	10-Q(1)	001-35758	10.16e	July 30, 2015	
10.63	<a href="#"><u>Sixth Amendment to Amended and Restated Agreement For Research &amp; Development Alliance on Triex Module Technology, effective as of September 1, 2015, by and between The Research Foundation For The State University of New York, on behalf of the College of Nanoscale Science and Engineering of the State University of New York, and Silevo, LLC.</u></a>	10-Q(1)	001-35758	10.16f	October 30, 2015	
10.64	<a href="#"><u>Seventh Amendment to Amended and Restated Agreement For Research &amp; Development Alliance on Triex Module Technology, effective as of October 9, 2015, by and between The Research Foundation For The State University of New York, on behalf of the College of Nanoscale Science and Engineering of the State University of New York, and Silevo, LLC.</u></a>	10-Q(1)	001-35758	10.16g	October 30, 2015	



Exhibit Number	Exhibit Description	Incorporated by Reference				Filed Herewith
		Form	File No.	Exhibit	Filing Date	
10.65	<a href="#"><u>Eighth Amendment to Amended and Restated Agreement For Research &amp; Development Alliance on Triex Module Technology, effective as of October 26, 2015, by and between The Research Foundation For The State University of New York, on behalf of the College of Nanoscale Science and Engineering of the State University of New York, and Silevo, LLC.</u></a>	10-Q(1)	001-35758	10.16h	October 30, 2015	
10.66	<a href="#"><u>Ninth Amendment to Amended and Restated Agreement For Research &amp; Development Alliance on Triex Module Technology, effective as of December 9, 2015, by and between The Research Foundation For The State University of New York, on behalf of the College of Nanoscale Science and Engineering of the State University of New York, and Silevo, LLC.</u></a>	10-K(1)	001-35758	10.16i	February 10, 2016	
10.67	<a href="#"><u>Tenth Amendment to Amended and Restated Agreement For Research &amp; Development Alliance on Triex Module Technology, effective as of March 31, 2017, by and between The Research Foundation For The State University of New York, on behalf of the Colleges of Nanoscale Science and Engineering of the State University of New York, and Silevo, LLC.</u></a>	10-Q	001-34756	10.8	May 10, 2017	
21.1	<a href="#"><u>List of Subsidiaries of the Registrant</u></a>	—	—	—	—	X
23.1	<a href="#"><u>Consent of PricewaterhouseCoopers LLP, Independent Registered Public Accounting Firm</u></a>	—	—	—	—	X
31.1	<a href="#"><u>Rule 13a-14(a) / 15(d)-14(a) Certification of Principal Executive Officer</u></a>	—	—	—	—	X
31.2	<a href="#"><u>Rule 13a-14(a) / 15(d)-14(a) Certification of Principal Financial Officer</u></a>	—	—	—	—	X
32.1*	<a href="#"><u>Section 1350 Certifications</u></a>	—	—	—	—	
101.INS	XBRL Instance Document					

Exhibit Number	Exhibit Description	Incorporated by Reference				Filed Herewith
		Form	File No.	Exhibit	Filing Date	
101.SCH	XBRL Taxonomy Extension Schema Document					
101.CAL	XBRL Taxonomy Extension Calculation Linkbase Document.					
101.DEF	XBRL Taxonomy Extension Definition Linkbase Document					
101.LAB	XBRL Taxonomy Extension Label Linkbase Document					
101.PRE	XBRL Taxonomy Extension Presentation Linkbase Document					

\*     Furnished herewith

\*\*    Indicates a management contract or compensatory plan or arrangement

†     Confidential treatment has been requested for portions of this exhibit

(1)   Indicates a filing of SolarCity

#### **ITEM 16. SUMMARY**

None

## SIGNATURES

Pursuant to the requirements of Section 13 or 15(d) the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned, thereunto duly authorized.

Tesla, Inc.

Date: February 19, 2019

/s/ Elon Musk

Elon Musk  
Chief Executive Officer  
(Principal Executive Officer)

Pursuant to the requirements of the Securities Exchange Act of 1934, this report has been signed below by the following persons on behalf of the registrant and in the capacities and on the dates indicated.

<u>Signature</u>	<u>Title</u>	<u>Date</u>
/s/ Elon Musk Elon Musk	Chief Executive Officer and Director (Principal Executive Officer)	February 19, 2019
/s/ Deepak Ahuja Deepak Ahuja	Chief Financial Officer (Principal Financial Officer and Principal Accounting Officer)	February 19, 2019
/s/ Brad W. Buss Brad W. Buss	Director	February 19, 2019
/s/ Robyn Denholm Robyn Denholm	Director	February 19, 2019
/s/ Ira Ehrenpreis Ira Ehrenpreis	Director	February 19, 2019
/s/ Lawrence J. Ellison Lawrence J. Ellison	Director	February 19, 2019
/s/ Antonio J. Gracias Antonio J. Gracias	Director	February 19, 2019
/s/ James Murdoch James Murdoch	Director	February 19, 2019
/s/ Kimbal Musk Kimbal Musk	Director	February 19, 2019
/s/ Linda Johnson Rice Linda Johnson Rice	Director	February 19, 2019
/s/ Kathleen Wilson-Thompson Kathleen Wilson-Thompson	Director	February 19, 2019
Stephen T. Jurvetson	Director	

# FORM 10-K

(Mark One)

☒ **ANNUAL REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934**

For the fiscal year ended December 31, 2017

OR

☐ **TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934**

For the transition period from \_\_\_\_\_ to \_\_\_\_\_  
Commission File Number: 001-34756

## Tesla, Inc.

(Exact name of registrant as specified in its charter)

Delaware  
(State or other jurisdiction of  
incorporation or organization)

91-2197729  
(I.R.S. Employer  
Identification No.)

3500 Deer Creek Road  
Palo Alto, California  
(Address of principal executive offices)

94304  
(Zip Code)

(650) 681-5000

(Registrant's telephone number, including area code)

Securities registered pursuant to Section 12(b) of the Act:

Title of each class	Name of each exchange on which registered
Common Stock, \$0.001 par value	The NASDAQ Stock Market LLC

Securities registered pursuant to Section 12(g) of the Act:

None

Indicate by check mark whether the registrant is a well-known seasoned issuer, as defined in Rule 405 of the Securities Act. Yes ☒ No ☐

Indicate by check mark if the registrant is not required to file reports pursuant to Section 13 or 15(d) of the Act. Yes ☐ No ☒

Indicate by check mark whether the registrant (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 ("Exchange Act") during the preceding 12 months (or for such shorter period that the registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days. Yes ☒ No ☐

Indicate by check mark whether the registrant has submitted electronically and posted on its corporate Web site, if any, every Interactive Data File required to be submitted and posted pursuant to Rule 405 of Regulation S-T during the preceding 12 months (or for such shorter period that the registrant was required to submit and post such files). Yes ☒ No ☐

Indicate by check mark if disclosure of delinquent filers pursuant to Item 405 of Regulation S-K (§229.405 of this chapter) is not contained herein, and will not be contained, to the best of registrant's knowledge, in definitive proxy or information statements incorporated by reference in Part III of this Form 10-K or any amendment to this Form 10-K. ☐

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, a smaller reporting company or an emerging growth company. See the definitions of "large accelerated filer," "accelerated filer," "smaller reporting company" and "emerging growth company" in Rule 12b-2 of the Exchange Act:

Large accelerated filer ☒ Accelerated filer ☐  
Non-accelerated filer ☐ (Do not check if a smaller reporting company) Smaller reporting company ☐  
Emerging growth company ☐

If an emerging growth company, indicate by check mark if the registrant has elected not to use the extended transition period for complying with any new or revised financial accounting standards provided pursuant to Section 13(a) of the Exchange Act. ☐

Indicate by check mark whether the registrant is a shell company (as defined in Rule 12b-2 of the Exchange Act). Yes ☐ No ☒

The aggregate market value of voting stock held by non-affiliates of the registrant, as of June 30, 2017, the last day of the registrant's most recently completed second fiscal quarter, was \$47.83 billion (based on the closing price for shares of the registrant's Common Stock as reported by the NASDAQ Global Select Market on June 30, 2017). Shares of Common Stock held by each executive officer, director, and holder of 5% or more of the outstanding Common Stock have been excluded in that such persons may be deemed to be affiliates. This determination of affiliate status is not necessarily a conclusive determination for other purposes.

As of February 14, 2018, there were 168,919,941 shares of the registrant's Common Stock outstanding.

### DOCUMENTS INCORPORATED BY REFERENCE

Portions of the registrant's Proxy Statement for the 2018 Annual Meeting of Stockholders are incorporated herein by reference in Part III of this Annual Report on Form 10-K to the extent stated herein. Such proxy statement will be filed with the Securities and Exchange Commission within 120 days of the registrant's fiscal year ended December 31, 2017.

TESLA, INC.

ANNUAL REPORT ON FORM 10-K FOR THE YEAR ENDED DECEMBER 31, 2017

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## Forward-Looking Statements

*The discussions in this Annual Report on Form 10-K contain forward-looking statements reflecting our current expectations that involve risks and uncertainties. These forward-looking statements include, but are not limited to, statements concerning our strategy, future operations, future financial position, future revenues, projected costs, profitability, expected cost reductions, capital adequacy, expectations regarding demand and acceptance for our technologies, growth opportunities and trends in the market in which we operate, prospects and plans and objectives of management. The words “anticipates”, “believes”, “could,” “estimates”, “expects”, “intends”, “may”, “plans”, “projects”, “will”, “would” and similar expressions are intended to identify forward-looking statements, although not all forward-looking statements contain these identifying words. We may not actually achieve the plans, intentions or expectations disclosed in our forward-looking statements and you should not place undue reliance on our forward-looking statements. Actual results or events could differ materially from the plans, intentions and expectations disclosed in the forward-looking statements that we make. These forward-looking statements involve risks and uncertainties that could cause our actual results to differ materially from those in the forward-looking statements, including, without limitation, the risks set forth in Part I, Item 1A, “Risk Factors” in this Annual Report on Form 10-K and in our other filings with the Securities and Exchange Commission. We do not assume any obligation to update any forward-looking statements.*

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## PART I

### ITEM 1. BUSINESS

#### Overview

We design, develop, manufacture and sell high-performance fully electric vehicles, and energy generation and storage systems, and also install and maintain such systems and sell solar electricity. We are the world's only vertically integrated sustainable energy company, offering end-to-end clean energy products, including generation, storage and consumption. We have established and continue to grow a global network of stores, vehicle service centers and Supercharger stations to accelerate the widespread adoption of our products, and we continue to develop self-driving capability in order to improve vehicle safety. Our sustainable energy products, engineering expertise, intense focus to accelerate the world's transition to sustainable energy, and business model differentiate us from other companies.

We currently produce and sell three fully electric vehicles, the Model S sedan, the Model X sport utility vehicle ("SUV") and the Model 3 sedan. All of our vehicles offer high performance and functionality as well as attractive styling.

We commenced deliveries of Model S in June 2012 and have continued to improve Model S by introducing performance, all-wheel drive dual motor, and autopilot options, as well as free over-the-air software updates. We commenced deliveries of Model X in September 2015. Model X offers seating for up to seven people, all-wheel drive, and our autopilot functionality. We commenced deliveries of Model 3, a lower priced sedan designed for the mass market, in July 2017 and continue to ramp its production.

We also intend to bring additional vehicles to market in the future, including trucks and an all-new sports car. The production of fully electric vehicles that meets consumers' range and performance expectations requires substantial design, engineering, and integration work on almost every system of our vehicles. Our design and vehicle engineering capabilities, combined with the technical advancements of our powertrain system, have enabled us to design and develop electric vehicles that we believe overcome the design, styling, and performance issues that have historically limited broad adoption of electric vehicles. As a result, our customers enjoy several benefits, including:

- *Long Range and Recharging Flexibility.* Our vehicles offer ranges that significantly exceed those of any other commercially available electric vehicle. In addition, our vehicles incorporate our proprietary on-board charging system, permitting recharging from almost any available electrical outlet, and also offer fast charging capability from our Supercharger network.
- *High-Performance Without Compromised Design or Functionality.* Our vehicles deliver instantaneous and sustained acceleration, an advanced autopilot system with active safety and convenience features, and over-the-air software updates.
- *Energy Efficiency and Cost of Ownership.* Our vehicles offer an attractive cost of ownership compared to internal combustion engine or hybrid electric vehicles. Using only an electric powertrain enables us to create more energy efficient vehicles that are mechanically simpler than currently available hybrid or internal combustion engine vehicles. The cost to fuel our vehicles is less compared to internal combustion vehicles. We also expect our electric vehicles will have lower relative maintenance costs than other vehicles due to fewer moving parts and the absence of certain components, including oil, oil filters, spark plugs and engine valves.

We sell our vehicles through our own sales and service network which we are continuing to grow globally. The benefits we receive from distribution ownership enable us to improve the overall customer experience, the speed of product development and the capital efficiency of our business. We are also continuing to build our network of Superchargers and Destination Chargers in North America, Europe and Asia to provide both fast charging that enables convenient long-distance travel as well as other convenient charging options.

In addition, we are leveraging our technological expertise in batteries, power electronics, and integrated systems to manufacture and sell energy storage products. In late 2016, we began production and deliveries of our latest generation energy storage products, Powerwall 2 and Powerpack 2. Powerwall 2 is a 14 kilowatt hour (kWh) home battery with an integrated inverter. Powerpack 2 is an infinitely scalable energy storage system for commercial, industrial and utility applications, comprised of 210 kWh (AC) battery packs and 50 kVa (at 480V) inverters.

Similar to our electric vehicles, our energy storage products have been developed to receive over-the-air firmware and software updates that enable additional features over time.

Finally, we sell and lease solar systems (with or without accompanying energy storage systems) to residential and commercial customers and sell renewable energy to residential and commercial customers at prices that are typically below utility rates. Since 2006, we have installed solar energy systems for hundreds of thousands of customers. Our long-term lease and power purchase agreements with our customers generate recurring payments and create a portfolio of high-quality receivables that we leverage to further reduce the cost of making the switch to solar energy. The electricity produced by our solar installations represents a very small fraction of total U.S. electricity generation. With tens of millions of single-family homes and businesses in our primary service territories, and many more in other locations, we have a large opportunity to expand and grow this business.

We manufacture our vehicle products primarily at our facilities in Fremont, California, Lathrop, California, Tilburg, Netherlands and at our Gigafactory 1 near Reno, Nevada. We manufacture our energy storage products at Gigafactory 1 and our solar products at our factories in Fremont, California and Buffalo, New York (Gigafactory 2).

## **Our Products and Services**

### **Vehicles**

#### ***Model S***

Model S is a fully electric, four-door, five-adult passenger sedan that offers compelling range and performance. We offer performance and all-wheel drive dual motor system options. Model S 100D is the longest range all-electric production sedan in the world, and the performance version with the Ludicrous speed upgrade is the quickest accelerating production vehicle ever.

Model S includes a 17 inch touch screen driver interface, our advanced autopilot hardware to enable both active safety and convenience features, and over-the-air software updates. We believe the combination of performance, safety, styling, convenience and energy efficiency of Model S positions it as a compelling alternative to other vehicles in the luxury and performance segments.

#### ***Model X***

Model X is the longest range all-electric production sport utility vehicle in the world, and offers high performance features such as our fully electric, all-wheel drive dual motor system and our autopilot system. Model X can seat up to seven adults and incorporates a unique falcon wing door system for easy access to the second and third seating rows. Model X is sold in all the markets where Model S is available, including in Asia and Europe.

#### ***Model 3***

Model 3 is our third generation electric vehicle. We began deliveries in July 2017. Model 3 is produced at the Tesla Factory in Fremont, California and at Gigafactory 1. We will offer a variant of this vehicle at a starting price of \$35,000 and expect to produce Model 3 vehicles at far higher volumes than our Model S or Model X vehicles.

#### ***Future Consumer and Commercial EVs***

We are planning to introduce additional vehicles to address a broader cross-section of the vehicle market, including commercial EVs such as the Tesla Semi truck, and a new version of the Tesla Roadster. We have started to accept reservations for both of these new vehicles.

### **Energy Storage**

Using the energy management technologies and manufacturing processes developed for our vehicle powertrain systems, we developed energy storage products for use in homes, commercial facilities and on the utility grid. Advances in battery architecture, thermal management and power electronics that were originally commercialized in our vehicles, are now being leveraged in our energy storage products. Our energy storage systems are used for backup power, grid independence, peak demand reduction, demand response, reducing intermittency of renewable generation and wholesale electric market services.



Our energy product portfolio includes systems with a wide range of applications, from residential use to use in large grid-scale projects. Powerwall 2 is a 14 kWh rechargeable lithium-ion battery designed to store energy at a home or small commercial facility and can be used to provide seamless backup power in a grid outage and to maximize self-consumption of solar power generation. In addition, we offer the Powerpack 2 system, a fully integrated energy storage solution comprising of 210kWh (AC) battery packs and 50 kVa (at 480V) inverters that can be grouped together to form MWh and GWh sized installations. The Powerpack 2 system can be used by commercial and industrial customers for peak shaving, load shifting, self-consumption of solar generation and demand response, as well as to provide backup power during grid outages, and by utilities and independent power producers to smooth and firm the output of renewable power generation sources, provide dynamic energy capacity to the grid, defer or eliminate the need to upgrade transmission infrastructure, and provide a variety of other grid services such as frequency regulation and voltage control. Powerpack 2 can also be combined with renewable energy generation sources to create microgrids that provide remote communities with clean, resilient and affordable power.

Along with designing and manufacturing energy storage products, we continue to develop and advance our software capabilities for the control and optimal dispatch of energy storage systems across a wide range of markets and applications.

### **Solar Energy Systems**

The major components of our solar energy systems include solar panels that convert sunlight into electrical current, inverters that convert the electrical output from the panels to a usable current compatible with the electric grid, racking that attaches the solar panels to the roof or ground, electrical hardware that connects the solar energy system to the electric grid and our monitoring device. While we have recently started manufacturing solar panels in Gigafactory 2 in collaboration with Panasonic, we currently purchase the majority of system components from vendors, maintaining multiple sources for each major component to ensure competitive pricing and an adequate supply of materials. We also design and manufacture other system components.

Sales of residential solar systems enable our customers to take direct advantage of federal tax credits to reduce their electricity costs. Our solar loan offering enables customers to own their solar system with little upfront cost. We also continue to offer lease and power purchase agreement options to both residential and commercial customers. Our current standard leases and PPAs have a 20-year term, and we typically offer customers the opportunity to renew our agreements.

In October 2016, we unveiled Solar Roof, which integrates solar energy production with aesthetically pleasing and durable glass roofing tiles and is designed to complement the architecture of homes and commercial buildings while turning sunlight into electricity. We recently commenced Solar Roof production at our Gigafactory 2 in Buffalo, New York, and are beginning to install them in customers' homes.

### **Technology**

#### **Vehicles**

Our core competencies are powertrain engineering, vehicle engineering, innovative manufacturing and energy storage. Our core intellectual property includes our electric powertrain, our ability to design a vehicle that utilizes the unique advantages of an electric powertrain and our development of self-driving technologies. Our powertrain consists of our battery pack, power electronics, motor, gearbox and control software. We offer several powertrain variants for our vehicles that incorporate years of research and development. In addition, we have designed our vehicles to incorporate the latest advances in consumer technologies, such as mobile computing, sensing, displays, and connectivity.

#### ***Battery Pack***

We design our battery packs to achieve high energy density at a low cost while also maintaining safety, reliability and long life. Our proprietary technology includes systems for high density energy storage, cooling, safety, charge balancing, structural durability, and electronics management. We have also pioneered advanced manufacturing techniques to manufacture large volumes of battery packs with high quality at low cost.

We have significant expertise in the safety and management systems needed to use lithium-ion cells in the automotive environment, and have further optimized cell designs to increase overall performance. These advancements have enabled us to improve cost and performance of our batteries over time.

Our engineering and manufacturing efforts have been performed with a longer-term goal of building a foundation for further development. For instance, we have designed our battery pack to permit flexibility with respect to battery cell chemistry and form factor. We maintain extensive testing and R&D capabilities at the individual cell level, the full battery-pack level, and other critical battery pack systems and have built an expansive body of knowledge on lithium-ion cell vendors, chemistry types, and performance characteristics. We believe that the flexibility of our designs, combined with our research and real-world performance data, will enable us to continue to evaluate new battery cells and optimize battery pack system performance and cost for our current and future vehicles.

### ***Power Electronics***

The power electronics in our electric vehicle powertrain govern the flow of high voltage electrical current throughout our vehicles and serve to power our electric motor to generate torque while driving and deliver energy into the battery pack while charging.

The drive inverter converts direct current (“DC”) from the battery pack into alternating current (“AC”) to drive our induction motors and provides “regenerative braking” functionality, which captures energy from the wheels to charge the battery pack. The primary technological advantages to our designs include the ability to drive large amounts of current in a small physical package.

The charger charges the battery pack by converting alternating current (usually from a wall outlet or other electricity source) into direct current that can be accepted by the battery. Tesla vehicles can recharge on a wide variety of electricity sources due to the design of this charger, from a common household outlet to high power circuits meant for more industrial uses.

### ***Dual Motor Powertrain***

We offer dual motor powertrain vehicles, which use two electric motors to provide greater efficiency, performance, and range in an all-wheel drive configuration. Tesla’s dual motor powertrain digitally and independently controls torque to the front and rear wheels. The almost instantaneous response of the motors, combined with low centers of gravity, provides drivers with controlled performance and increased traction control.

### ***Vehicle Control and Infotainment Software***

The performance and safety systems of our vehicles and their battery packs require sophisticated control software. There are numerous processors in our vehicles to control these functions, and we write custom firmware for many of these processors. Software algorithms control traction, vehicle stability and the sustained acceleration and regenerative braking of the vehicle, and are also used extensively to monitor the charge state of the battery pack and to manage all of its safety systems. Drivers use the information and control systems in our vehicles to optimize performance, customize vehicle behavior, manage charging modes and times and control all infotainment functions. We develop almost all of this software, including most of the user interfaces, internally.

### ***Self-Driving Development***

We have expertise in vehicle autopilot systems, including auto-steering, traffic aware cruise control, automated lane changing, automated parking, Summon and driver warning systems. In October 2016, we began equipping all Tesla vehicles with hardware needed for full self-driving capability, including cameras that provide 360 degree visibility, updated ultrasonic sensors for object detection, a forward-facing radar with enhanced processing, and a powerful new onboard computer. Our autopilot systems relieve our drivers of the most tedious and potentially dangerous aspects of road travel. Although, at present, the driver is ultimately responsible for controlling the vehicle, our system provides safety and convenience functionality that allows our customers to rely on it much like the system that airplane pilots use when conditions permit. This hardware suite, along with over-the-air firmware updates and field data feedback loops from the onboard camera, radar, ultrasonics, and GPS, enables the system to continually learn and improve its performance.

Additionally, we continue to make significant advancements in the development of fully self-driving technologies.

### **Energy Storage**

We are leveraging many of the component level technologies from our vehicles to advance our energy storage products, including high density energy storage, cooling, safety, charge balancing, structural durability, and electronics management. By taking a modular approach to the design of battery systems, we are able to maximize manufacturing capacity to produce both Powerwall and Powerpack products. Additionally, we are making significant strides in the area of bi-directional, grid-tied power electronics that enable us to interconnect our battery systems seamlessly with global electricity grids while providing fast-acting systems for power injection and absorption.

### **Solar Energy Systems**

We are continually innovating and developing new technologies to facilitate the growth of our solar energy systems business. For example, Solar Roof is being designed to work seamlessly with Tesla Powerwall 2 and we have developed proprietary software to reduce system design and installation timelines and costs.

## **Design and Engineering**

### **Vehicles**

In addition to the design, development and production of the powertrain, we have created significant in-house capabilities in the design and engineering of electric vehicles and their components and systems. We design and engineer bodies, chassis, interiors, heating and cooling and low voltage electrical systems in house and to a lesser extent in conjunction with our suppliers. Our team has core competencies in computer aided design and crash test simulations which reduces the product development time of new models.

Additionally, our team has expertise in lightweight materials, a very important characteristic for electric vehicles given the impact of mass on range. Model S and Model X are built with a lightweight aluminum body and chassis which incorporates a variety of materials and production methods that help optimize the weight of the vehicle. Moreover, we have designed Model 3 with a mix of materials to be lightweight and safe while also increasing cost-effectiveness for this mass-market vehicle.

### **Energy Storage**

We have an in-house engineering team that both designs our energy storage products themselves, and works with our residential, commercial and utility customers to design bespoke systems incorporating our products. Our team's expertise in electrical, mechanical, civil and software engineering enables us to create integrated energy storage solutions that meet the particular needs of all customer types.

### **Solar Energy Systems**

We also have an in-house engineering team that designs a customized solar energy system or Solar Roof for each of our customers, and which works closely with our energy storage engineering teams to integrate an energy storage system when requested by the customer. We have developed software that simplifies and expedites the design process and optimizes the design to maximize the energy production of each system. Our engineers complete a structural analysis of each building and produce a full set of structural design and electrical blueprints that contain the specifications for all system components. Additionally, we design complementary mounting and grounding hardware where required.

## **Sales and Marketing**

### **Vehicles**

#### ***Company-Owned Stores and Galleries***

We market and sell our vehicles directly to consumers through an international network of company-owned stores and galleries which we believe enables us to better control costs of inventory, manage warranty service and pricing, maintain and strengthen the Tesla brand, and obtain rapid customer feedback. Our Tesla stores and galleries

are highly visible, premium outlets in major metropolitan markets, some of which combine retail sales and service. We have also found that opening a service center in a new geographic area can increase demand. As a result, we have complemented our store strategy with sales facilities and personnel in service centers to more rapidly expand our retail footprint. We refer to these as “Service Plus” locations.

### ***Used Car Sales***

Our used car business supports new car sales by integrating the sale of a new Tesla vehicle with a customer’s trade-in needs for their existing Tesla and non-Tesla vehicles. The Tesla and non-Tesla vehicles we acquire through trade-ins are subsequently remarketed, primarily to the general public and through third-party auto auctions. We also receive used Tesla vehicles to resell through lease returns and other sources.

### ***Charging***

On the road, customers can also charge using our Supercharger network or at a variety of destinations that have deployed our charging equipment. In addition, our vehicles can charge at a variety of public charging stations around the world, either natively or through a suite of adapters. This flexibility in charging provides customers with additional mobility in addition to their ability to conveniently charge their vehicles overnight at home.

We continue to build out our Tesla Supercharger network throughout North America, Europe, Asia and other markets to enable convenient, long-distance travel. Our Supercharger network is a strategic corporate initiative designed to provide fast charging to enable long-distance travel and remove a barrier to the broader adoption of electric vehicles caused by the perception of limited vehicle range. The Tesla Supercharger is an industrial grade, high speed charger designed to recharge a Tesla vehicle significantly more quickly than other charging options. To satisfy growing demand, Supercharger stations typically have between six and twenty Superchargers and are strategically placed along well-travelled routes to allow Tesla vehicle owners the ability to enjoy long distance travel with convenient, minimal stops. Additionally, we are also building Superchargers in an increasing number of city centers to enable urban use. Use of the Supercharger network is either free or requires a small fee.

We are working with a wide variety of hospitality locations, including hotels, resorts, shopping centers and parks to offer an additional charging option for our customers. These Destination Charging partners deploy Tesla wall connectors and provide charging to Tesla vehicle owners that patronize their businesses.

Where possible, we are co-locating Superchargers with our solar and energy storage systems to reduce the cost of electricity and promote the use of renewable electricity by Tesla vehicle owners.

### ***Orders and Reservations***

We typically carry a small inventory of our vehicles at our Tesla stores which are available for immediate sale. The majority of our customers, however, customize their vehicle by placing an order with us via the Internet.

### ***Marketing***

Historically, we have been able to generate significant media coverage of our company and our vehicles, and we believe we will continue to do so. To date, for vehicle sales, media coverage and word of mouth have been the primary drivers of our sales leads and have helped us achieve sales without traditional advertising and at relatively low marketing costs.

### ***Solar and Energy Storage***

We market and sell our energy storage products to individuals, commercial and industrial customers and utilities through a variety of channels.

Our residential solar and energy storage products appear in an increasing number of our stores and galleries in the U.S. which generates further interest in these products. In the U.S., we also use our national sales organization, channel partner network and customer referral program to market and sell our residential solar and energy storage systems. Outside of the U.S., we use our international sales organization and a network of channel partners to market and sell Powerwall 2, and we have recently launched pilot programs for the sale of residential solar products in certain countries. We also sell Powerwall 2 directly to utilities, who then deploy the product in customer homes.

We sell Powerpack 2 systems to commercial and utility customers through our international sales organization, which consists of experienced power industry professionals in all of our target markets, as well as through our channel partner network. In the U.S and Mexico, we also sell installed solar systems to commercial customers through cash, lease and power purchase agreement transactions.

## **Service and Warranty**

### **Vehicles**

#### ***Service***

We provide service for our electric vehicles at our company-owned service centers, at our Service Plus locations or, in certain areas, through Tesla mobile technicians who provide services that do not require a vehicle lift. Performing vehicle service ourselves allows us to identify problems, find solutions, and incorporate improvements faster than incumbent automobile manufacturers.

Our vehicles are designed with the capability to wirelessly upload data to us via an on-board system with cellular connectivity, allowing us to diagnose and remedy many problems before ever looking at the vehicle. When maintenance or service is required, a customer can schedule service by contacting one of our Tesla service centers or our Tesla mobile technicians can perform an array of services from a customer's home or other remote location.

#### ***New Vehicle Limited Warranty, Maintenance and Extended Service Plans***

We provide a four year or 50,000 mile New Vehicle Limited Warranty with every new vehicle, subject to separate limited warranties for the supplemental restraint system and battery and drive unit. For the battery and drive unit on our current new Model S and Model X vehicles, we offer an eight year, infinite mile limited warranty, although the battery's charging capacity is not covered. For the battery and drive unit on our current new Model 3 vehicles, we offer an eight year or 100,000 mile limited warranty for our standard range battery and an eight year or 120,000 mile limited warranty for our long range battery, with minimum 70% retention of battery capacity over the warranty period.

In addition to the New Vehicle Limited Warranty, we currently offer for Model S and Model X a comprehensive maintenance program for every new vehicle, which includes plans covering prepaid maintenance for up to four years or up to 50,000 miles and an Extended Service plan. The maintenance plans cover annual inspections and the replacement of wear and tear parts, excluding tires and the battery. The Extended Service plan covers the repair or replacement of vehicle parts for up to an additional four years or up to an additional 50,000 miles after the New Vehicle Limited Warranty.

### **Energy Storage**

We generally provide a ten year "no defect" and "energy retention" warranty with every Powerwall 2 and a fifteen year "no defect" and "energy retention" warranty with every Powerpack 2 system. For Powerwall 2, the energy retention warranty involves us guaranteeing that the energy capacity of the product will be 70% or 80% (depending on the region of installation) of its nameplate capacity after 10 years of use. For Powerpack 2, the energy retention warranty involves us guaranteeing a minimum energy capacity in each of its first 15 years of use. For both products, our warranty is subject to specified use restrictions or kWh throughput caps. In addition, we offer certain extended warranties, which customers are able to purchase from us at the time they purchase an energy storage system, including a 20 year extended protection plan for Powerwall 2 and a selection of 10 or 20 year performance guarantees for Powerpack 2. We agree to repair or replace our energy storage products in the event of a valid warranty claim. In circumstances where we install a Powerwall 2 or Powerpack 2 system, we also provide warranties, generally ranging from one to four years, on our installation workmanship. All of the warranties for our energy storage systems are subject to customary limitations and exclusions.

### **Solar Energy Systems**

For traditional solar systems that are leased or under power purchase agreements ("PPAs"), we provide a full system warranty for 20 years from installation. For other traditional solar systems, we provide a 20 year installation warranty and a warranty against roof leaks of at least a year. We also pass-through the inverter and module manufacturer warranties (typically 10 years and 25 years respectively) and, for an additional fee, offer an extended

inverter warranty that runs from the end of the manufacturer's warranty until 20 years after system installation. When we sell or lease a traditional solar system, or a customer pays up front in full under a PPA, we compensate the customer if their system produces less energy than guaranteed over a specified period. For Solar Roof, we provide a warranty against glass tile chipping or cracking for the lifetime of the home, a 30 year installation warranty, a 30 year weatherization warranty and a power output warranty. For all systems (traditional and Solar Roof) we also provide service and repair (either under warranty or for a fee) during the entire term of the customer relationship.

## **Financial Services**

### **Vehicles**

We offer loans and leases for our vehicles in North America, Europe and Asia primarily through various financial institutions. We also offer financing arrangements directly through our local subsidiaries in certain areas of the U.S., Germany, Canada and the UK. We intend to broaden our financial services offerings during the next few years.

Certain of our current financing programs outside of North America provide customers with a resale value guarantee under which those customers have the option of selling their vehicle back to us at a preset future date, generally at the end of the term of the applicable loan or financing program, for a pre-determined resale value. In certain markets, we also offer vehicle buyback guarantees to financial institutions which may obligate us to repurchase the vehicles for a pre-determined price.

### **Solar Energy Systems**

We are an industry leader in offering innovative financing alternatives that allow our customers to take direct advantage of available tax credits and incentives to reduce the cost of owning a solar energy system through a solar loan, or to make the switch to solar energy with little to no upfront costs under a lease or PPA. Our solar loan offers third-party financing directly to a qualified customer to enable the customer to purchase and own a solar energy system. We are not a party to the loan agreement between the customer and the third-party lender, and the third-party lender has no recourse against us with respect to the loan. Our solar lease offers customers a fixed monthly fee, at rates that typically translate into lower monthly utility bills, and an electricity production guarantee. Our solar PPA charges customers a fee per kWh based on the amount of electricity produced by our solar energy systems, at rates typically lower than their local utility rate. Both our lease and PPA create high-quality, recurring customer payments that we monetize through funds we have formed with investors.

### **Energy Storage**

We currently offer a loan product to residential customers who purchase Powerwall 2 together with a new solar system, and lease and power purchase agreements to commercial customers who purchase a Powerpack 2 system together with a new solar system. We intend to introduce financial services offerings for customers who purchase energy storage only, as well as for our Solar Roof customers, in the future.

## **Manufacturing**

### **Vehicles**

We conduct vehicle manufacturing and assembly operations at our facilities in Fremont, California; Lathrop, California; and Tilburg, Netherlands. We have also built and continue to expand a cell and battery manufacturing facility, Gigafactory 1, outside of Reno, Nevada.

#### ***The Tesla Factory in Fremont, CA and Manufacturing Facility in Lathrop, CA***

We manufacture our vehicles, and certain parts and components that are critical to our intellectual property and quality standards, at the Tesla Factory and our manufacturing facility in Lathrop, CA. The Tesla Factory contains several manufacturing operations, including stamping, machining, casting, plastics, body assembly, paint operations, drive unit production, final vehicle assembly and end-of-line testing. In addition, we manufacture lithium-ion battery packs, electric motors, gearboxes and components for Model S and Model X at the Tesla Factory. Some major vehicle component systems are purchased from suppliers; however we have a high level of vertical integration in our manufacturing processes at the Tesla Factory.

### ***The Netherlands***

Our European headquarters and manufacturing facilities are located in Amsterdam and Tilburg. Our operations in Tilburg include final assembly, testing and quality control for vehicles delivered within the European Union, a parts distribution warehouse for service centers throughout Europe, a center for remanufacturing work and a customer service center.

### ***Gigafactory 1 outside of Reno, Nevada***

Gigafactory 1 is a facility where we work together with our suppliers to integrate battery material, cell, module and battery pack production in one location. We use the battery packs manufactured at Gigafactory 1 for our vehicles, including Model 3 and energy storage products. We also manufacture Model 3 drive units at Gigafactory 1.

Gigafactory 1 is being built in phases. Tesla, Panasonic and other partners are currently manufacturing inside the finished sections. Our present plan is to continue expanding Gigafactory 1 over the next few years so that its capacity significantly exceeds the approximately 500,000 vehicle per year capacity that we announced when we first started developing it, and to additionally have sufficient capacity for our energy storage products.

We believe that Gigafactory 1 will allow us to achieve a significant reduction in the cost of our battery packs once we are in volume production with Model 3. We have committed to substantial capital expenditures for Gigafactory 1. Panasonic has agreed to partner with us on Gigafactory 1 with investments in production equipment that it will use to manufacture and supply us with battery cells. Through our ownership of Gigafactory 1 and our partnership with Panasonic, we own sole access to a facility designed to be the highest-volume and lowest-cost source of lithium-ion batteries in the world.

### ***Supply Chain***

Our vehicles use thousands of purchased parts which we source globally from hundreds of suppliers. We have developed close relationships with several key suppliers particularly in the procurement of cells and certain other key system parts. While we obtain components from multiple sources in some cases, similar to other automobile manufacturers, many of the components used in our vehicles are purchased by us from a single source. In addition, while several sources of the battery cell we have selected for our battery packs are available, we have currently fully qualified only one cell supplier for the battery packs we use in our production vehicles. We are working to fully qualify additional cells from other manufacturers.

We use various raw materials in our business including aluminum, steel, cobalt, lithium, nickel and copper. The prices for these raw materials fluctuate depending on market conditions and global demand for these materials. We believe that we have adequate supplies or sources of availability of the raw materials necessary to meet our manufacturing and supply requirements.

### **Energy Storage**

Our energy storage products are manufactured at Gigafactory 1. We leverage the same supply chain process and infrastructure as we use for our vehicles. The battery architecture and many of the components used in our energy storage products are the same or similar to those used in our vehicles' battery pack, enabling us to take advantage of manufacturing efficiencies and supply chain economies of scale. The power electronics and inverters for the Powerwall and Powerpack systems are also manufactured at Gigafactory 1, allowing us to ship deployment-ready systems directly to customers.

### **Solar Energy Systems**

We currently purchase major components such as solar panels and inverters directly from multiple manufacturers. We typically purchase solar panels and inverters on an as-needed basis from our suppliers at then-prevailing prices pursuant to purchase orders issued under our master contractual arrangements. In December 2016, we entered into a long-term agreement with Panasonic to manufacture photovoltaic ("PV") cells and modules at our Gigafactory 2 in Buffalo, New York, with negotiated pricing provisions and the intent to manufacture at least 1.0 gigawatt of solar panels annually. We have recently started manufacturing solar panels in Gigafactory 2 in collaboration with Panasonic.

## **Governmental Programs, Incentives and Regulations**

### **Vehicles**

#### ***California Alternative Energy and Advanced Transportation Financing Authority Tax Incentives***

We have entered into multiple agreements over the past few years with the California Alternative Energy and Advanced Transportation Financing Authority (“CAEATFA”) that provide multi-year sales tax exclusions on purchases of manufacturing equipment that will be used for specific purposes including the expansion and ongoing development of Model S, Model X, Model 3 and future electric vehicles and expansion of electric vehicle powertrain production in California.

#### ***Nevada Tax Incentives***

In connection with the construction of Gigafactory 1 in Nevada, we have entered into agreements with the State of Nevada and Storey County in Nevada that will provide abatements for sales and use taxes, real and personal property taxes, and employer excise taxes, discounts to the base tariff energy rates, and transferable tax credits. These incentives are available for the applicable periods ending on June 30, 2034, subject to capital investments by Tesla and its partners for Gigafactory 1 of at least \$3.50 billion in the aggregate on or before June 30, 2024, which were met as of December 31, 2017, and certain other conditions specified in the agreements. If we do not satisfy one or more conditions under the agreements, Tesla will be required to repay to the respective taxing authorities the amounts of the tax incentives incurred, plus interest.

#### ***Tesla Regulatory Credits***

In connection with the production, delivery and placement into service of our zero emission vehicles, charging infrastructure and solar systems in global markets, we have earned and will continue to earn various tradable regulatory credits. We have sold these credits, and will continue to sell future credits, to automotive companies and regulated entities. For example, under California’s Zero-Emission Vehicle Regulation and those of states that have adopted California’s standard, vehicle manufacturers are required to earn or purchase credits for compliance with their annual regulatory requirements. These laws provide that automakers may bank excess credits, referred to as ZEV credits, if they earn more credits than the minimum quantity required by those laws. Manufacturers with a surplus of credits may sell their credits to other regulated parties. Pursuant to the U.S. Environmental Protection Agency’s (“EPA”) national greenhouse gas (“GHG”) emission standards and similar standards adopted by the Canadian government, car and truck manufacturers are required to meet fleet-wide average carbon dioxide emissions standards. Manufacturers may sell excess credits to other manufacturers, who can use the credits to comply with these regulatory requirements. Many U.S. states have also adopted procurement requirements for renewable energy production. These requirements enable companies deploying solar energy to earn tradable credits known as Solar Renewable Energy Certificates (“SRECs”).

#### ***Regulation—Vehicle Safety and Testing***

Our vehicles are subject to, and comply with or are otherwise exempt from, numerous regulatory requirements established by the National Highway Traffic Safety Administration (“NHTSA”), including all applicable United States Federal Motor Vehicle Safety Standards (“FMVSS”). Our vehicles fully comply with all applicable FMVSSs without the need for any exemptions, and we expect future Tesla vehicles to either fully comply or comply with limited exemptions related to new technologies. Additionally, there are regulatory changes being considered for several FMVSS, and while we anticipate compliance, there is no assurance until final regulation changes are enacted.

As a manufacturer, we must self-certify that our vehicles meet all applicable FMVSS, as well as the NHTSA bumper standard, or otherwise are exempt, before the vehicles can be imported or sold in the U.S. Numerous FMVSS apply to our vehicles, such as crash-worthiness requirements, crash avoidance requirements, and electric vehicle requirements. We are also required to comply with other federal laws administered by NHTSA, including the CAFE standards, Theft Prevention Act requirements, consumer information labeling requirements, Early Warning Reporting requirements regarding warranty claims, field reports, death and injury reports and foreign recalls, and owner’s manual requirements.

The Automobile Information and Disclosure Act requires manufacturers of motor vehicles to disclose certain information regarding the manufacturer’s suggested retail price, optional equipment and pricing. In addition, this



law allows inclusion of city and highway fuel economy ratings, as determined by EPA, as well as crash test ratings as determined by NHTSA if such tests are conducted.

Our vehicles sold outside of the U.S. are subject to foreign safety testing regulations. Many of those regulations are different from the federal motor vehicle safety standards applicable in the U.S. and may require redesign and/or retesting. The European Union has proposed new rules that, if approved, may significantly change the manner that vehicles are certified for compliance in Europe by creating more individual country-by-country type-approval requirements instead of the current singular Europe-wide system.

### ***Regulation – Self Driving***

There are no federal U.S. regulations pertaining to the safety of self-driving vehicles; however, NHTSA has established recommended guidelines. Certain U.S. states have legal restrictions on self-driving vehicles, and many other states are considering them. This patchwork increases legal complexity for our vehicles. In Europe, certain vehicle safety regulations apply to self-driving braking and steering systems, and certain treaties also restrict the legality of certain higher levels of self-driving vehicles. Self-driving laws and regulations are expected to continue to evolve in numerous jurisdictions in the U.S. and foreign countries and may create restrictions on our self-driving features.

### ***Regulation—Battery Safety and Testing***

Our battery pack conforms to mandatory regulations that govern transport of “dangerous goods”, defined to include lithium-ion batteries, which may present a risk in transportation. The regulations vary by mode of shipping transportation, such as by ocean vessel, rail, truck, or air. We have completed the applicable transportation tests for our battery packs, demonstrating our compliance with applicable regulations.

We use lithium-ion cells in our high voltage battery packs. The cells do not contain any lead, mercury, cadmium or heavy metals. Our battery packs include certain materials that contain trace amounts of hazardous chemicals whose use, storage, and disposal is regulated under federal law. We currently have an agreement with a third party battery recycling company to recycle our battery packs.

### ***Automobile Manufacturer and Dealer Regulation***

State laws regulate the manufacture, distribution, and sale of automobiles, and generally require motor vehicle manufacturers and dealers to be licensed in order to sell vehicles directly to consumers in the state. As we open additional Tesla stores and service centers, we secure dealer licenses (or their equivalent) and engage in sales activities to sell our vehicles directly to consumers. A few states, such as Michigan and Connecticut, do not permit automobile manufacturers to be licensed as dealers or to act in the capacity of a dealer, or otherwise restrict a manufacturer’s ability to deliver or service vehicles. To sell vehicles to residents of states where we are not licensed as a dealer, we generally conduct the sale out of the state via the internet, phone or mail. In such states, we have opened “galleries” that serve an educational purpose and are not retail locations.

As we expand our retail footprint in the U.S., some automobile dealer trade associations have both challenged the legality of our operations in court and used administrative and legislative processes to attempt to prohibit or limit our ability to operate existing stores or expand to new locations. We expect that the dealer associations will continue to mount challenges to our business model. In addition, we expect the dealer associations to actively lobby state licensing agencies and legislators to interpret existing laws or enact new laws in ways not favorable to Tesla’s ownership and operation of its own retail and service locations, and we intend to actively fight any such efforts to limit our ability to sell our own vehicles.

While we have analyzed the principal laws in the U.S., EU, China, Japan, UK, and Australia relating to our distribution model and believe we comply with such laws, we have not performed a complete analysis of all jurisdictions in which we may sell vehicles. Accordingly, there may be laws in certain jurisdictions that may restrict our sales and service operations.

## **Energy Storage**

The regulatory regime for energy storage projects is still under development. Nevertheless, there are various policies, incentives and financial mechanisms at the federal, state and local level that support the adoption of energy storage. For example, energy storage systems that are charged using solar energy are eligible for the 30% tax credit under Section 48(a)(3) of the Internal Revenue Code, or the IRC, as described below. In addition, California and a number of other states have adopted procurement targets for energy storage, and behind the meter energy storage systems qualify for funding under the California Self Generation Incentive Program.

The Federal Energy Regulatory Commission (“FERC”) has also taken steps to enable the participation of energy storage in wholesale energy markets. In 2011 and 2013, FERC removed many barriers for systems like energy storage to provide frequency regulation service, thus increasing the value these systems can obtain in wholesale energy markets. More recently, in late 2016, FERC released a Notice of Proposed Rulemaking that, if it becomes a final rule, would further break down barriers preventing energy storage from fully participating in wholesale energy markets. Finally, in January 2017, FERC issued a statement supporting the use of energy storage as both electric transmission and as electric generation concurrently, thus enabling energy storage systems to provide greater value to the electric grid.

## **Solar Energy Systems**

### ***Government and Utility Programs and Incentives***

U.S. federal, state and local governments have established various policies, incentives and financial mechanisms to reduce the cost of solar energy and to accelerate the adoption of solar energy. These incentives include tax credits, cash grants, tax abatements and rebates.

The federal government currently provides an uncapped investment tax credit, or Federal ITC, under two sections of the IRC: Section 48 and Section 25D. Section 48(a)(3) of the IRC allows a taxpayer to claim a credit of 30% of qualified expenditures for a commercial solar energy system that commences construction by December 31, 2019. The credit then declines to 26% in 2020, 22% in 2021, and a permanent 10% thereafter. We claim the Section 48 commercial credit when available for both our residential and commercial projects, based on ownership of the solar energy system. The federal government also provides accelerated depreciation for eligible commercial solar energy systems. Section 25D of the IRC allows a homeowner-taxpayer to claim a credit of 30% of qualified expenditures for a residential solar energy system owned by the homeowner that is placed in service by December 31, 2019. The credit then declines to 26% in 2020 and 22% in 2021, and is scheduled to expire thereafter. Customers who purchase their solar energy systems for cash or through our solar loan are eligible to claim the Section 25D investment tax credit.

In addition to the Federal ITC, many U.S. states offer personal and corporate tax credits and incentive available for solar energy systems.

### ***Regulation – General***

We are not a “regulated utility” in the U.S. To operate our systems, we obtain interconnection agreements from the utilities. In almost all cases, interconnection agreements are standard form agreements that have been pre-approved by the public utility commission or other regulatory body.

Sales of electricity and non-sale equipment leases by third parties, such as our leases and PPAs, face regulatory challenges in some states and jurisdictions.

### ***Regulation – Net Metering***

Thirty-eight states, Washington, D.C. and Puerto Rico have a regulatory policy known as net energy metering, or net metering, available to solar customers. Net metering typically allows solar customers to interconnect their on-site solar energy systems to the utility grid and offset their utility electricity purchases by receiving a bill credit for excess energy generated by their solar energy system that is exported to the grid. Each of the states where we currently serve customers has adopted a net metering policy except for Texas, where certain individual utilities have adopted net metering or a policy similar to net metering. In certain jurisdictions, regulators or utilities have reduced or eliminated the benefit available under net metering, or have proposed to do so.

### ***Regulation – Mandated Renewable Capacity***

Many states also have adopted procurement requirements for renewable energy production, such as an enforceable renewable portfolio standard, or RPS, or other policies that require covered entities to procure a specified percentage of total electricity delivered to customers in the state from eligible renewable energy sources, such as solar energy systems. In solar renewable energy certificate, or SREC, state markets, the RPS requires electricity suppliers to secure a portion of their electricity from solar generators. The SREC program provides a means for SRECs to be created. A SREC represents the renewable energy associated with 1,000 kWhs of electricity produced from a solar energy system. When a solar energy system generates 1,000 kWhs of electricity, one SREC is issued by a government agency, which can then be sold separately from the energy produced to covered entities who surrender the SRECs to the state to prove compliance with the state's renewable energy mandate.

### **Competition**

#### **Vehicles**

The worldwide automotive market, particularly for alternative fuel vehicles, is highly competitive and we expect it will become even more so in the future as we introduce additional vehicles, including Model 3 which will compete with lower-priced vehicles.

We believe that our vehicles compete in the market both based on their traditional segment classification as well as based on their propulsion technology. For example, Model S and Model X compete primarily in the extremely competitive premium sedan and premium SUV markets with internal combustion vehicles from more established automobile manufacturers, and Model 3 competes with small to medium-sized sedans. Our vehicles also compete with vehicles propelled by alternative fuels, principally electricity.

Many established and new automobile manufacturers have entered or have announced plans to enter the alternative fuel vehicle market. Overall, we believe these announcements and vehicle introductions promote the development of the alternative fuel vehicle market by highlighting the attractiveness of alternative fuel vehicles, particularly those fueled by electricity, relative to the internal combustion vehicle. Many major automobile manufacturers have electric vehicles available today, and other current and prospective automobile manufacturers are also developing electric vehicles. Electric vehicles have also already been brought to market in China and other foreign countries and we expect a number of those manufacturers to enter the U.S. market as well. In addition, several manufacturers, sell hybrid vehicles, including plug-in versions of their hybrid vehicles.

#### **Energy Storage**

The market for energy storage products is also highly competitive. Established companies, such as AES Energy Storage, Siemens, LG Chem and Samsung, as well as various emerging companies, have introduced products that are similar to our product portfolio. There are several companies providing individual components of energy storage systems (such as cells, battery modules, and power electronics) as well as others providing integrated systems. We compete with these companies on price, energy density and efficiency. We believe that the specifications of our products, our strong brand, and the modular, scalable nature of our Powerpack 2 product give us a competitive advantage when marketing our products.

#### **Solar Energy Systems**

The primary competitors to our solar energy business are the traditional local utility companies that supply energy to our potential customers. We compete with these traditional utility companies primarily based on price, predictability of price and the ease by which customers can switch to electricity generated by our solar energy systems. We also compete with solar energy companies that provide products and services similar to ours. Many solar energy companies only install solar energy systems, while others only provide financing for these installations. In the residential solar energy system installation market, our primary competitors include Vivint Solar Inc., Sunrun Inc., Trinity Solar, SunPower Corporation, and many smaller local solar companies.

### **Intellectual Property**

As part of our business, we seek to protect our intellectual property rights such as with respect to patents, trademarks, copyrights, trade secrets, including through employee and third party nondisclosure agreements, and

other contractual arrangements. Additionally, we previously announced a patent policy in which we irrevocably pledged that we will not initiate a lawsuit against any party for infringing our patents through activity relating to electric vehicles or related equipment for so long as such party is acting in good faith. We made this pledge in order to encourage the advancement of a common, rapidly-evolving platform for electric vehicles, thereby benefiting ourselves, other companies making electric vehicles, and the world.

### **Segment Information**

We operate as two reportable segments: automotive and energy generation and storage.

The automotive segment includes the design, development, manufacturing, and sales of electric vehicles. The energy generation and storage segment includes the design, manufacture, installation, and sale or lease of stationary energy storage products and solar energy systems, and sale of electricity generated by our solar energy systems to customers.

### **Employees**

As of December 31, 2017, Tesla, Inc. had 37,543 full-time employees. To date, we have not experienced any work stoppages, and we consider our relationship with our employees to be good.

### **Available Information**

We file or furnish periodic reports and amendments thereto, including our Annual Reports on Form 10-K, our Quarterly Reports on Form 10-Q and Current Reports on Form 8-K, proxy statements and other information with the Securities and Exchange Commission ("SEC"). Such reports, amendments, proxy statements and other information may be obtained by visiting the Public Reference Room of the SEC at 100 F Street, NE, Washington, D.C. 20549. Information on the operation of the Public Reference Room can be obtained by calling the SEC at 1-800-SEC-0330. In addition, the SEC maintains a website ([www.sec.gov](http://www.sec.gov)) that contains reports, proxy and information statements, and other information regarding issuers that file electronically. Our reports, amendments thereto, proxy statements and other information are also made available, free of charge, on our investor relations website at [ir.tesla.com](http://ir.tesla.com) as soon as reasonably practicable after we electronically file or furnish such information with the SEC. The information posted on our website is not incorporated by reference into this Annual Report on Form 10-K.

## ITEM 1A. RISK FACTORS

*You should carefully consider the risks described below together with the other information set forth in this report, which could materially affect our business, financial condition and future results. The risks described below are not the only risks facing our company. Risks and uncertainties not currently known to us or that we currently deem to be immaterial also may materially adversely affect our business, financial condition and operating results.*

### **Risks Related to Our Business and Industry**

***We have experienced in the past, and may experience in the future, delays or other complications in the design, manufacture, launch and production ramp of new vehicles and other products such as Model 3, our energy storage products and the Solar Roof, which could harm our brand, business, prospects, financial condition and operating results.***

We have previously experienced launch, manufacturing and production ramp delays or other complications in connection with new vehicle models such as Model S, Model X and Model 3, and new vehicle features such as the all-wheel drive dual motor drivetrain on Model S and the second version of autopilot hardware. For example, we encountered unanticipated challenges, such as certain supply chain constraints, that led to initial delays in producing Model X. Similarly, we have experienced certain bottlenecks in the production of Model 3 in places like the battery module assembly line at Gigafactory 1, leading to delays in its ramp. If such issues continue longer than expected, or new issues arise or recur with respect to Model 3 or any of our other production vehicles, we could experience further delays. In addition, because our vehicle models share certain production facilities with other models, the volume or efficiency of production with respect to one model may impact the production of other models.

We may also experience similar future delays or other complications in bringing to market and ramping production of new vehicles, such as our Tesla Semi truck, our planned Model Y and new Tesla Roadster, our energy storage products and the Solar Roof. Any significant additional delay or other complication in the production of our current products or the development, manufacture, launch and production ramp of our future products, including complications associated with expanding our production capacity and supply chain or obtaining or maintaining regulatory approvals, could materially damage our brand, business, prospects, financial condition and operating results.

***We may experience delays in realizing our projected timelines and cost and volume targets for the production and ramp of our Model 3 vehicle, which could harm our business, prospects, financial condition and operating results.***

Our future business depends in large part on our ability to execute on our plans to manufacture, market and sell the Model 3 vehicle, which we are offering at a lower price point and which we intend to produce at significantly higher volumes than our present production capabilities for the Model S or Model X vehicles. We commenced production and initial customer deliveries of Model 3 in July 2017 and are targeting a forecasted production rate of 5,000 Model 3 vehicles per week by the end of the second quarter of 2018.

We have no experience to date in manufacturing vehicles at the high volumes that we anticipate for Model 3, and to be successful, we will need to complete the implementation and ramp of efficient and cost-effective manufacturing capabilities, processes and supply chains necessary to support such volumes. We are employing a higher degree of automation in our materials conveyance, battery module production and other manufacturing processes for Model 3 than we have previously employed, and in some cases we have implemented interim processes such as semi-automated manufacturing lines, for which we are likely to incur additional labor costs until we bring online our fully automated processes. Moreover, our Model 3 production plan has generally required and will require significant investments of cash and management resources.

Our production plan for Model 3 is based on many key assumptions, including:

- that we will be able to complete ramping high volume production of Model 3 at the Tesla Factory without exceeding our projected costs and on our projected timeline;
- that we will be able to continue to expand Gigafactory 1 in a timely manner to produce high volumes of quality lithium-ion cells to be integrated into battery modules and finished battery packs and drive unit components for Model 3, all at costs that allow us to sell Model 3 at our target gross margins;

- that the equipment and processes which we have selected for Model 3 production will be able to accurately manufacture high volumes of Model 3 vehicles within specified design tolerances and with high quality;
- that we will be able to maintain suppliers for the necessary components on terms and conditions that are acceptable to us and that we will be able to obtain components on a timely basis and in the necessary quantities to support high volume production; and
- that we will be able to attract, recruit, hire, train and retain skilled employees, including employees on the production line, to operate our planned high volume production facilities to support Model 3, including at the Tesla Factory and Gigafactory 1.

If one or more of the foregoing assumptions turns out to be incorrect, our ability to meet our Model 3 projections on time and at volumes and prices that are profitable, the number of current and future Model 3 reservations, as well as our business, prospects, operating results and financial condition, may be materially and adversely impacted.

***We may be unable to meet our growing vehicle production and delivery plans, both of which could harm our business and prospects.***

Our plans call for significant increases in vehicle production and deliveries to high volumes in a short amount of time. Our ability to achieve these plans will depend upon a number of factors, including our ability to utilize installed manufacturing capacity, achieve the planned production yield and further increase capacity as planned while maintaining our desired quality levels and optimize design and production changes, and our suppliers' ability to support our needs. In addition, we have used and may use in the future a number of new manufacturing technologies, techniques and processes for our vehicles, which we must successfully introduce and scale for high volume production. For example, we have introduced highly automated production lines, aluminum spot welding systems and high-speed blow forming of certain difficult to stamp vehicle parts. We have also introduced unique design features in our vehicles with different manufacturing challenges, such as large display screens, dual motor drivetrain, autopilot hardware and falcon-wing doors. We have limited experience developing, manufacturing, selling and servicing, and allocating our available resources among, multiple products simultaneously. If we are unable to realize our plans, our brand, business, prospects, financial condition and operating results could be materially damaged.

Concurrent with the significant planned increase in our vehicle production levels, we will also need to continue to significantly increase deliveries of, and servicing capacity for, our vehicles. Although we have a plan for delivering and servicing significantly increased volumes of vehicles, we have limited experience in delivering a high volume of vehicles, and no experience in delivering and servicing vehicles at the significantly higher volumes we anticipate for Model 3, and we may face difficulties meeting our delivery and growth plans into both existing markets as well as new markets into which we expand. If we are unable to ramp up to meet our delivery and servicing needs globally, this could have a material adverse effect on our business, prospects, financial condition and operating results.

***We are dependent on our suppliers, the majority of which are single source suppliers, and the inability of these suppliers to deliver necessary components of our products according to our schedule and at prices, quality levels, and volumes acceptable to us, or our inability to efficiently manage these components, could have a material adverse effect on our financial condition and operating results.***

Our products contain numerous purchased parts which we source globally from hundreds of direct suppliers, the majority of whom are currently single source suppliers, although we attempt to qualify and obtain components from multiple sources whenever feasible. Any significant unanticipated demand would require us to procure additional components in a short amount of time, and in the past we have also replaced certain suppliers because of their failure to provide components that met our quality control standards. While we believe that we will be able to secure additional or alternate sources of supply for most of our components in a relatively short time frame, there is no assurance that we will be able to do so or develop our own replacements for certain highly customized components of our products. Moreover, we have signed long-term agreements with Panasonic to be our manufacturing partner and supplier for lithium-ion cells at Gigafactory 1 in Nevada and PV cells and panels at Gigafactory 2 in Buffalo, New York. If we encounter unexpected difficulties with key suppliers such as Panasonic,

and if we are unable to fill these needs from other suppliers, we could experience production delays and potential loss of access to important technology and parts for producing, servicing and supporting our products.

This limited, and in many cases single source, supply chain exposes us to multiple potential sources of delivery failure or component shortages for the production of our products, such as those which we experienced in 2012 and 2016 in connection with our slower-than-planned Model S and Model X ramps. Furthermore, unexpected changes in business conditions, materials pricing, labor issues, wars, governmental changes, natural disasters such as the March 2011 earthquakes in Japan and other factors beyond our and our suppliers' control, could also affect our suppliers' ability to deliver components to us on a timely basis. The loss of any single or limited source supplier or the disruption in the supply of components from these suppliers could lead to product design changes and delays in product deliveries to our customers, which could hurt our relationships with our customers and result in negative publicity, damage to our brand and a material and adverse effect on our business, prospects, financial condition and operating results.

Changes in our supply chain have also resulted in the past, and may result in the future, in increased cost. We have also experienced cost increases from certain of our suppliers in order to meet our quality targets and development timelines as well as due to design changes that we made, and we may experience similar cost increases in the future. Certain suppliers have sought to renegotiate the terms of the supply arrangements. Additionally, we are negotiating with existing suppliers for cost reductions, seeking new and less expensive suppliers for certain parts, and attempting to redesign certain parts to make them less expensive to produce. If we are unsuccessful in our efforts to control and reduce supplier costs, our operating results will suffer.

The foregoing discussion applies to Model 3 and our energy storage products as well. However, because we plan to produce Model 3 at significantly higher volumes than Model S or Model X, the negative impact of any delays or other constraints with respect to our suppliers for Model 3 could be substantially greater than any such issues experienced with respect to our other products. As some of our suppliers for Model S and Model X do not have the resources, equipment or capability to provide components for the Model 3 in line with our requirements, we have engaged a significant number of new suppliers, and we need such suppliers to ramp and deliver according to our schedule. There is no assurance that these suppliers will ultimately be able to meet our cost, quality and volume needs, or do so at the times needed. Furthermore, as the scale of our vehicle production increases, we will need to accurately forecast, purchase, warehouse and transport to our manufacturing facilities components at much higher volumes than we have experience with. If we are unable to accurately match the timing and quantities of component purchases to our actual needs, or successfully implement automation, inventory management and other systems to accommodate the increased complexity in our supply chain, we may incur unexpected production disruption, storage, transportation and write-off costs, which could have a material adverse effect on our financial condition and operating results.

***Our future growth and success is dependent upon consumers' willingness to adopt electric vehicles and specifically our vehicles, especially in the mass market demographic which we are targeting with Model 3.***

Our growth is highly dependent upon the adoption by consumers of alternative fuel vehicles in general and electric vehicles in particular. Although we have successfully grown demand for Model S and Model X, have seen very strong initial demand for Model 3, and believe that we will be able to continue to grow demand separately for each of these and future vehicles, there is no guarantee of such future demand or that our vehicles will not compete with one another in the market. Moreover, the mass market demographic which we are targeting with Model 3 is larger, but more competitive, than the demographic for Model S and Model X, and additional electric vehicles are entering the market.

If the market for electric vehicles in general and Tesla vehicles in particular does not develop as we expect, or develops more slowly than we expect, or if demand for our vehicles decreases in key and other markets, our business, prospects, financial condition and operating results could be harmed. The market for alternative fuel vehicles is relatively new, rapidly evolving, and could be affected by numerous external factors, such as:

- perceptions about electric vehicle features, quality, safety, performance and cost;
- perceptions about the limited range over which electric vehicles may be driven on a single battery charge;

- competition, including from other types of alternative fuel vehicles, plug-in hybrid electric vehicles, and high fuel-economy internal combustion engine vehicles;
- volatility in the cost of oil and gasoline;
- government regulations and economic incentives; and
- access to charging facilities.

***Future problems or delays in expanding Gigafactory 1 or ramping operations there could negatively affect the production and profitability of our products, such as Model 3.***

To lower the cost of cell production and produce cells in high volume, we have vertically integrated the production of lithium-ion cells and finished battery packs for Model 3 and energy storage products at Gigafactory 1. While Gigafactory 1 began producing lithium-ion cells for energy storage products in January 2017 and has since begun producing lithium-ion cells for Model 3, we have no other direct experience in the production of lithium-ion cells. Given the size and complexity of this undertaking, it is possible that future events could result in the cost of expanding and operating Gigafactory 1 exceeding our current expectations and Gigafactory 1 taking longer to ramp production and expand than we currently anticipate. In order to reach our planned volume and gross margin for Model 3, we must have significant cell production from Gigafactory 1, which, among other things, requires Panasonic to successfully ramp its all-new cell production lines to significant volumes over a short period of time. Although Panasonic has a long track record of producing high-quality cells at significant volume at its factories in Japan, it has never before started and ramped cell production at a factory in the U.S. like at Gigafactory 1. In addition, we have started producing several components for Model 3, such as battery modules incorporating the lithium-ion cells produced by Panasonic, at Gigafactory 1. Some of the manufacturing lines for such components have taken longer than anticipated to ramp to their full capacity. We expect that we will continue to experience challenges as we move through the ramp, and we will continue to fine-tune our manufacturing lines to address them. While we currently believe that we will reach our production targets, if we are unable to resolve ramping challenges and expand Gigafactory 1 production in a timely manner and at reasonable prices, and if we or Panasonic are unable to attract, hire and retain a substantial number of highly skilled personnel, our ability to supply battery packs or other components for Model 3 and our other products could be negatively impacted. Any such problems or delays with Gigafactory 1 could negatively affect our brand and harm our business, prospects, financial condition and operating results.

***If our vehicles or other products that we sell or install fail to perform as expected, our ability to develop, market and sell our products and services could be harmed.***

If our vehicles or our energy products were to contain defects in design and manufacture that cause them not to perform as expected or that require repair, or certain features of our vehicles, such as full self-driving, take longer than expected to become enabled or are legally restricted, our ability to develop, market and sell our products and services could be harmed. For example, the operation of our vehicles is highly dependent on software, which is inherently complex and could conceivably contain latent defects and errors or be subject to external attacks. Issues experienced by customers have included those related to the software for the 17 inch display screen, the panoramic roof and the 12 volt battery in the Model S and the seats and doors in the Model X. Although we attempt to remedy any issues we observe in our products as effectively and rapidly as possible, such efforts may not be timely, may hamper production or may not be up to the satisfaction of our customers. While we have performed extensive internal testing on the products we manufacture, we currently have a limited frame of reference by which to evaluate detailed long-term quality, reliability, durability and performance characteristics of our battery packs, powertrains, vehicles and energy storage products. There can be no assurance that we will be able to detect and fix any defects in our products prior to their sale to or installation for consumers.

Any product defects, delays or legal restrictions on product features, or other failure of our products to perform as expected could harm our reputation and result in delivery delays, product recalls, product liability claims, significant warranty and other expenses, and could have a material adverse impact on our business, financial condition, operating results and prospects. Model 3 has not yet been evaluated by NHTSA for a star rating under the New Car Assessment Program, and while based on our internal evaluation we expect to obtain comparable ratings to those achieved by Model S and Model X, there is no assurance this will occur.



***If we fail to scale our business operations and otherwise manage future growth and adapt to new conditions effectively as we rapidly grow our company, including internationally, we may not be able to produce, market, sell and service our products successfully.***

Any failure to manage our growth effectively could materially and adversely affect our business, prospects, operating results and financial condition. We continue to expand our operations significantly, including internationally, including by a transition to high volume vehicle production with the ramp of Model 3 and the worldwide sales, delivery and servicing of a significantly higher number of vehicles than our current vehicle fleet in the coming years. Furthermore, we are developing and growing our energy storage product and solar business worldwide, including in countries where we have limited or no previous operating experience in connection with our vehicle business. Our future operating results depend to a large extent on our ability to manage our expansion and growth successfully. We may not be successful in undertaking this global expansion if we are unable to control expenses and avoid cost overruns and other unexpected operating costs; establish sufficient worldwide automobile sales, delivery, service and Supercharger facilities in a timely manner; adapt our products and conduct our operations to meet local requirements; implement the required infrastructure, systems and processes; and find and hire a significant number of additional manufacturing, engineering, service, electrical installation, construction and administrative personnel.

***If we are unable to achieve our targeted manufacturing costs for our vehicles, including Model 3, our financial condition and operating results will suffer.***

While we have experienced and expect in the future to realize cost reductions by both us and our suppliers, there is no guarantee we will be able to achieve sufficient cost savings to reach our gross margin and profitability goals. We incur significant costs related to procuring the materials required to manufacture our vehicles, assembling vehicles and compensating our personnel. We may also incur substantial costs or cost overruns in utilizing and increasing the production capability of our vehicle manufacturing facilities, such as for Model 3. Furthermore, if we are unable to achieve production cost targets on our vehicles pursuant to our plans, we may not be able to meet our gross margin and other financial targets. Many of the factors that impact our manufacturing costs are beyond our control, such as potential increases in the costs of our materials and components, such as lithium, nickel, and other components of our battery cells or aluminum used to produce body panels. If we are unable to continue to control and reduce our manufacturing costs, our operating results, business and prospects will be harmed.

***We are significantly dependent upon revenue generated from the sale of a limited fleet of electric vehicles, which currently includes Model S, Model X and Model 3.***

We currently generate a significant percentage of our revenues from the sale of two products: Model S and Model X vehicles. Model 3, for which we are planning significantly higher volumes than Model S or Model X, has required and will continue to require significant investment in connection with its ongoing ramp, and there is no guarantee that it will be commercially successful. Historically, automobile customers have come to expect a variety of vehicles offered in a manufacturer's fleet and new and improved vehicle models to be introduced frequently. In order to meet these expectations, we may in the future be required to introduce on a regular basis new vehicle models as well as enhanced versions of existing vehicle models. To the extent our product variety and cycles do not meet consumer expectations, or cannot be produced on our projected timelines and cost and volume targets, our future sales may be adversely affected. This could have a material adverse effect on our business, prospects, financial condition and operating results.

***Our vehicles and energy storage products make use of lithium-ion battery cells, which have been observed to catch fire or vent smoke and flame, and such events have raised concerns, and future events may lead to additional concerns, about the batteries used in automotive applications.***

The battery packs that we produce make use of lithium-ion cells. On rare occasions, lithium-ion cells can rapidly release the energy they contain by venting smoke and flames in a manner that can ignite nearby materials as well as other lithium-ion cells. While we have designed the battery pack to passively contain any single cell's release of energy without spreading to neighboring cells, there can be no assurance that a field or testing failure of our vehicles or other battery packs that we produce will not occur, which could subject us to lawsuits, product recalls, or redesign efforts, all of which would be time consuming and expensive. Also, negative public perceptions regarding the suitability of lithium-ion cells for automotive applications or any future incident involving lithium-ion

cells such as a vehicle or other fire, even if such incident does not involve our vehicles or energy storage products, could seriously harm our business.

In addition, we store a significant number of lithium-ion cells at our facilities and plan to produce high volumes of cells and battery modules and packs at Gigafactory 1. Any mishandling of battery cells may cause disruption to the operation of our facilities. While we have implemented safety procedures related to the handling of the cells, there can be no assurance that a safety issue or fire related to the cells would not disrupt our operations. Such damage or injury could lead to adverse publicity and potentially a safety recall. Moreover, any failure of a competitor's electric vehicle or energy storage product may cause indirect adverse publicity for us and our products. Such adverse publicity could negatively affect our brand and harm our business, prospects, financial condition and operating results.

***Increases in costs, disruption of supply or shortage of materials, in particular for lithium-ion cells, could harm our business.***

We may experience increases in the cost or a sustained interruption in the supply or shortage of materials. Any such increase, supply interruption or shortage could materially and negatively impact our business, prospects, financial condition and operating results. We use various materials in our business including aluminum, steel, lithium, nickel, copper and cobalt, as well as lithium-ion cells from suppliers. The prices for these materials fluctuate, and their available supply may be unstable, depending on market conditions and global demand for these materials, including as a result of increased production of electric vehicles and energy storage products by our competitors, and could adversely affect our business and operating results. For instance, we are exposed to multiple risks relating to lithium-ion cells. These risks include:

- an increase in the cost, or decrease in the available supply, of materials used in the cells;
- disruption in the supply of cells due to quality issues or recalls by battery cell manufacturers or any issues that may arise with respect to cells manufactured at our own facilities; and
- fluctuations in the value of the Japanese yen against the U.S. dollar as our battery cell purchases for Model S and Model X and some raw materials for cells used in Model 3 and energy storage products are currently denominated in Japanese yen.

Our business is dependent on the continued supply of battery cells for the battery packs used in our vehicles and energy storage products. While we believe several sources of the battery cells are available for such battery packs, and expect to eventually rely substantially on battery cells manufactured at our own facilities, we have to date fully qualified only a very limited number of suppliers for the cells used in such battery packs and have very limited flexibility in changing cell suppliers. In particular, we have fully qualified only one supplier for the cells used in battery packs for our current production vehicles. Any disruption in the supply of battery cells from such suppliers could disrupt production of our vehicles and of the battery packs we produce for energy products until such time as a different supplier is fully qualified. Furthermore, fluctuations or shortages in petroleum and other economic conditions may cause us to experience significant increases in freight charges and material costs. Substantial increases in the prices for our materials or prices charged to us, such as those charged by battery cell suppliers, would increase our operating costs, and could reduce our margins if we cannot recoup the increased costs through increased vehicle prices. Any attempts to increase vehicle prices in response to increased material costs could result in cancellations of vehicle orders and reservations and therefore materially and adversely affect our brand, image, business, prospects and operating results.

***We may become subject to product liability claims, which could harm our financial condition and liquidity if we are not able to successfully defend or insure against such claims.***

Although we design our vehicles to be the safest vehicles on the road, product liability claims could harm our business, prospects, operating results and financial condition. The automobile industry in particular experiences significant product liability claims and we face inherent risk of exposure to claims in the event our vehicles do not perform as expected. As is true for other automakers, our cars have been involved and we expect in the future will be involved in crashes resulting in death or personal injury, and such crashes where autopilot is engaged are the subject of significant public attention. We have experienced and we expect to continue to face claims related to misuse or failures of new technologies that we are pioneering, including autopilot in our vehicles. Moreover, as our solar energy systems and energy storage products generate and store electricity, they have the potential to cause

injury to people or property. A successful product liability claim against us could require us to pay a substantial monetary award. Our risks in this area are particularly pronounced given the relatively limited number of vehicles and energy storage products delivered to date and limited field experience of our products. Moreover, a product liability claim could generate substantial negative publicity about our products and business and could have material adverse effect on our brand, business, prospects and operating results. In most jurisdictions, we generally self-insure against the risk of product liability claims for vehicle exposure, meaning that any product liability claims will likely have to be paid from company funds, not by insurance.

***The markets in which we operate are highly competitive, and we may not be successful in competing in these industries. We currently face competition from new and established domestic and international competitors and expect to face competition from others in the future, including competition from companies with new technology.***

The worldwide automotive market, particularly for alternative fuel vehicles, is highly competitive today and we expect it will become even more so in the future. There is no assurance that our vehicles will be successful in the respective markets in which they compete. Many established and new automobile manufacturers such as Audi, BMW, Daimler, General Motors, Toyota and Volvo, as well as other companies, have entered or are reported to have plans to enter the alternative fuel vehicle market, including hybrid, plug-in hybrid and fully electric vehicles, as well as the market for self-driving technology and applications. In some cases, such competitors have announced an intention to produce electric vehicles exclusively at some point in the future. Most of our current and potential competitors have significantly greater financial, technical, manufacturing, marketing, vehicle sales networks and other resources than we do and may be able to devote greater resources to the design, development, manufacturing, distribution, promotion, sale and support of their products. Increased competition could result in lower vehicle unit sales, price reductions, revenue shortfalls, loss of customers and loss of market share, which could harm our business, prospects, financial condition and operating results. In addition, our Model 3 vehicle faces competition from existing and future automobile manufacturers in the extremely competitive entry-level premium sedan market, including Audi, BMW, Lexus and Mercedes.

The solar and energy storage industries are highly competitive. We face competition from other manufacturers, developers and installers of solar and energy storage systems, as well as from large utilities. Decreases in the retail prices of electricity from utilities or other renewable energy sources could make our products less attractive to customers and lead to an increased rate of customer defaults under our existing long-term leases and PPAs. Moreover, solar panel and lithium-ion battery prices have declined and are continuing to decline. As we increase our battery and solar manufacturing capabilities, including at Gigafactory 1 and Gigafactory 2, future price declines may harm our ability to produce energy storage systems and solar systems at competitive prices.

***If we are unable to establish and maintain confidence in our long-term business prospects among consumers, analysts and within our industries, then our financial condition, operating results, business prospects and stock price may suffer materially.***

Consumers may be less likely to purchase our products now if they are not convinced that our business will succeed or that our service and support and other operations will continue in the long term. Similarly, suppliers and other third parties will be less likely to invest time and resources in developing business relationships with us if they are not convinced that our business will succeed. Accordingly, in order to build and maintain our business, we must maintain confidence among customers, suppliers, analysts and other parties in our long-term financial viability and business prospects. Maintaining such confidence may be particularly complicated by certain factors, such as our limited operating history, unfamiliarity with our products, competition and uncertainty regarding the future of electric vehicles or our other products and services and our quarterly production and sales performance compared with market expectations. Many of these factors are largely outside our control, and any negative perceptions about our long-term business prospects, even if exaggerated or unfounded, would likely harm our business and make it more difficult to raise additional funds if needed.

***Our plan to generate ongoing growth and demand, including by expanding our network of Tesla stores, galleries, delivery centers, service centers and Superchargers, will require significant cash investments and management resources and may not meet expectations with respect to additional sales or installations of our products or availability of Superchargers.***

We plan to generate ongoing growth and demand, including by globally expanding our network of Tesla stores, galleries, delivery centers, service centers, mobile service offerings and Superchargers. These plans will require significant cash investments and management resources and may not meet our expectations with respect to additional sales or installations of our products. This ongoing global expansion, which includes planned entry into markets in which we have limited or no experience selling, delivering, installing and/or servicing our products, and which may pose legal, regulatory, labor, cultural and political challenges that we have not previously encountered, may not have the desired effect of increasing sales and installations and expanding our brand presence to the degree we are anticipating. Furthermore, the increasing number of Model S and Model X vehicles, as well as the significant increase in our vehicle fleet size that we expect from Model 3, will require us to continue to increase the number of our Supercharger stations and connectors significantly. If we fail to do so, our customers could become dissatisfied, which could adversely affect sales of our vehicles. We will also need to ensure we are in compliance with any regulatory requirements applicable to the sale, installation and service of our products, the sale of electricity generated through our solar energy systems, and operation of Superchargers in those jurisdictions, which could take considerable time and expense. If we experience any delays or cannot meet customer expectations in expanding our customer infrastructure network, or our expansion plans are not successful in continuing to grow demand, this could lead to a decrease or stagnation in sales or installations of our products and could negatively impact our business, prospects, financial condition and operating results.

***We face risks associated with our international operations and expansion, including unfavorable regulatory, political, tax and labor conditions, and with establishing ourselves in new markets, all of which could harm our business.***

We currently have international operations and subsidiaries in various countries and jurisdictions that are subject to legal, political, and regulatory requirements and social and economic conditions that may be very different from those affecting us domestically. Additionally, as part of our growth strategy, we will continue to expand our sales, delivery, service and Supercharger locations internationally. International expansion requires us to make significant expenditures, including the establishment of local operating entities, hiring of local employees and establishing facilities in advance of generating any revenue.

We are subject to a number of risks associated with international business activities that may increase our costs, impact our ability to sell our products and require significant management attention. These risks include conforming our products to various international regulatory and safety requirements as well as charging and other electric infrastructures, difficulty in establishing, staffing and managing foreign operations, challenges in attracting customers, foreign government taxes, regulations and permit requirements, our ability to enforce our contractual rights; trade restrictions, customs regulations, tariffs and price or exchange controls, and preferences of foreign nations for domestically manufactured products.

***If we fail to effectively grow and manage the residual, financing and credit risks related to our vehicle financing programs, our business may suffer.***

We offer vehicle financing arrangements for Model S and Model X through our local subsidiaries in the U.S., Canada, Germany and the UK, including leasing directly through certain of those subsidiaries. The profitability of the leasing program depends on our ability to accurately project residual values, secure adequate financing and/or business partners to fund and grow this program, and screen for and manage customer credit risk. We expect the need for leasing and other financing options will continue to be important to Model S and Model X deliveries and for Model 3 in the long term. If we are unable to adequately fund our leasing program with internal funds, or partners or other external financing sources, and compelling alternative financing programs are not available for our customers, we may be unable to grow our sales. Furthermore, if our leasing business grows substantially, our business may suffer if we cannot effectively manage the greater levels of residual and credit risks resulting from growth. Finally, if we do not successfully monitor and comply with applicable national, state and/or local financial regulations and consumer protection laws governing lease transactions, we may become subject to enforcement actions or penalties, either of which may harm our business.

***The unavailability, reduction or elimination of, or unfavorable determinations with respect to, government and economic incentives in the U.S. and abroad supporting the development and adoption of electric vehicles or solar energy could have some impact on demand for our products and services.***

We currently benefit from certain government and economic incentives supporting the development and adoption of electric vehicles. In the U.S. and abroad, such incentives include, among other things, tax credits or rebates that encourage the purchase of electric vehicles. In Norway, for example, the purchase of electric vehicles is not currently subject to import taxes, taxes on non-recurring vehicle fees, the 25% value added tax or the purchase taxes that apply to the purchase of gas-powered vehicles. Notably, the quantum of incentive programs promoting electric vehicles is a tiny fraction of the amount of subsidies that are provided to gas-powered vehicles through the oil and gas industries. Nevertheless, even the limited benefits from such programs could be reduced, eliminated or exhausted. For example, in April 2017 and January 2016, respectively, previously available incentives in Hong Kong and Denmark that favored the purchase of electric vehicles expired, negatively impacting sales. Moreover, under current regulations, a \$7,500 federal tax credit available in the U.S. for the purchase of qualified electric vehicles with at least 17 kWh of battery capacity, such as our vehicles, will begin to phase out over time with respect to any vehicles delivered in the second calendar quarter following the quarter in which we deliver our 200,000<sup>th</sup> qualifying vehicle in the U.S. We currently expect such 200,000<sup>th</sup> qualifying delivery to occur at some point during 2018. In addition, California implemented regulations phasing out a \$2,500 cash rebate on qualified electric vehicles for high-income consumers, which became effective in March 2016. In certain circumstances, there is pressure from the oil and gas lobby or related special interests to bring about such developments, which could have some negative impact on demand for our vehicles.

In addition, certain governmental rebates, tax credits and other financial incentives that are currently available with respect to our solar and energy storage product businesses allow us to lower our installation costs and cost of capital and encourage customers to buy our products and investors to invest in our solar financing funds. However, these incentives may expire on a particular date, end when the allocated funding is exhausted or be reduced or terminated as renewable energy adoption rates increase, often without warning. For example, the federal government currently offers a 30% investment tax credit (“ITC”) for the installation of solar power facilities and energy storage systems that are charged from a co-sited solar power facility. The ITC is currently scheduled to decline to 10%, and expire altogether for residential systems, by January 2022. Likewise, in jurisdictions where net energy metering is currently available, our customers receive bill credits from utilities for energy that their solar energy systems generate and export to the grid in excess of the electric load they use. Several jurisdictions have reduced or eliminated the benefit available under net energy metering, or have proposed to do so. Such reductions in or termination of governmental incentives could adversely impact our results by making our products less competitive for potential customers, increasing our cost of capital and adversely impacting our ability to attract investment partners and to form new financing funds for our solar and energy storage assets. Additionally, the enactment of the Tax Cuts and Jobs Act in the U.S. could potentially increase the cost, and decrease the availability, of renewable energy financing, by reducing the value of depreciation benefits associated with, and the overall investor tax capacity needed to monetize, renewable energy projects. Such changes could lower the overall investment willingness and capacity for such projects available in the market.

Moreover, we and our fund investors claim the ITC in amounts based on the fair market value of our solar and energy storage systems. Although we obtain independent appraisals to support the claimed fair market values, the relevant governmental authorities have audited such values and in certain cases have determined that they should be lower, and they may do so in the future. Such determinations may result in adverse tax consequences and/or our obligation to make indemnification or other payments, or contribute additional assets, to our funds or fund investors.

***Any failure by us to realize the expected benefits of our substantial investments and commitments with respect to the manufacture of PV cells and modules, including if we are unable to comply with the terms of our agreement with the Research Foundation for the State University of New York relating to our Gigafactory 2, could result in negative consequences for our business.***

We own certain PV cell and module manufacturing and technology assets, and a build-to-suit lease arrangement with the Research Foundation for the State University of New York (the “SUNY Foundation”). This agreement with the SUNY Foundation provides for the construction of Gigafactory 2 in Buffalo, New York, which at full capacity we expect will be capable of producing at least 1.0 gigawatt of PV cells and modules annually, including for our Solar Roof. Under this agreement, we are obligated to, among other things, employ specified

minimum numbers of personnel in the State of New York and spend or incur \$5.0 billion in combined capital, operational expenses, costs of goods sold and other costs in the State of New York during the 10-year period following the completion of all construction and related infrastructure, the arrival of manufacturing equipment, and the receipt of certain permits and other specified items at Gigafactory 2. If we fail in any year over the course of the term of the agreement to meet these obligations, we would be obligated to pay a “program payment” of \$41.2 million to the SUNY Foundation in such year. Any inability on our part to comply with the requirements of this agreement may result in the payment of significant amounts to the SUNY Foundation, the termination of our lease at Gigafactory 2, and/or the need to secure an alternative supply of PV cells and modules for products such as our Solar Roof. Moreover, if we are unable to utilize our manufacturing and technology assets in accordance with our expectations, we may have to recognize accounting charges pertaining to the write-off of such assets. Any of the foregoing events could have a material adverse effect on our business, prospects, financial condition and operating results.

***If we are unable to attract and/or retain key employees and hire qualified personnel, our ability to compete could be harmed.***

The loss of the services of any of our key employees could disrupt our operations, delay the development and introduction of our vehicles and services, and negatively impact our business, prospects and operating results. In particular, we are highly dependent on the services of Elon Musk, our Chief Executive Officer, and Jeffrey B. Straubel, our Chief Technical Officer.

None of our key employees is bound by an employment agreement for any specific term and we may not be able to successfully attract and retain senior leadership necessary to grow our business. Our future success depends upon our ability to attract and retain executive officers and other key technology, sales, marketing, engineering, manufacturing and support personnel and any failure to do so could adversely impact our business, prospects, financial condition and operating results.

Key talent may leave Tesla due to various factors, such as a very competitive labor market for talented individuals with automotive or technology experience. In California, Nevada and other regions where we have operations, there is increasing competition for individuals with skillsets needed for our business, including specialized knowledge of electric vehicles, software engineering, manufacturing engineering, and other skills such as electrical and building construction expertise. This competition affects both our ability to retain key employees and hire new ones. Our continued success depends upon our continued ability to hire new employees in a timely manner, especially to support our expansion plans and ramp to high-volume manufacture of vehicles, and retain current employees. Additionally, we compete with both mature and prosperous companies that have far greater financial resources than we do and start-ups and emerging companies that promise short-term growth opportunities. Difficulties in retaining current employees or recruiting new ones could have an adverse effect on our performance.

***We are highly dependent on the services of Elon Musk, our Chief Executive Officer.***

We are highly dependent on the services of Elon Musk, our Chief Executive Officer, Chairman of our Board of Directors and largest stockholder. Although Mr. Musk spends significant time with Tesla and is highly active in our management, he does not devote his full time and attention to Tesla. Mr. Musk also currently serves as Chief Executive Officer and Chief Technical Officer of Space Exploration Technologies, a developer and manufacturer of space launch vehicles, and is involved in other emerging technology ventures.

On February 8, 2018, we filed a proxy statement with the U.S. Securities and Exchange Commission pursuant to which we are seeking stockholder approval of the grant in January 2018 of a 10-year performance-based stock option award for Mr. Musk, which will be forfeited if not so approved (the “CEO Performance Award”). Mr. Musk currently has no other compensation at Tesla, other than a prior performance-based stock option award granted to Mr. Musk in 2012, which has vested as to 9 out of 10 tranches, and a state-mandated minimum wage salary that he has never accepted. There is no assurance that the CEO Performance Award will receive stockholder approval.

***We are subject to various environmental and safety laws and regulations that could impose substantial costs upon us and negatively impact our ability to operate our manufacturing facilities.***

As a manufacturing company, including with respect to facilities such as the Tesla Factory, Gigafactory 1 and Gigafactory 2, we are subject to complex environmental, health and safety laws and regulations at numerous

jurisdictional levels in the U.S. and abroad, including laws relating to the use, handling, storage, disposal and human exposure to hazardous materials. The costs of compliance, including remediating contamination if any is found on our properties and any changes to our operations mandated by new or amended laws, may be significant. We may also face unexpected delays in obtaining permits and approvals required by such laws in connection with our manufacturing facilities, which would hinder our operation of these facilities. Such costs and delays may adversely impact our business prospects and operating results. Furthermore, any violations of these laws may result in substantial fines and penalties, remediation costs, third party damages, or a suspension or cessation of our operations.

***Our business may be adversely affected by any disruptions caused by union activities.***

It is common for employees at companies with significant manufacturing operations such as us to belong to a union, which can result in higher employee costs and increased risk of work stoppages. Moreover, regulations in some jurisdictions outside of the U.S. mandate employee participation in industrial collective bargaining agreements and work councils with certain consultation rights with respect to the relevant companies' operations. Although we work diligently to provide the best possible work environment for our employees, they may still decide to join or seek recognition to form a labor union, or we may be required to become a union signatory. The United Automobile Workers has publicly announced a desire to organize the Tesla Factory, and has been engaged in a campaign against the company. Furthermore, we are directly or indirectly dependent upon companies with unionized work forces, such as parts suppliers and trucking and freight companies, and work stoppages or strikes organized by such unions could have a material adverse impact on our business, financial condition or operating results. If a work stoppage occurs, it could delay the manufacture and sale of our products and have a material adverse effect on our business, prospects, operating results or financial condition.

***Our products and services are subject to substantial regulations, which are evolving, and unfavorable changes or failure by us to comply with these regulations could substantially harm our business and operating results.***

Motor vehicles are subject to substantial regulation under international, federal, state, and local laws. We incur significant costs in complying with these regulations and may be required to incur additional costs to comply with any changes to such regulations, and any failures to comply could result in significant expenses, delays or fines. We are subject to laws and regulations applicable to the manufacture, import, sale and service of automobiles internationally. For example, in countries outside of the U.S., we are required to meet standards relating to vehicle safety, fuel economy and emissions, among other things, that are often materially different from requirements in the U.S., thus resulting in additional investment into the vehicles and systems to ensure regulatory compliance in those countries. This process may include official review and certification of our vehicles by foreign regulatory agencies prior to market entry, as well as compliance with foreign reporting and recall management systems requirements.

Additionally, our vehicles are equipped with a suite of driver-assistance features called autopilot, which help assist drivers with certain tedious and potentially dangerous aspects of road travel, but require drivers to remain engaged. There is a variety of international, federal, and state regulations that may apply to self-driving vehicles, which include many existing vehicle standards that were not originally intended to apply to vehicles that may not have a driver. Such regulations continue to rapidly change, which increases the likelihood of a patchwork of complex or conflicting regulations, or may delay products or restrict self-driving features and availability, any of which could adversely affect our business.

Moreover, as a manufacturer and installer of solar generation and energy storage systems and a supplier of electricity generated and stored by the solar energy and energy storage systems we install for customers, we are impacted by federal, state and local regulations and policies concerning electricity pricing, the interconnection of electricity generation and storage equipment with the electric grid, and the sale of electricity generated by third-party owned systems. For example, existing or proposed regulations and policies would permit utilities to limit the amount of electricity generated by our customers with their solar energy systems, charge fees and penalties to our customers relating to the purchase of energy other than from the grid, adjust electricity rate designs such that the price of our solar products may not be competitive with that of electricity from the grid, restrict us and our customers from transacting under our PPAs or qualifying for government incentives and benefits that apply to solar power, and limit or eliminate net energy metering. If such regulations and policies remain in effect or are adopted in other jurisdictions, or if other regulations and policies that adversely impact the interconnection of our solar and energy storage systems to the grid are introduced, modified or eliminated, they could deter potential customers from

purchasing our solar and energy storage products, threaten the economics of our existing contracts and cause us to cease solar and energy storage system sales and operations in the relevant jurisdictions, which could harm our business, prospects, financial condition and results of operations.

***We are subject to various privacy and consumer protection laws.***

Our privacy policy is posted on our website, and any failure by us or our vendor or other business partners to comply with it or with federal, state or international privacy, data protection or security laws or regulations could result in regulatory or litigation-related actions against us, legal liability, fines, damages and other costs. We may also incur substantial expenses and costs in connection with maintaining compliance with such laws. For example, commencing in May 2018, the General Data Protection Regulation (the “GDPR”) will fully apply to the processing of personal information collected from individuals located in the European Union. The GDPR will create new compliance obligations and will significantly increase fines for noncompliance. Although we take steps to protect the security of our customers’ personal information, we may be required to expend significant resources to comply with data breach requirements if third parties improperly obtain and use the personal information of our customers or we otherwise experience a data loss with respect to customers’ personal information. A major breach of our network security and systems could have negative consequences for our business and future prospects, including possible fines, penalties and damages, reduced customer demand for our vehicles, and harm to our reputation and brand.

***We may be compelled to undertake product recalls or take other actions, which could adversely affect our brand image and financial performance.***

Any product recall, including for solar or charging equipment, in the future may result in adverse publicity, damage our brand and adversely affect our business, prospects, operating results and financial condition. For example, certain limited vehicle recalls that we initiated in the past two years have resulted from a component that could prevent the parking brake from releasing once engaged, a concern with the firmware in the restraints control module in certain right-hand-drive vehicles, industry-wide issues with airbags from a particular supplier, a front seat belt issue in a single field vehicle, and Model X seat components that could cause unintended seat movement during a collision. Furthermore, testing of our vehicles by government regulators or industry groups may require us to initiate vehicle recalls or may result in negative public perceptions about the safety of our vehicles. In the future, we may at various times, voluntarily or involuntarily, initiate a recall if any of our products or our electric vehicle powertrain components that we have provided to other vehicle OEMs, including any systems or parts sourced from our suppliers, prove to be defective or noncompliant with applicable laws and regulations, such as federal motor vehicle safety standards. Such recalls, whether voluntary or involuntary or caused by systems or components engineered or manufactured by us or our suppliers, could involve significant expense and could adversely affect our brand image in our target markets, as well as our business, prospects, financial condition and results of operations.

***Our resale value guarantee and leasing programs for our vehicles expose us to the risk that the resale values of vehicles returned to us are lower than our estimates and may result in lower revenues, gross margin, profitability and liquidity.***

We have provided resale value guarantees to many of our customers, under which such customers may sell their vehicles back to us at certain points in time at pre-determined resale values. If the resale values of any vehicles resold or returned to us pursuant to these programs are materially lower than our estimates, our profitability and/or liquidity could be negatively impacted.

We have applied lease accounting on leases made directly by us and, prior to 2018, on all leases made by our leasing partners and sales by us of vehicles with a resale value guarantee. Under lease accounting, we recognize the associated revenues and costs of the vehicle sale over time rather than fully upfront at vehicle delivery. As a result, these programs generate lower revenues in the period the car is delivered and higher gross margins during the period of the resale value guarantee as compared to purchases in which the resale value guarantee does not apply. A higher than anticipated prevalence of these programs could therefore have an adverse impact on our near term revenues and operating results. Moreover, unlike the sale of a vehicle with a resale value guarantee or programs with leasing partners which do not impact our cash flows and liquidity at the time of vehicle delivery, under a lease held directly by us, we may receive only a very small portion of the total vehicle purchase price at the time of lease, followed by a stream of payments over the term of the lease. To the extent we expand our leasing program without securing



external financing or business partners to support such expansion, our cash flow and liquidity could also be negatively impacted.

***Our current and future warranty reserves may be insufficient to cover future warranty claims which could adversely affect our financial performance.***

Subject to separate limited warranties for the supplemental restraint system, battery and drive unit, we provide four year or 50,000 mile limited warranties for the purchasers of new Model 3, Model S and Model X vehicles and either a four year or 50,000 mile limited warranty or a two year or 100,000 mile limited warranty for the purchasers of used Model S or Model X vehicles certified and sold by us. The limited warranty for the battery and drive unit for new Model S and Model X vehicles covers the drive unit for eight years, as well as the battery for a period of eight years (or for certain older vehicles, 125,000 miles if reached sooner than eight years), although the battery's charging capacity is not covered under any of our warranties or Extended Service plans; the limited warranty for used Model S and Model X vehicles does not extend or otherwise alter the terms of the original battery and drive unit limited warranty for such used vehicles specified in their original New Vehicle Limited Warranty. For the battery and drive unit on our current new Model 3 vehicles, we offer an eight year or 100,000 mile limited warranty for our standard range battery and an eight year or 120,000 mile limited warranty for our long range battery, with minimum 70% retention of battery capacity over the warranty period. In addition, customers of new Model S and Model X vehicles have the opportunity to purchase an Extended Service plan for the period after the end of the limited warranty for their new vehicles to cover additional services for up to an additional four years or 50,000 miles, provided it is purchased within a specified period of time.

For energy storage products, we provide limited warranties against defects and to guarantee minimum energy retention levels. For example, we guarantee that each Powerwall 2 product will maintain at least 70-80% of its stated energy capacity after 10 years, and that each Powerpack 2 product will retain specified minimum energy capacities in each of its first 10 to 15 years of use. For our Solar Roof, we offer a warranty on the glass tiles for the lifetime of a customer's home and a separate warranty for the energy generation capability of the solar tiles. We also offer extended warranties, availability guarantees and capacity guarantees for periods of up to 20 years at an additional cost at the time of purchase, as well as workmanship warranties to customers who elect to have us install their systems.

Finally, customers who buy energy from us under solar energy system leases or PPAs are covered by warranties equal to the length of the agreement term, which is typically 20 years. Systems purchased for cash are covered by a warranty of up to 10 years, with extended warranties available at additional cost. In addition, we pass through to our customers the inverter and panel manufacturers' warranties, which generally range from 5 to 25 years, subjecting us to the risk that the manufacturers may later cease operations or fail to honor their underlying warranties. Finally, we provide a performance guarantee with our leased solar energy systems that compensates a customer on an annual basis if their system does not meet the electricity production guarantees set forth in their lease.

If our warranty reserves are inadequate to cover future warranty claims on our products, our business, prospects, financial condition and operating results could be materially and adversely affected. Warranty reserves include management's best estimate of the projected costs to repair or to replace items under warranty. These estimates are based on actual claims incurred to-date and an estimate of the nature, frequency and costs of future claims. Such estimates are inherently uncertain and changes to our historical or projected experience, especially with respect to products such as Model 3 and Solar Roof that are new and/or that we expect to produce at significantly greater volumes than our past products, may cause material changes to our warranty reserves in the future.

***We are continuously expanding and improving our information technology systems and use security measures designed to protect our systems against breaches and cyber-attacks. If these efforts are not successful, our business and operations could be disrupted and our operating results and reputation could be harmed.***

We are continuously expanding and improving our information technology systems, including implementing new internally developed systems, to assist us in the management of our business. In particular, our volume production of multiple vehicles necessitates continued development, maintenance and improvement of our information technology systems in the U.S. and abroad, which include product data management, procurement, inventory management, production planning and execution, sales, service and logistics, dealer management,

financial, tax and regulatory compliance systems. The implementation, maintenance and improvement of these systems require significant management time, support and cost. Moreover, there are inherent risks associated with developing, improving and expanding our core systems as well as implementing new systems, including the disruption of our data management, procurement, manufacturing execution, finance, supply chain and sales and service processes. These risks may affect our ability to manage our data and inventory, procure parts or supplies or manufacture, sell, deliver and service vehicles, or achieve and maintain compliance with, or realize available benefits under, tax laws and other applicable regulations. We also maintain information technology measures designed to protect us against system security risks, data breaches and cyber-attacks.

We cannot be sure that these systems or their required functionality will be effectively implemented, maintained or expanded as planned. If we do not successfully implement, maintain or expand these systems as planned, our operations may be disrupted, our ability to accurately and/or timely report our financial results could be impaired, and deficiencies may arise in our internal control over financial reporting, which may impact our ability to certify our financial results. Moreover, our proprietary information could be compromised and our reputation may be adversely affected. If these systems or their functionality do not operate as we expect them to, we may be required to expend significant resources to make corrections or find alternative sources for performing these functions.

***Our insurance strategy may not be adequate to protect us from all business risks.***

We may be subject, in the ordinary course of business, to losses resulting from products liability, accidents, acts of God and other claims against us, for which we may have no insurance coverage. As a general matter, we do not maintain as much insurance coverage as many other companies do, and in some cases, we do not maintain any at all. Additionally, the policies that we do have may include significant deductibles or self-insured retentions, and we cannot be certain that our insurance coverage will be sufficient to cover all future losses or claims against us. A loss that is uninsured or which exceeds policy limits may require us to pay substantial amounts, which could adversely affect our financial condition and operating results.

***Our financial results may vary significantly from period-to-period due to fluctuations in our operating costs.***

We expect our period-to-period financial results to vary based on our operating costs which we anticipate will increase significantly in future periods as we, among other things, ramp up the production of Model 3, expand Gigafactory 1, open new Tesla stores and service centers with maintenance and repair capabilities, open new Supercharger locations, ramp production at Gigafactory 2, increase our sales and marketing activities, and increase our general and administrative functions to support our growing operations. Moreover, we expect to continue to design, develop and manufacture new and future products, and increase our production capacity by expanding our current manufacturing facilities and adding future facilities. As a result of these factors, we believe that quarter-to-quarter comparisons of our financial results, especially in the short-term, are not necessarily meaningful and that these comparisons cannot be relied upon as indicators of future performance. Moreover, our financial results may not meet expectations of equity research analysts or investors. If any of this occurs, the trading price of our stock could fall substantially, either suddenly or over time.

***Any unauthorized control or manipulation of our vehicles' systems could result in loss of confidence in us and our vehicles and harm our business.***

Our vehicles contain complex information technology systems. For example, our vehicles are designed with built-in data connectivity to accept and install periodic remote updates from us to improve or update the functionality of our vehicles. We have designed, implemented and tested security measures intended to prevent unauthorized access to our information technology networks, our vehicles and their systems. However, hackers have reportedly attempted, and may attempt in the future, to gain unauthorized access to modify, alter and use such networks, vehicles and systems to gain control of, or to change, our vehicles' functionality, user interface and performance characteristics, or to gain access to data stored in or generated by the vehicle. We encourage reporting of potential vulnerabilities in the security of our vehicles via our security vulnerability reporting policy, and we aim to remedy any reported and verified vulnerabilities. Accordingly, we have received reports of potential vulnerabilities in the past and have attempted to remedy them. However, there can be no assurance that vulnerabilities will not be identified in the future, or that our remediation efforts are or will be successful.

Any unauthorized access to or control of our vehicles or their systems or any loss of data could result in legal claims or proceedings. In addition, regardless of their veracity, reports of unauthorized access to our vehicles, their systems or data, as well as other factors that may result in the perception that our vehicles, their systems or data are capable of being “hacked,” could negatively affect our brand and harm our business, prospects, financial condition and operating results. We have been the subject of such reports in the past.

***Servicing our indebtedness requires a significant amount of cash, and there is no guarantee that we will have sufficient cash flow from our business to pay our substantial indebtedness.***

As of December 31, 2017, we and our subsidiaries had outstanding \$10.17 billion in aggregate principal amount of indebtedness (see Note 13, Convertible and Long-Term Debt Obligations, to the consolidated financial statements included elsewhere in this Annual Report on Form 10-K). Our substantial consolidated indebtedness may increase our vulnerability to any generally adverse economic and industry conditions. We and our subsidiaries may, subject to the limitations in the terms of our existing and future indebtedness, incur additional debt, secure existing or future debt or recapitalize our debt.

Pursuant to their terms, holders of our 1.50% Convertible Senior notes due 2018, 0.25% Convertible Senior Notes due 2019, 1.25% Convertible Senior Notes due 2021 and 2.375% Convertible Senior Notes due 2022 (collectively, the “Tesla Convertible Notes”) may convert their respective Tesla Convertible Notes at their option prior to the scheduled maturities of the respective Tesla Convertible Notes under certain circumstances. Upon conversion of the applicable Tesla Convertible Notes, we will be obligated to deliver cash and/or shares in respect of the principal amounts thereof and the conversion value in excess of such principal amounts on such Tesla Convertible Notes. For example, in June 2017, September 2017 and November 2017, pursuant to separate privately negotiated agreements, we exchanged \$144.8 million, \$10.0 million and \$12.0 million, respectively, in aggregate principal amount of the 1.50% Convertible Senior Notes due 2018 for 1.2 million shares, 0.1 million shares and 0.1 million shares, respectively, of our common stock. Moreover, our subsidiary’s 2.75% Convertible Senior Notes due 2018, 1.625% Convertible Senior Notes due 2019 and Zero-Coupon Convertible Senior Notes due 2020 (collectively, the “Subsidiary Convertible Notes”) are convertible into shares of our common stock at conversion prices ranging from \$300.00 to \$759.36 per share. Finally, holders of the Tesla Convertible Notes and the Subsidiary Convertible Notes will have the right to require us to repurchase their notes upon the occurrence of a fundamental change at a purchase price equal to 100% of the principal amount of the notes, plus accrued and unpaid interest, if any, to, but not including, the fundamental change purchase date.

Our ability to make scheduled payments of the principal and interest on our indebtedness when due or to make payments upon conversion or repurchase demands with respect to our convertible notes, or to refinance our indebtedness as we may need or desire, depends on our future performance, which is subject to economic, financial, competitive and other factors beyond our control. Our business may not continue to generate cash flow from operations in the future sufficient to satisfy our obligations under our existing indebtedness, and any future indebtedness we may incur, and to make necessary capital expenditures. If we are unable to generate such cash flow, we may be required to adopt one or more alternatives, such as reducing or delaying investments or capital expenditures, selling assets, refinancing or obtaining additional equity capital on terms that may be onerous or highly dilutive. Our ability to refinance existing or future indebtedness will depend on the capital markets and our financial condition at such time. In addition, our ability to make payments may be limited by law, by regulatory authority or by agreements governing our future indebtedness. We may not be able to engage in any of these activities or engage in these activities on desirable terms or at all, which could result in a default on our existing or future indebtedness and have a material adverse effect on our business, results of operations and financial condition.

***Our debt agreements contain covenant restrictions that may limit our ability to operate our business.***

The terms of certain of our credit facilities, including our senior secured asset based revolving credit agreement, contain, and any of our other future debt agreements may contain, covenant restrictions that limit our ability to operate our business, including restrictions on our ability to, among other things, incur additional debt or issue guarantees, create liens, repurchase stock or make other restricted payments, and make certain voluntary prepayments of specified debt. In addition, under certain circumstances we are required to comply with a fixed charge coverage ratio. As a result of these covenants, our ability to respond to changes in business and economic conditions and engage in beneficial transactions, including to obtain additional financing as needed, may be restricted. Furthermore, our failure to comply with our debt covenants could result in a default under our debt

agreements, which could permit the holders to accelerate our obligation to repay the debt. If any of our debt is accelerated, we may not have sufficient funds available to repay it.

***We may need or want to raise additional funds and these funds may not be available to us when we need them. If we cannot raise additional funds when we need or want them, our operations and prospects could be negatively affected.***

The design, manufacture, sale, installation and/or servicing of automobiles, energy storage products and solar products is a capital intensive business. Until we are consistently generating positive free cash flows, we may need or want to raise additional funds through the issuance of equity, equity-related or debt securities or through obtaining credit from financial institutions to fund, together with our principal sources of liquidity, the costs of developing and manufacturing our current or future vehicles, energy storage products and/or solar products, to pay any significant unplanned or accelerated expenses or for new significant strategic investments, or to refinance our significant consolidated indebtedness, even if not required to do so by the terms of such indebtedness. We need sufficient capital to fund our ongoing operations, ramp vehicle production, continue research and development projects, establish sales, delivery and service centers, build and deploy Superchargers, expand Gigafactory 1, ramp production at Gigafactory 2 and to make the investments in tooling and manufacturing capital required to introduce new vehicles, energy storage products and solar products. We cannot be certain that additional funds will be available to us on favorable terms when required, or at all. If we cannot raise additional funds when we need them, our financial condition, results of operations, business and prospects could be materially and adversely affected.

Additionally, we use capital from third-party investors to enable our customers' access to our solar energy systems with little or no upfront cost. The availability of this financing depends upon many factors, including the confidence of the investors in the solar energy industry, the quality and mix of our customer contracts, any regulatory changes impacting the economics of our existing customer contracts, changes in law (including tax law), risks or government incentives associated with these financings, and our ability to compete with other renewable energy companies for the limited number of potential investors. Moreover, interest rates are at historically low levels. If the rate of return required by investors rises as a result of a rise in interest rates, it will reduce the present value of the customer payment streams underlying, and therefore the total value of, our financing structures, increasing our cost of capital. If we are unable to establish new financing funds on favorable terms for third-party ownership arrangements, we may be unable to finance installation of our solar energy system lease or PPA customers' systems, or our cost of capital could increase and our liquidity may be negatively impacted, which would have an adverse effect on our business, financial condition and results of operations.

***If we update our manufacturing equipment more quickly than expected, we may have to shorten the useful lives of any equipment to be retired as a result of any such update, and the resulting acceleration in our depreciation could negatively affect our financial results.***

We have invested and expect to continue to invest significantly in what we believe is state of the art tooling, machinery and other manufacturing equipment for our various product lines, and we depreciate the cost of such equipment over their expected useful lives. However, manufacturing technology may evolve rapidly, and we may decide to update our manufacturing process with cutting-edge equipment more quickly than expected. Moreover, as our engineering and manufacturing expertise and efficiency increase, we may be able to manufacture our products using less of our installed equipment. The useful life of any equipment that would be retired early as a result would be shortened, causing the depreciation on such equipment to be accelerated, and our results of operations could be negatively impacted.

***We are exposed to fluctuations in currency exchange rates, which could negatively affect our financial results.***

Our revenues and costs denominated in foreign currencies are not completely matched. As we have increased vehicle deliveries in markets outside of the U.S., we have much higher revenues than costs denominated in other currencies such as the euro, Chinese yuan, Norwegian krone, pound sterling and Canadian dollar. Any strengthening of the U.S. dollar would tend to reduce our revenues as measured in U.S. dollars, as we have historically experienced. In addition, a portion of our costs and expenses have been, and we anticipate will continue to be, denominated in foreign currencies, including the Japanese yen. If we do not have fully offsetting revenues in these currencies and if the value of the U.S. dollar depreciates significantly against these currencies, our costs as measured

in U.S. dollars as a percent of our revenues will correspondingly increase and our margins will suffer. Moreover, while we undertake limited hedging activities intended to offset the impact of currency translation exposure, it is impossible to predict or eliminate such impact. As a result, our operating results could be adversely affected.

***We may face regulatory limitations on our ability to sell vehicles directly which could materially and adversely affect our ability to sell our electric vehicles.***

We sell our vehicles directly to consumers. We may not be able to sell our vehicles through this sales model in each state in the U.S. as some states have laws that may be interpreted to impose limitations on this direct-to-consumer sales model. In certain states in which we are not able to obtain dealer licenses, we have opened galleries, which are not full retail locations.

The application of these state laws to our operations continues to be difficult to predict. Laws in some states have limited our ability to obtain dealer licenses from state motor vehicle regulators and may continue to do so.

In addition, decisions by regulators permitting us to sell vehicles may be challenged by dealer associations and others as to whether such decisions comply with applicable state motor vehicle industry laws. We have prevailed in many of these lawsuits and such results have reinforced our continuing belief that state laws were not designed to prevent our distribution model. In some states, there have also been regulatory and legislative efforts by dealer associations to propose laws that, if enacted, would prevent us from obtaining dealer licenses in their states given our current sales model. A few states have passed legislation that clarifies our ability to operate, but at the same time limits the number of dealer licenses we can obtain or stores that we can operate. We have also filed a lawsuit in federal court in Michigan challenging the constitutionality of the state's prohibition on direct sales as applied to our business.

Internationally, there may be laws in jurisdictions we have not yet entered or laws we are unaware of in jurisdictions we have entered that may restrict our sales or other business practices. Even for those jurisdictions we have analyzed, the laws in this area can be complex, difficult to interpret and may change over time. Continued regulatory limitations and other obstacles interfering with our ability to sell vehicles directly to consumers could have a negative and material impact on our business, prospects, financial condition and results of operations.

***We may need to defend ourselves against intellectual property infringement claims, which may be time-consuming and could cause us to incur substantial costs.***

Others, including our competitors, may hold or obtain patents, copyrights, trademarks or other proprietary rights that could prevent, limit or interfere with our ability to make, use, develop, sell or market our products and services, which could make it more difficult for us to operate our business. From time to time, the holders of such intellectual property rights may assert their rights and urge us to take licenses, and/or may bring suits alleging infringement or misappropriation of such rights. We may consider the entering into licensing agreements with respect to such rights, although no assurance can be given that such licenses can be obtained on acceptable terms or that litigation will not occur, and such licenses could significantly increase our operating expenses. In addition, if we are determined to have infringed upon a third party's intellectual property rights, we may be required to cease making, selling or incorporating certain components or intellectual property into the goods and services we offer, to pay substantial damages and/or license royalties, to redesign our products and services, and/or to establish and maintain alternative branding for our products and services. In the event that we were required to take one or more such actions, our business, prospects, operating results and financial condition could be materially adversely affected. In addition, any litigation or claims, whether or not valid, could result in substantial costs, negative publicity and diversion of resources and management attention.

***Our facilities or operations could be damaged or adversely affected as a result of disasters.***

Our corporate headquarters, the Tesla Factory and Gigafactory 1 are located in seismically active regions in Northern California and Nevada. If major disasters such as earthquakes or other events occur, or our information system or communications network breaks down or operates improperly, our headquarters and production facilities may be seriously damaged, or we may have to stop or delay production and shipment of our products. We may incur expenses relating to such damages, which could have a material adverse impact on our business, operating results and financial condition.

## **Risks Related to the Ownership of Our Common Stock**

### ***The trading price of our common stock is likely to continue to be volatile.***

The trading price of our common stock has been highly volatile and could continue to be subject to wide fluctuations in response to various factors, some of which are beyond our control. Our common stock has experienced an intra-day trading high of \$389.61 per share and a low of \$242.01 per share over the last 52 weeks. The stock market in general, and the market for technology companies in particular, has experienced extreme price and volume fluctuations that have often been unrelated or disproportionate to the operating performance of those companies. Broad market and industry factors may seriously affect the market price of companies' stock, including ours, regardless of actual operating performance. In addition, in the past, following periods of volatility in the overall market and the market price of a particular company's securities, securities class action litigation has often been instituted against these companies. Moreover, stockholder litigation like this has been filed against us in the past. While we are continuing to defend such actions vigorously, any judgment against us or any future stockholder litigation could result in substantial costs and a diversion of our management's attention and resources.

### ***We may fail to meet our publicly announced guidance or other expectations about our business, which could cause our stock price to decline.***

We provide guidance regarding our expected financial and business performance, such as projections regarding sales and production, as well as anticipated future revenues, gross margins, profitability and cash flows. Correctly identifying key factors affecting business conditions and predicting future events is inherently an uncertain process and our guidance may not ultimately be accurate. Our guidance is based on certain assumptions such as those relating to anticipated production and sales volumes and average sales prices, supplier and commodity costs, and planned cost reductions. If our guidance is not accurate or varies from actual results due to our inability to meet our assumptions or the impact on our financial performance that could occur as a result of various risks and uncertainties, the market value of our common stock could decline significantly.

### ***Transactions relating to our convertible notes may dilute the ownership interest of existing stockholders, or may otherwise depress the price of our common stock.***

The conversion of some or all of the Tesla Convertible Notes or the Subsidiary Convertible Notes would dilute the ownership interests of existing stockholders to the extent we deliver shares upon conversion of any of such notes. Our 1.50% Convertible Senior Notes due 2018 and the Subsidiary Convertible Notes have been historically, and the other Tesla Convertible Notes may become in the future, convertible at the option of their holders prior to their scheduled terms under certain circumstances. If holders elect to convert their convertible notes, we could be required to deliver to them a significant number of shares of our common stock. Any sales in the public market of the common stock issuable upon such conversion could adversely affect prevailing market prices of our common stock. In addition, the existence of the convertible notes may encourage short selling by market participants because the conversion of such notes could be used to satisfy short positions, or anticipated conversion of such notes into shares of our common stock could depress the price of our common stock.

Moreover, in connection with each issuance of the Tesla Convertible Notes, we entered into convertible note hedge transactions, which are expected to reduce the potential dilution and/or offset potential cash payments we are required to make in excess of the principal amount upon conversion of the applicable Tesla Convertible Notes. We also entered into warrant transactions with the hedge counterparties, which could separately have a dilutive effect on our common stock to the extent that the market price per share of our common stock exceeds the applicable strike price of the warrants on the applicable expiration dates. In addition, the hedge counterparties or their affiliates may enter into various transactions with respect to their hedge positions, which could also cause or prevent an increase or a decrease in the market price of our common stock or the convertible notes.

### ***Elon Musk has pledged shares of our common stock to secure certain bank borrowings. If Mr. Musk were forced to sell these shares pursuant to a margin call that he could not avoid or satisfy, such sales could cause our stock price to decline.***

Certain banking institutions have made extensions of credit to Elon Musk, our Chief Executive Officer, a portion of which was used to purchase shares of common stock in certain of our public offerings and private placements at the same prices offered to third party participants in such offerings and placements. We are not a party to these loans, which are partially secured by pledges of a portion of the Tesla common stock currently owned by

Mr. Musk. If the price of our common stock were to decline substantially and Mr. Musk were unable to avoid or satisfy a margin call with respect to his pledged shares, Mr. Musk may be forced by one or more of the banking institutions to sell shares of Tesla common stock in order to remain within the margin limitations imposed under the terms of his loans. Any such sales could cause the price of our common stock to decline further.

***Anti-takeover provisions contained in our governing documents, applicable laws and our convertible notes could impair a takeover attempt.***

Our certificate of incorporation and bylaws afford certain rights and powers to our board of directors that could contribute to the delay or prevention of an acquisition that it deems undesirable. We are also subject to Section 203 of the Delaware General Corporation Law and other provisions of Delaware law that limit the ability of stockholders in certain situations to effect certain business combinations. In addition, the terms of our convertible notes require us to repurchase such notes in the event of a fundamental change, including a takeover of our company. Any of the foregoing provisions and terms that has the effect of delaying or deterring a change in control could limit the opportunity for our stockholders to receive a premium for their shares of our common stock, and could also affect the price that some investors are willing to pay for our common stock.

**ITEM 1B. UNRESOLVED STAFF COMMENTS**

None

**ITEM 2. PROPERTIES**

The following table sets forth the location, approximate size and primary use of our principal leased and owned facilities:

Location	Approximate Size (Building) in Square Feet	Primary Use	Lease Expiration Date
Fremont, California	5,500,000	Manufacturing, administration, engineering, service, delivery and warehouse	Owned building
Sparks, Nevada	3,500,000 *	Gigafactory 1, production of lithium-ion battery cells and vehicle drive units	Owned building
Livermore, California	1,002,703	Warehouse	October 2026
Fremont, California	506,490	Administration and manufacturing	September 2029
Tilburg, Netherlands	499,710	Manufacturing, administration, engineering and service	November 2023
Lathrop, California	496,888	Manufacturing	Owned building
Palo Alto, California	350,000	Administration and engineering	January 2020
Lathrop, California	338,564	Warehouse and manufacturing	February 2030
Sparks, Nevada	328,245	Warehouse	December 2020
Sparks, Nevada	304,200	Warehouse	December 2019
Fremont, California	302,400	Engineering	March 2028
Lathrop, California	276,228	Warehouse and manufacturing	September 2024
Lathrop, California	271,075	Manufacturing	May 2025
Fremont, California	229,530	Administration	March 2029
Fremont, California	199,352	Administration and manufacturing	June 2025
Draper, Utah	154,846	Administration	October 2027
Hawthorne, California	132,250	Engineering	December 2022
Bethlehem, Pennsylvania	130,971	Warehouse	April 2022
Beijing, China	83,119	Delivery hub	April 2020
Amsterdam, Netherlands	73,597	Administration and service	February 2024
San Mateo, California	68,025	Administration	July 2022

\* Gigafactory 1 is partially constructed with current occupancy of 3.5 million square feet.

In addition to the properties included in the table above, we also lease a large number of properties in North America, Europe and Asia for our retail and service locations, Supercharger sites, solar installation and maintenance warehouses and regional administrative and sales offices for our solar business. Furthermore, we will begin leasing a 1.1 million square foot solar manufacturing facility (Gigafactory 2 in Buffalo, New York) upon completion in 2018 for an initial term of 10 years.

Our properties are used to support both of our reporting segments.

### **ITEM 3. LEGAL PROCEEDINGS**

#### **Proceedings Related to U.S. Treasury**

In July 2012, SolarCity Corporation (“SolarCity”), along with other companies in the solar energy industry, received a subpoena from the U.S. Treasury Department’s Office of the Inspector General to deliver certain documents in SolarCity’s possession that relate to SolarCity’s applications for U.S. Treasury grants. In February 2013, two financing funds affiliated with SolarCity filed a lawsuit in the U.S. Court of Federal Claims against the U.S. government, seeking to recover \$14.0 million that the U.S. Treasury was obligated to pay, but failed to pay, under Section 1603 of the American Recovery and Reinvestment Act of 2009. In February 2016, the U.S. government filed a motion seeking leave to assert a counterclaim against the two plaintiff funds on the grounds that the U.S. government, in fact, paid them more, not less, than they were entitled to as a matter of law. In September 2017, SolarCity and the U.S. government reached a global settlement of both the investigation and SolarCity’s lawsuit. In that settlement, SolarCity admitted no wrongdoing and agreed to return approximately 5% of the U.S. Treasury cash grants it had received between 2009 and 2013, amounting to \$29.5 million. The investigation is now closed and SolarCity’s lawsuit has been dismissed.

#### **Securities Litigation Relating to SolarCity’s Financial Statements and Guidance**

On March 28, 2014, a purported stockholder class action was filed in the U.S. District Court for the Northern District of California against SolarCity and two of its officers. The complaint alleges violations of federal securities laws, and seeks unspecified compensatory damages and other relief on behalf of a purported class of purchasers of SolarCity’s securities from March 6, 2013 to March 18, 2014. After a series of amendments to the original complaint, the District Court dismissed the amended complaint and entered a judgment in our favor on August 9, 2016. The plaintiffs have filed a notice of appeal. On December 4, 2017, the Court heard oral argument on plaintiffs’ notice of appeal from the dismissal. We believe that the claims are without merit and intend to defend against this lawsuit and appeal vigorously. We are unable to estimate the possible loss or range of loss, if any, associated with this lawsuit.

On August 15, 2016, a purported stockholder class action lawsuit was filed in the U.S. District Court for the Northern District of California against SolarCity, two of its officers and a former officer. On March 20, 2017, the purported stockholder class filed a consolidated complaint that includes the original matter in the same court against SolarCity, one of its officers and three former officers. As consolidated, the complaint alleges that SolarCity made projections of future sales and installations that it failed to achieve and that these projections were fraudulent when made. The suit claimed violations of federal securities laws and sought unspecified compensatory damages and other relief on behalf of a purported class of purchasers of SolarCity’s securities from May 6, 2015 to May 9, 2016. On July 25, 2017, the court took SolarCity’s fully-briefed motion to dismiss under submission. On August 11, 2017, the court granted the motion to dismiss with leave to amend. On September 11, 2017, after lead plaintiff determined he would not amend, the Court dismissed the action with prejudice and entered judgment in favor of SolarCity and the individual defendants.

#### **Securities Litigation Relating to the SolarCity Acquisition**

Between September 1, 2016 and October 5, 2016, seven lawsuits were filed in the Court of Chancery of the State of Delaware by purported stockholders of Tesla challenging our acquisition of SolarCity. Following consolidation, the lawsuit names as defendants the members of Tesla’s board of directors and alleges, among other things, that board members breached their fiduciary duties in connection with the acquisition. The complaint asserts both derivative claims and direct claims on behalf of a purported class and seeks, among other relief, unspecified monetary damages, attorneys’ fees, and costs. On January 27, 2017, the defendants filed a motion to dismiss the operative complaint. Rather than respond to the defendants’ motion, the plaintiffs filed an amended complaint. On March 17, 2017, the defendants filed a motion to dismiss the amended complaint. On December 13, 2017, the Court heard oral argument on



the motion and reserved decision. These same plaintiffs filed a parallel action in the U.S. District Court for the District of Delaware on April 21, 2017, adding claims for violations of the federal securities laws.

On February 6, 2017, a purported stockholder made a demand to inspect Tesla's books and records, purportedly to investigate potential breaches of fiduciary duty in connection with the SolarCity acquisition. On April 17, 2017, the purported stockholder filed a petition for a writ of mandate in California Superior Court, seeking to compel Tesla to provide the documents requested in the demand. Tesla filed a demurrer to the writ petition or, in the alternative, a motion to stay the action. On November 9, 2017, the court granted Tesla's motion and dismissed the action without prejudice.

On March 24, 2017, another lawsuit was filed in the U.S. District Court for the District of Delaware by a purported Tesla stockholder challenging the SolarCity acquisition. The complaint alleges, among other things, that Tesla's board of directors breached their fiduciary duties in connection with the acquisition and alleges violations of the federal securities laws.

We believe that claims challenging the SolarCity acquisition are without merit. We are unable to estimate the possible loss or range of loss, if any, associated with these claims.

#### **Securities Litigation Relating to Production of Model 3 Vehicles**

On October 10, 2017, a purported stockholder class action was filed in the U.S. District Court for the Northern District of California against Tesla, Inc., two of its current officers, and a former officer. The complaint alleges violations of federal securities laws, and seeks unspecified compensatory damages and other relief on behalf of a purported class of purchasers of Tesla securities from May 4, 2016 to October 6, 2017. The lawsuit claims that Tesla supposedly made materially false and misleading statements regarding the Company's preparedness to produce Model 3 vehicles. We believe that the claims are without merit and intend to defend against this lawsuit vigorously. We are unable to estimate the possible loss or range of loss, if any, associated with this lawsuit.

#### **Other Matters**

From time to time, we have received requests for information from regulators and governmental authorities, such as the National Highway Traffic Safety Administration, the National Transportation Safety Board and the Securities and Exchange Commission. We are also subject to various other legal proceedings and claims that arise from the normal course of business activities. If an unfavorable ruling were to occur, there exists the possibility of a material adverse impact on our results of operations, prospects, cash flows, financial position and brand.

#### **ITEM 4. MINE SAFETY DISCLOSURES**

Not applicable

## PART II

### ITEM 5. MARKET FOR REGISTRANT'S COMMON EQUITY, RELATED STOCKHOLDER MATTERS AND ISSUER PURCHASES OF EQUITY SECURITIES

#### Market Information

Our common stock has traded on The NASDAQ Global Select Market under the symbol "TSLA" since it began trading on June 29, 2010. Our initial public offering was priced at \$17.00 per share on June 28, 2010. The following table sets forth, for the time period indicated, the high and low closing prices of our common stock as reported on The NASDAQ Global Select Market:

	2017		2016	
	High	Low	High	Low
First quarter	\$ 280.98	\$ 216.99	\$ 238.32	\$ 143.67
Second quarter	\$ 383.45	\$ 295.00	\$ 265.42	\$ 193.15
Third quarter	\$ 385.00	\$ 308.83	\$ 234.79	\$ 194.47
Fourth quarter	\$ 359.65	\$ 299.26	\$ 219.74	\$ 181.45

#### Holders

As of January 31, 2018, there were 1,156 holders of record of our common stock. A substantially greater number of holders of our common stock are "street name" or beneficial holders, whose shares are held by banks, brokers and other financial institutions.

#### Dividend Policy

We have never declared or paid cash dividends on our common stock. We currently do not anticipate paying any cash dividends in the foreseeable future. Any future determination to declare cash dividends will be made at the discretion of our board of directors, subject to applicable laws, and will depend on our financial condition, results of operations, capital requirements, general business conditions and other factors that our board of directors may deem relevant.

## Stock Performance Graph

*This performance graph shall not be deemed “filed” for purposes of Section 18 of the Securities Exchange Act of 1934, as amended (the “Exchange Act”), or incorporated by reference into any filing of Tesla, Inc. under the Securities Act of 1933, as amended (the “Securities Act”), or the Exchange Act, except as shall be expressly set forth by specific reference in such filing.*

The following graph shows a comparison, from January 1, 2013 through December 31, 2017, of the cumulative total return on our common stock, The NASDAQ Composite Index and a group of all public companies sharing the same SIC code as us, which is SIC code 3711, “Motor Vehicles and Passenger Car Bodies” (Motor Vehicles and Passenger Car Bodies Public Company Group). Such returns are based on historical results and are not intended to suggest future performance. Data for The NASDAQ Composite Index and the Motor Vehicles and Passenger Car Bodies Public Company Group assumes an investment of \$100 on January 1, 2013 and reinvestment of dividends. We have never declared or paid cash dividends on our common stock nor do we anticipate paying any such cash dividends in the foreseeable future.

## Unregistered Sales of Equity Securities

### *Exchange of Certain 1.50% Convertible Senior Notes Due 2018*

On November 15, 2017, we issued 96,634 shares of our common stock to a holder of our 1.50% Convertible Senior Notes due 2018 in exchange for \$12.0 million in aggregate principal amount of such notes, pursuant to a privately negotiated agreement. Such issuance was conducted pursuant to an exemption from registration provided by Rule 4(a)(2) of the Securities Act. We relied on this exemption from registration based in part on the representations made by the holder of such notes in the transaction.

In connection with the offering of such notes in 2013, we sold certain warrants to Morgan Stanley & Co. LLC (“Morgan Stanley”). On November 14, 2017, we agreed with Morgan Stanley to partially terminate such warrants, and in connection with such partial termination, we issued 16,960 shares of our common stock to Morgan Stanley. Such issuance was conducted as a private placement pursuant to an exemption from registration provided by Rule 4(a)(2) of the Securities Act and was offered only to persons believed to be either (i) “accredited investors” within the meaning of Rule 501 of Regulation D promulgated under the Securities Act or (ii) “qualified institutional buyers” within the meaning of Rule 144A promulgated under the Securities Act. We relied on this exemption from registration based in part on the representations made by Morgan Stanley.

*Acquisition of PERBIX Machine Company, Inc.*

On November 7, 2017, we issued 34,772 shares of our common stock to the sole shareholder of record of PERBIX Machine Company, Inc., a leader in designing and building custom, high-quality, highly-automated manufacturing equipment (“PERBIX”), as part of the purchase price for all of the outstanding capital stock of PERBIX. Such issuance was conducted pursuant to an exemption from registration provided by Rule 4(a)(2) of the Securities Act. We relied on this exemption from registration based in part on the representations made by the selling shareholder.

**Purchases of Equity Securities by the Issuer and Affiliated Purchasers**

None

**ITEM 6. SELECTED CONSOLIDATED FINANCIAL DATA**

The following selected consolidated financial data should be read in conjunction with “Management’s Discussion and Analysis of Financial Condition and Results of Operations” and the consolidated financial statements and the related notes included elsewhere in this Annual Report on Form 10-K (in thousands, except per share data).

	Year Ended December 31,				
	2017	2016 (1)	2015	2014	2013
<b>Consolidated Statements of Operations Data:</b>					
Total revenues	\$ 11,758,751	\$ 7,000,132	\$ 4,046,025	\$ 3,198,356	\$ 2,013,496
Gross profit	\$ 2,222,487	\$ 1,599,257	\$ 923,503	\$ 881,671	\$ 456,262
Loss from operations	\$ (1,632,086)	\$ (667,340)	\$ (716,629)	\$ (186,689)	\$ (61,283)
Net loss attributable to common stockholders	\$ (1,961,400)	\$ (674,914)	\$ (888,663)	\$ (294,040)	\$ (74,014)
Net loss per share of common stock attributable to common stockholders, basic and diluted	\$ (11.83)	\$ (4.68)	\$ (6.93)	\$ (2.36)	\$ (0.62)
Weighted average shares used in computing net loss per share of common stock, basic and diluted	165,758	144,212	128,202	124,539	119,421

- (1) We acquired SolarCity on November 21, 2016. SolarCity’s results of operations have been included in our results of operations from the acquisition date. See Note 3, *Business Combinations*, of the notes to the consolidated financial statements for additional information regarding this transaction.

	As of December 31,				
	2017	2016 (1)	2015	2014	2013
<b>Consolidated Balance Sheet Data:</b>					
Working (deficit) capital	\$ (1,104,150)	\$ 432,791	\$ (29,029)	\$ 1,072,907	\$ 585,665
Total assets	28,655,372	22,664,076	8,067,939	5,830,667	2,411,186
Total long-term obligations	15,348,310	10,923,162	4,125,915	2,753,595	1,069,535

- (1) We acquired SolarCity on November 21, 2016. SolarCity’s financial positions have been included in our financial positions from the acquisition date. See Note 3, *Business Combinations*, of the notes to the consolidated financial statements for additional information regarding this transaction.

## **ITEM 7. MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS**

*The following discussion and analysis should be read in conjunction with the consolidated financial statements and the related notes included elsewhere in this Annual Report on Form 10-K.*

### **Overview and 2017 Highlights**

Our mission is to accelerate the world's transition to sustainable energy. We design, develop, manufacture, lease and sell high-performance fully electric vehicles, solar energy generation systems and energy storage products. We also offer maintenance, installation, operation and other services related to our products.

#### *Automotive*

Our production vehicle fleet includes our Model S premium sedan and our Model X sport utility vehicle, which are our highest-performance vehicles, and our Model 3, a lower priced sedan designed for the mass market which we began to produce and deliver in the second half of 2017. We continue to enhance our vehicle offerings with enhanced autopilot options, Internet connectivity and free over-the-air software updates to provide additional safety, convenience and performance features. In addition, we have several future electric vehicles in our product pipeline, including those we unveiled in 2017 – an electric semi-truck and a new version of the Tesla Roadster.

In 2017, our vehicle production capability continued to scale and gain operational efficiencies, and vehicle production volume increased by 20% year-over-year. Additionally, we delivered 101,420 Model S and Model X vehicles and 1,764 Model 3 vehicles in 2017.

#### *Energy Generation and Storage*

We lease and sell solar energy systems and sell renewable energy and energy storage products to our customers. We have partnered with Panasonic to provide capital and operational support to manufacture PV cells, thus enabling high volume integrated tile and PV cell production at our Gigafactory 2 in Buffalo, New York. We also recently commenced Solar Roof production at Gigafactory 2. Our energy storage products, which we manufacture at Gigafactory 1, consist of Powerwall mostly for residential applications and Powerpack for commercial, industrial and utility-scale applications.

In late 2017, we completed installation of the largest battery in the world in South Australia. This battery delivers electricity during peak hours to help maintain the reliable operation of South Australia's electrical infrastructure.

In 2017, we deployed 358 MWh of energy storage products and 523 MW of solar energy generation.

### **Management Opportunities, Challenges and Risks and 2018 Outlook**

#### *Automotive Demand, Production and Deliveries*

We drive demand for our vehicles by continually improving our vehicles through over-the-air software updates, expanding our retail, service and charging infrastructure, and by periodically developing and introducing new passenger and commercial electric vehicle variants and models. Our goal is to become the best manufacturer in the automotive industry, and having cutting edge robotic expertise in-house is at the core of that goal. Our recent acquisitions of advanced automation companies have added to our talent base and are helping us increase vehicle production rates more effectively.

The worldwide automotive market for alternative fuel vehicles and self-driving technology are highly competitive and we expect them to become even more so. Many companies including established automakers have announced plans to expand, and in some cases fully transition to, production of electric or environmentally friendly vehicles, and to also develop self-driving technologies. We welcome the acceleration of the world's transition to sustainable transport. Nonetheless, we believe that the unique features of our vehicles, our constant innovation, our growing brand, the increased affordability introduced with Model 3, our global Supercharger network and our future vehicles, will continue to generate incremental demand for our vehicles by making our vehicles accessible to larger and previously untapped consumer and commercial markets.

We expect Model S and Model X deliveries to be approximately 100,000 in total in 2018, constrained by the supply of cells with the 18650 form factor used in those vehicles. As our sales network continues to expand to new markets in 2018, we believe vehicle orders should continue to grow. With demand outpacing production, we plan to optimize the trim and option mix in order to optimize revenue and gross margin. We have made significant and sustained progress in the production processes of Model S and Model X, and we will continue to improve manufacturing efficiencies for these vehicles in 2018.

We expect Model 3 production and deliveries to grow significantly in 2018. The initial phase of manufacturing any new vehicle is always challenging, and the Model 3 production ramp has been no exception, particularly given our focus on highly automated manufacturing processes, that we expect will ultimately result in higher volumes at significantly lower costs. Model 3 volume production has been less than we initially anticipated due to production bottlenecks, with the battery module assembly line at Gigafactory 1 being the primary production constraint to date, although future bottlenecks in other areas of vehicle manufacturing may surface. We have redirected our best engineering talent to Gigafactory 1 to fine-tune the automated processes and related robotic programming not only to address the challenges we have experienced but also to continue evaluating our overall manufacturing process for efficiencies.

Based on our current progress, we are targeting a production rate of 2,500 Model 3 vehicles per week by the end of the first quarter of 2018 and 5,000 Model 3 vehicles per week by the end of the second quarter. It is important to note that while these are the levels we are focused on hitting and we have plans in place to achieve them, our prior experience on the Model 3 ramp has demonstrated the difficulty of accurately forecasting specific production rates at specific points in time. We are systematically addressing bottlenecks and adding capacity and resources in places like the battery module line where we have experienced constraints, and these actions should result in our Model 3 production rate significantly increasing during the first half of 2018. In some cases, we may not achieve the manufacturing labor efficiencies until we ramp up to fully automated manufacturing lines, which may take us longer than anticipated. In order to optimize the incremental improvement of our automation processes and the efficiency of our capital expenditures, we will implement the capacity to further ramp production to 10,000 units per week only after we have achieved a 5,000 units per week run rate.

We are also making strides in other aspects of our vehicle production, deliveries and customer infrastructure. For example, we expect to continue to lower the cost of manufacturing our vehicles due to economies of scale, material cost reductions and more efficient manufacturing and equipment utilization. We have achieved cost improvements through material cost reductions from both engineering and commercial actions and increased manufacturing efficiencies including better inventory control for Model S and Model X. We have also seen improved product reliability in our vehicles, batteries and drive units. Likewise, we may experience infrastructure constraints and customer experience issues relating to vehicle deliveries, but are trying to address such issues by opening additional delivery and service centers to scale the volume of vehicles we are able to deliver. Generally, as sales of Tesla vehicles ramp in 2018, we plan to continue to open new Tesla retail, locations, service centers and delivery hubs around the world, we plan to continue to expand our mobile repair services, and we plan to significantly increase the number of Superchargers and Destination Charging connectors globally with the goal of remaining ahead of the Model 3 ramp.

We are also making progress with our self-driving technology. An overhaul of the underlying architecture of our software has been completed, which has enabled a step-change improvement in the collection and analysis of data and fundamentally enhanced its machine learning capabilities. The aggregate of such data and learnings, which we refer to as our “neural net,” is able to collect and analyze more high-quality data than ever before, enabling us to rollout a series of new autopilot features in 2018 and beyond.

#### *Energy Generation and Storage Demand, Production and Deployment*

We are continuing to reduce customer acquisition costs of our energy generation products, including by cutting advertising spend and increasingly selling these products in Tesla stores with dedicated energy product sales personnel and leveraging channel partnerships. Moreover, we have deemphasized absolute volume growth for our solar products, and we have instead prioritized projects for cash generation and profitability. Solar Roof installations will initially ramp slowly in the first half of 2018. As Solar Roof is truly the first-of-its-kind and there is significant complexity in both its manufacturing and installation, we are deliberately ramping production at a gradual pace to

ensure reliability and a great customer experience. With demand outpacing production, we expect our backlog to remain in excess of one year for the next several quarters.

We expect energy storage products to experience significant growth, with our aim being to at least triple our sales in 2018. We are ramping up production for these products at our Gigafactory 1 over the next several quarters, but demand is greater than our current production capacity for energy storage.

We expect energy generation and storage gross margin to improve significantly in 2018 as we enter the year with a backlog of higher-margin commercial solar projects and a more profitable energy storage business due to overall cost and manufacturing efficiencies from scaling.

#### *Trends in Cash Flow, Capital Expenditures and Operating Expenses*

Capital expenditures in 2018 are projected to be slightly more than 2017, with the majority of the spending to support increases in Model 3 production capacity at Gigafactory 1 and the Tesla Factory, and for building additional stores, service centers and Superchargers.

We expect operating expenses to grow in 2018 as compared to 2017, although operating expenses should decrease significantly as a percentage of revenue due to the significant increase in expected revenue in 2018 and as we focus on increasing operational efficiency. The growth in operating expense will mainly be driven by engineering, design and testing of new products or changes to existing products and higher sales and service costs associated with expanding our worldwide geographic presence. In addition, we expect operating expenses to increase as a result of increased selling, general and administrative expenses incurred by our energy generation and storage business.

We are seeking stockholder approval for a new 10-year CEO performance award for Elon Musk with vesting contingent on achieving market capitalization and operational milestones. If Tesla stockholders approve the award, we would incur significant additional stock-based compensation expense over the term of the award as each performance milestone becomes probable of vesting.

#### *Automotive Financing Options*

We offer loans and leases for our vehicles in certain markets in North America, Europe and Asia primarily through various financial institutions. We offered resale value guarantees or similar buy-back terms to all direct customers who purchase vehicles and who financed their vehicle through one of our specified commercial banking partners. Subsequent to June 30, 2016, this program is available only in certain international markets. Resale value guarantees available for exercise within the 12 months following December 31, 2017 totaled \$375.7 million in value.

We plan to adopt the new revenue recognition standard ASC 606 effective January 1, 2018. This will impact the way we account for vehicle sales with a resale value guarantee and vehicles leased through our leasing partners, which now will qualify to be accounted for as sales with a right of return. In addition, for certain vehicles sales with a resale value guarantee and vehicles leased through leasing partners prior to 2018, we will cease recognizing lease revenue starting in 2018 and record the associated cumulative adjustment to equity under the modified retrospective approach.

Vehicle deliveries with the resale value guarantee do not impact our near-term cash flows and liquidity, since we receive the full amount of cash for the vehicle sales price at delivery. While we do not assume any credit risk related to the customer, if a customer exercises the option to return the vehicle to us, we are exposed to liquidity risk that the resale value of vehicles under these programs may be lower than our guarantee, or the volume of vehicles returned to us may be higher than our estimates or we may be unable to resell the used cars in a timely manner, all of which could adversely impact our cash flows. Through 2017, we only had an insignificant number of customers who exercised their resale value guarantees and returned their vehicles to us. Based on current market demand for our cars, we estimate the resale prices for our vehicles will continue to be above our resale value guarantee amounts. Should market values of our vehicles or customer demand decrease, these estimates may be impacted materially.

We currently offer vehicle leases in the U.S. for Model S and Model X directly from Tesla Finance, our captive financing entity, as well as through leasing partners. Leasing through Tesla Finance is available in 39 states and the District of Columbia. We also offer financing arrangements through our entities in Canada, Germany and the

United Kingdom. Leasing through our captive financing entities and our leasing partners exposes us to residual value risk. In addition, for leases offered directly from our captive financing entities, we assume customer credit risk. We plan to continue expanding our financing offerings, including our lease financing options and the financial sources to support them, and to support the overall financing needs of our customers. To the extent that we are unable to arrange such options for our customers on terms that are attractive, our sales, financial results and cash flows could be negatively impacted.

#### *Energy Generation and Storage Financing Options*

We offer our customers the choice to either purchase and own solar energy systems or to purchase the energy that our solar energy systems produce through various contractual arrangements. These contractual arrangements include long-term leases and power purchase agreements. In both structures, we install our solar energy systems at our customer's premises and charge the customer a monthly fee. In the lease structure, this monthly payment is fixed with a minimum production guarantee. In the power purchase agreement structure, we charge customers a fee per kilowatt-hour, or kWh, based on the amount of electricity the solar energy system actually produces. The leases and power purchase agreements are typically for 20 years with a renewal option, and generally when there is no upfront prepayment, the specified monthly fees are subject to annual escalations.

For customers who want to purchase and own solar energy systems, we also offer solar loans, whereby a third-party lender provides financing directly to a qualified customer to enable the customer to purchase and own a solar energy system designed, installed and serviced by us. We enter into a standard solar energy system sale and installation agreement with the customer. Separately, the customer enters into a loan agreement with a third-party lender, who finances the full purchase price. We are not a party to the loan agreement between the customer and the third-party lender, and the third-party lender has no recourse against us with respect to the loan.

#### *Gigafactory 1*

We continue to develop Gigafactory 1 as a facility where we work together with our suppliers to integrate production of battery material, cells, modules, battery packs and drive units in one location for vehicles and energy storage products. We also continue to invest in the future expansion of Gigafactory 1 and in production equipment for battery cell, module and pack production.

Panasonic has partnered with us on Gigafactory 1 with investments in the production equipment that it uses to manufacture and supply us with battery cells. Under our arrangement with Panasonic, we plan to purchase the full output from their production equipment at negotiated prices. As these terms convey to us the right to use, as defined in ASC 840, *Leases*, their production equipment, we consider them to be leased assets when production commences. This results in us recording the value of their production equipment within property, plant and equipment, net, on the consolidated balance sheets with a corresponding liability recorded to financing obligations. For all suppliers and partners for which we plan to purchase the full output from their production equipment located at Gigafactory 1, we will apply similar accounting. During the year ended December 31, 2017, we recorded \$473.3 million on the consolidated balance sheet.

While we currently believe that our progress at Gigafactory 1 will allow us to reach our production targets, our ultimate ability to do so will require us to resolve the types of challenges that are typical of a production ramp. For example, we have experienced bottlenecks in the assembly of battery modules at Gigafactory 1, which has negatively affected our production of Model 3. While we continue to make progress to resolve such issues at Gigafactory 1, given the size and complexity of this undertaking, it is possible that future events could result in the cost of building and operating Gigafactory 1 exceeding our current expectations and Gigafactory 1 taking longer to expand than we currently anticipate.

#### *Gigafactory 2*

We have an agreement with the SUNY Foundation for the construction of a factory capable of producing at least 1.0 gigawatts of solar cells annually in Buffalo, New York, referred to as Gigafactory 2. In December 2016, we entered into an agreement with Panasonic under which it will manufacture custom PV cells and modules for us, primarily at Gigafactory 2, and we will purchase certain quantities of PV cells and modules from Panasonic during the 10-year term.



The terms of our agreement with the SUNY Foundation require us to comply with a number of covenants, and any failure to comply with these covenants could obligate us to pay significant amounts to the SUNY Foundation and result in termination of the agreement. Although we remain on track with our progress at Gigafactory 2, our expectations as to the cost of building the facility, acquiring manufacturing equipment and supporting our manufacturing operations may prove incorrect, which could subject us to significant expenses to achieve the desired benefits.

#### *Other Manufacturing*

In addition, we continue to expand production capacity at our Tesla Factory and are exploring additional production capacity in Asia and Europe.

### **Critical Accounting Policies and Estimates**

The consolidated financial statements are prepared in accordance with accounting principles generally accepted in the U.S. ("GAAP"). The preparation of the consolidated financial statements requires us to make estimates and assumptions that affect the reported amounts of assets, liabilities, revenues, costs and expenses and related disclosures. We base our estimates on historical experience, as appropriate, and on various other assumptions that we believe to be reasonable under the circumstances. Changes in the accounting estimates are reasonably likely to occur from period to period. Accordingly, actual results could differ significantly from the estimates made by our management. We evaluate our estimates and assumptions on an ongoing basis. To the extent that there are material differences between these estimates and actual results, our future financial statement presentation, financial condition, results of operations and cash flows will be affected. We believe that the following critical accounting policies involve a greater degree of judgment and complexity than our other accounting policies. Accordingly, these are the policies we believe are the most critical to understanding and evaluating the consolidated financial condition and results of operations.

#### *Revenue Recognition*

We recognize revenue for products and services when: (i) a persuasive evidence of an arrangement exists; (ii) delivery has occurred and there are no uncertainties regarding customer acceptance; (iii) pricing or fees are fixed or determinable and (iv) collection is reasonably assured.

#### *Automotive Segment*

Automotive revenue includes revenues related to deliveries of new vehicles, sales of regulatory credits to other automotive manufacturers and specific other elements that meet the definition of a deliverable under multiple-element accounting guidance, including free internet connectivity, free access to our Supercharger network and future free over-the-air software updates. These other elements are valued on a stand-alone basis, and we recognize their revenue over our performance period, which is generally the eight-year life of the vehicle, except for internet connectivity, which is over the free four-year period. If we sell a deliverable separately, we use that pricing to determine its fair value; otherwise, we use our best estimated selling price by considering costs used to develop and deliver the service, third-party pricing of similar options and other information that may be available. At the time of revenue recognition, we record a reserve against revenue for estimated future product returns. Such estimates are based on historical experience and were immaterial in all periods presented. In addition, any fees that are paid or payable by us to a customer's lender, when we arrange the financing, would be recognized as an offset against automotive sales revenue, in accordance with ASC 605-50, *Customer Payments and Incentives*.

Automotive leasing revenue includes revenue recognized under lease accounting guidance for our direct leasing programs as well as programs with resale value guarantees. See "Vehicle sales to customers with a resale value guarantee," "Vehicle sales to leasing partners with a resale value guarantee" and "Direct Vehicle Leasing Program" for further details.

Service and other revenue consists of repair and maintenance services, service plans, merchandise, sales of used Tesla vehicles, sales of electric vehicle powertrain components and systems to other manufacturers and sales of non-Tesla vehicle trade-ins.

#### *Vehicle sales to customers with a resale value guarantee*

Prior to June 30, 2016, we offered resale value guarantees or similar buy-back terms to all customers who purchased vehicles and who financed their vehicles through one of our specified commercial banking partners. Since June 30, 2016, this program is available only in certain international markets. Under this program, customers have the option of selling their vehicle back to us during the guarantee period, which currently is generally at the end of the term of the applicable loan or financing program, for a determined resale value. Although we receive full payment for the vehicle sales price at the time of delivery, we are required to account for these transactions as operating leases. The amount of sale proceeds equal to the resale value guarantee is deferred until the guarantee expires or is exercised. The remaining sale proceeds are deferred and recognized on a straight-line basis over the stated guarantee period to automotive leasing revenue. The guarantee period expires at the earlier of the end of the guarantee period or the pay-off of the initial loan. We capitalize the cost of these vehicles on the consolidated balance sheet as operating lease vehicles, net, and depreciate their value, less salvage value, to cost of automotive leasing revenue over the same period.

In cases where a customer retains ownership of a vehicle at the end of the guarantee period, the resale value guarantee liability and any remaining deferred revenue balances related to the vehicle are settled to automotive leasing revenue, and the net book value of the leased vehicle is expensed to cost of automotive leasing revenue. If a customer returns the vehicle to us during the guarantee period, we purchase the vehicle from the customer in an amount equal to the resale value guarantee and settle any remaining deferred balances to automotive leasing revenue, and we reclassify the net book value of the vehicle on the consolidated balance sheet to used vehicle inventory.

#### *Vehicle sales to leasing partners with a resale value guarantee*

We also offer resale value guarantees in connection with automobile sales to certain leasing partners. As we have guaranteed the value of these vehicles and as the vehicles are leased to end-customers, we account for these transactions as interest bearing collateralized borrowings as required under ASC 840. Under this program, cash is received for the full price of the vehicle and is recorded within resale value guarantees for the long-term portion and deferred revenue for the current portion. We accrete the deferred revenue amount to automotive leasing revenue on a straight-line basis over the guarantee period and accrue interest expense based on our borrowing rate. We capitalize vehicles under this program to operating lease vehicles, net, on the consolidated balance sheet, and we record depreciation from these vehicles to cost of automotive leasing revenue during the period the vehicle is under a lease arrangement. Cash received for these vehicles, net of revenue recognized during the period, is classified as collateralized lease borrowings within cash flows from financing activities in the consolidated statement of cash flows.

At the end of the lease term, we settle our liability in cash by either purchasing the vehicle from the leasing partner for the resale value guarantee amount or paying a shortfall to the guarantee amount the leasing partner may realize on the sale of the vehicle. Any remaining balances within deferred revenue and resale value guarantee will be settled to automotive leasing revenue. In cases where the leasing partner retains ownership of the vehicle after the end of our guarantee period, we expense the net value of the leased vehicle to cost of automotive leasing revenue.

On a quarterly basis, we assess the estimated market values of vehicles under our resale value guarantee program to determine if we have sustained a loss on any of these contracts. As we accumulate more data related to the resale values of our vehicles or as market conditions change, there may be material changes to their estimated values.

#### *Direct Vehicle Leasing Program*

We offer a vehicle leasing program in certain locations in the North America and Europe. Qualifying customers are permitted to lease a vehicle directly from Tesla for up to 48 months. At the end of the lease term, customers have the option of either returning the vehicle to us or purchasing it for a pre-determined residual value. We account for these leasing transactions as operating leases, and we recognize leasing revenues on a straight-line basis over the contractual term and record the depreciation of these vehicles to cost of automotive leasing revenue.

#### *Maintenance and Service Plans*

We offer a prepaid maintenance program for our vehicles, which includes plans covering maintenance for up to four years or up to 50,000 miles, provided these services are purchased within a specified period of time. The maintenance plans cover annual inspections and the replacement of wear and tear parts, excluding tires and the battery. Payments collected in advance of the performance of service are initially recorded in deferred revenue on the consolidated balance sheet and recognized in automotive sales as we fulfill our performance obligations.

We also offer an extended service plan, which covers the repair or replacement of vehicle parts for an additional four years or up to an additional 50,000 miles, after the end of our initial New Vehicle Limited Warranty, provided they are purchased within a specified period of time. Payments collected in advance of the performance of service are initially recorded in deferred revenue on the consolidated balance sheet and recognized in automotive sales ratably over the service coverage periods.

#### *Energy Generation and Storage Segment*

For solar energy systems and components sales wherein customers pay the full purchase price, either directly or through the solar loan program, revenue is recognized when we install a solar energy system and the solar energy system passes inspection by the utility or the authority having jurisdiction, provided all other revenue recognition criteria have been met. In instances where there are multiple deliverables in a single arrangement, we allocate the arrangement consideration to the various elements in the arrangement based on the relative selling price method. Costs incurred on residential installations before the solar energy systems are completed are included in inventories as work-in-progress in the consolidated balance sheet. However, any fees that are paid or payable by us to a solar loan lender would be recognized as an offset against energy generation and storage revenue, in accordance with ASC 605-50, *Customer Payments and Incentives*. Revenue from an energy storage product sale is recognized when the product has been delivered, installed and accepted by the customer, provided all other revenue recognition criteria have been met.

For revenue arrangements where we are the lessor under operating lease agreements for solar energy systems, including energy storage products, we record lease revenue from minimum lease payments, including upfront rebates and incentives earned from such systems, on a straight-line basis over the life of the lease term, assuming all other revenue recognition criteria have been met. For incentives that are earned based on the amount of electricity generated by the system, we record revenue as the amounts are earned. The difference between the payments received and the revenue recognized is recorded as deferred revenue on the consolidated balance sheet.

For solar energy systems where customers purchase electricity from us under PPAs, we have determined that these agreements should be accounted for, in substance, as operating leases pursuant to ASC 840. Revenue is recognized based on the amount of electricity delivered at rates specified under the contracts, assuming all other revenue recognition criteria are met.

We record as deferred revenue any amounts that are collected from customers, including lease prepayments, in excess of revenue recognized. Deferred revenue also includes the portion of rebates and incentives received from utility companies and various local and state government agencies, which are recognized as revenue over the lease term, as well as the fees charged for remote monitoring service, which is recognized as revenue ratably over the respective customer contract term.

We capitalize initial direct costs from the origination of solar energy system leases or PPAs (i.e. the incremental cost of contract administration, referral fees and sales commissions) as an element of solar energy systems, leased and to be leased, net, and subsequently amortize these costs over the term of the related lease or PPA.

#### *Inventory Valuation*

Inventories are stated at the lower of cost or net realizable value. Cost is computed using standard cost for vehicles and energy storage products, which approximates actual cost on a first-in, first-out basis. In addition, cost for solar energy systems are recorded using actual cost. We record inventory write-downs for excess or obsolete inventories based upon assumptions about on current and future demand forecasts. If our inventory on-hand is in excess of our future demand forecast, the excess amounts are written-off.

We also review our inventory to determine whether its carrying value exceeds the net amount realizable upon the ultimate sale of the inventory. This requires us to determine the estimated selling price of our vehicles less the estimated cost to convert the inventory on-hand into a finished product. Once inventory is written-down, a new, lower cost basis for that inventory is established and subsequent changes in facts and circumstances do not result in the restoration or increase in that newly established cost basis.

Should our estimates of future selling prices or production costs change, additional and potentially material increases to this reserve may be required. A small change in our estimates may result in a material charge to our reported financial results.

#### *Warranties*

We provide a manufacturer's warranty on all new and used vehicles, production powertrain components and systems and energy products we sell. In addition, we also provide a warranty on the installation and components of the solar energy systems we sell for periods typically between 10 to 30 years. We accrue a warranty reserve for the products sold by us, which includes our best estimate of the projected costs to repair or replace items under warranty. These estimates are based on actual claims incurred to date and an estimate of the nature, frequency and costs of future claims. These estimates are inherently uncertain given our relatively short history of sales, and changes to our historical or projected warranty experience may cause material changes to the warranty reserve in the future. The warranty reserve does not include projected warranty costs associated with our vehicles subject to lease accounting and our solar energy systems under lease contracts or PPAs, as the costs to repair these warranty claims are expensed as incurred. The portion of the warranty reserve expected to be incurred within the next 12 months is included within accrued liabilities and other while the remaining balance is included within other long-term liabilities on the consolidated balance sheet. Warranty expense is recorded as a component of cost of revenue.

#### *Stock-Based Compensation*

We use the fair value method of accounting for our stock options and restricted stock units ("RSUs") granted to employees and our employee stock purchase plan (the "ESPP") to measure the cost of employee services received in exchange for the stock-based awards. The fair value of stock options and ESPP is estimated on the grant or offering date using the Black-Scholes option-pricing model. The Black-Scholes option-pricing model requires inputs such as the risk-free interest rate, expected term and expected volatility. These inputs are subjective and generally require significant judgment. The fair value of RSUs is measured on the grant date based on the closing fair market value of our common stock. The resulting cost is recognized over the period during which an employee is required to provide service in exchange for the awards, usually the vesting period, which is generally four years for stock options and RSUs and six months for the ESPP. Stock-based compensation expense is recognized on a straight-line basis, net of actual forfeitures in the period (prior to 2017, net of estimated projected forfeitures).

For performance-based awards, stock-based compensation expense is recognized over the expected performance achievement period of individual performance milestones when the achievement of each individual performance milestone becomes probable. For performance-based awards with a vesting schedule based entirely on the attainment of both performance and market conditions, stock-based compensation expense is recognized for each pair of performance and market conditions over the longer of the expected achievement period of the performance and market conditions, beginning at the point in time that the relevant performance condition is considered probable of achievement. The fair value of such awards is estimated on the grant date using Monte Carlo simulations.

As we accumulate additional employee stock-based awards data over time and as we incorporate market data related to our common stock, we may calculate significantly different volatilities and expected lives, which could materially impact the valuation of our stock-based awards and the stock-based compensation expense that we will recognize in future periods. Stock-based compensation expense is recorded in cost of revenue, research and development expense and selling, general and administrative expense.

#### *Income Taxes*

We are subject to federal and state taxes in the U.S. and in many foreign jurisdictions. Significant judgment is required in determining our provision for income taxes, our deferred tax assets and liabilities and any valuation allowance recorded against our net deferred tax assets. We make these estimates and judgments about our future taxable income that are based on assumptions that are consistent with our future plans. Tax laws, regulations, and

administrative practices may be subject to change due to economic or political conditions including fundamental changes to the tax laws applicable to corporate multinationals. The U.S., many countries in the European Union and a number of other countries are actively considering changes in this regard. As of December 31, 2017, we had recorded a full valuation allowance on our net U.S. deferred tax assets because we expect that it is more likely than not that our U.S. deferred tax assets will not be realized in the foreseeable future. Should the actual amounts differ from our estimates, the amount of our valuation allowance could be materially impacted.

Furthermore, significant judgment is required in evaluating our tax positions. In the ordinary course of business, there are many transactions and calculations for which the ultimate tax settlement is uncertain. As a result, we recognize the effect of this uncertainty on our tax attributes based on our estimates of the eventual outcome. These effects are recognized when, despite our belief that our tax return positions are supportable, we believe that it is more likely than not that those positions may not be fully sustained upon review by tax authorities. We are required to file income tax returns in the U.S. and various foreign jurisdictions, which requires us to interpret the applicable tax laws and regulations in effect in such jurisdictions. Such returns are subject to audit by the various federal, state and foreign taxing authorities, who may disagree with respect to our tax positions. We believe that our consideration is adequate for all open audit years based on our assessment of many factors, including past experience and interpretations of tax law. We review and update our estimates in light of changing facts and circumstances, such as the closing of a tax audit, the lapse of a statute of limitations or a change in estimate. To the extent that the final tax outcome of these matters differs from our expectations, such differences may impact income tax expense in the period in which such determination is made. The eventual impact on our income tax expense depends in part if we still have a valuation allowance recorded against our deferred tax assets in the period that such determination is made.

On December 22, 2017, the 2017 Tax Cuts and Jobs Act (“Tax Act”) was enacted into law making significant changes to the Internal Revenue Code. Changes include, but are not limited to, a federal corporate tax rate decrease from 35% to 21% for tax years beginning after December 31, 2017, the transition of U.S. international taxation from a worldwide tax system to a territorial system and a one-time transition tax on the mandatory deemed repatriation of foreign earnings. We are required to recognize the effect of the tax law changes in the period of enactment, such as re-measuring our U.S. deferred tax assets and liabilities as well as reassessing the net realizability of our deferred tax assets and liabilities. The Tax Act did not give rise to any material impact on the consolidated balance sheets and consolidated statements of operations due to our historical worldwide loss position and the full valuation allowance on our net U.S. deferred tax assets.

In December 2017, the Securities and Exchange Commission staff issued Staff Accounting Bulletin No. 118, *Income Tax Accounting Implications of the Tax Cuts and Jobs Act* (“SAB 118”), which allows us to record provisional amounts during a measurement period not to extend beyond one year from the enactment date. Since the Tax Act was enacted late in the fourth quarter of 2017 (and ongoing guidance and accounting interpretations are expected over the next 12 months), we consider the accounting of deferred tax re-measurements and other items, such as state tax considerations, to be incomplete due to the forthcoming guidance and our ongoing analysis of final year-end data and tax positions. We expect to complete our analysis within the measurement period in accordance with SAB 118. We do not expect any subsequent adjustments to have any material impact on the consolidated balance sheets or statements of operations due to our historical worldwide loss position and the full valuation allowance on our net U.S. deferred tax assets.

### *Principles of Consolidation*

The consolidated financial statements reflect our accounts and operations and those of our subsidiaries in which we have a controlling financial interest. In accordance with the provisions of ASC 810, *Consolidation*, we consolidate any variable interest entity (“VIE”) of which we are the primary beneficiary. We form VIEs with our financing fund investors in the ordinary course of business in order to facilitate the funding and monetization of certain attributes associated with our solar energy systems. The typical condition for a controlling financial interest ownership is holding a majority of the voting interests of an entity; however, a controlling financial interest may also exist in entities, such as VIEs, through arrangements that do not involve controlling voting interests. ASC 810 requires a variable interest holder to consolidate a VIE if that party has the power to direct the activities of the VIE that most significantly impact the VIE’s economic performance and the obligation to absorb losses of the VIE that could potentially be significant to the VIE or the right to receive benefits from the VIE that could potentially be significant to the VIE. We do not consolidate a VIE in which we have a majority ownership interest when we are not

considered the primary beneficiary. We have determined that we are the primary beneficiary of a number of VIEs. We evaluate our relationships with all the VIEs on an ongoing basis to ensure that we continue to be the primary beneficiary. All intercompany transactions and balances have been eliminated upon consolidation.

#### *Noncontrolling Interests and Redeemable Noncontrolling Interests*

Noncontrolling interests and redeemable noncontrolling interests represent third-party interests in the net assets under certain funding arrangements, or funds, that we enter into to finance the costs of solar energy systems and vehicles under operating leases. We have determined that the contractual provisions of the funds represent substantive profit sharing arrangements. We have further determined that the appropriate methodology for calculating the noncontrolling interest and redeemable noncontrolling interest balances that reflects the substantive profit sharing arrangements is a balance sheet approach using the hypothetical liquidation at book value (“HLBV”) method. We, therefore, determine the amount of the noncontrolling interests and redeemable noncontrolling interests in the net assets of the funds at each balance sheet date using the HLBV method, which is presented on the consolidated balance sheet as noncontrolling interests in subsidiaries and redeemable noncontrolling interests in subsidiaries. Under the HLBV method, the amounts reported as noncontrolling interests and redeemable noncontrolling interests in the consolidated balance sheet represent the amounts the third-parties would hypothetically receive at each balance sheet date under the liquidation provisions of the funds, assuming the net assets of the funds were liquidated at their recorded amounts determined in accordance with GAAP and with tax laws effective at the balance sheet date and distributed to the third-parties. The third-parties’ interests in the results of operations of the funds are determined as the difference in the noncontrolling interest and redeemable noncontrolling interest balances in the consolidated balance sheets between the start and end of each reporting period, after taking into account any capital transactions between the funds and the third-parties. However, the redeemable noncontrolling interest balance is at least equal to the redemption amount. The redeemable noncontrolling interest balance is presented as temporary equity in the mezzanine section of the consolidated balance sheet since these third-parties have the right to redeem their interests in the funds for cash or other assets.

#### *Business Combinations*

We account for business acquisitions under ASC 805, *Business Combinations*. The total purchase consideration for an acquisition is measured as the fair value of the assets given, equity instruments issued and liabilities assumed at the acquisition date. Costs that are directly attributable to the acquisition are expensed as incurred. Identifiable assets (including intangible assets), liabilities assumed (including contingent liabilities) and noncontrolling interests in an acquisition are measured initially at their fair values at the acquisition date. We recognize goodwill if the fair value of the total purchase consideration and any noncontrolling interests is in excess of the net fair value of the identifiable assets acquired and the liabilities assumed. We recognize a bargain purchase gain within other income (expense), net, on the consolidated statement of operations if the net fair value of the identifiable assets acquired and the liabilities assumed is in excess of the fair value of the total purchase consideration and any noncontrolling interests. We include the results of operations of the acquired business in the consolidated financial statements beginning on the acquisition date.

When determining such fair values, we make significant estimates and assumptions. Critical estimates include, but are not limited to, future expected cash flows from the underlying assets and discount rates. Our estimate of fair values is based on assumptions believed to be reasonable but that are inherently uncertain and unpredictable. As a result, actual results may differ from our estimates. Furthermore, our estimates might change as additional information becomes available, as more fully discussed in Note 3, *Business Combinations*, included elsewhere in this Annual Report on Form 10-K.

## Results of Operations

### Revenues

(Dollars in thousands)	Year Ended December 31,			Change 2017 vs. 2016		Change 2016 vs. 2015	
	2017	2016	2015	\$	%	\$	%
Automotive sales	\$ 8,534,752	\$ 5,589,007	\$ 3,431,587	\$ 2,945,745	53%	\$ 2,157,420	63%
Automotive leasing	1,106,548	761,759	309,386	344,789	45%	452,373	146%
Total automotive revenues	9,641,300	6,350,766	3,740,973	3,290,534	52%	2,609,793	70%
Services and other	1,001,185	467,972	290,575	533,213	114%	177,397	61%
Total automotive & services and other segment revenue	10,642,485	6,818,738	4,031,548	3,823,747	56%	2,787,190	69%
Energy generation and storage segment revenue	1,116,266	181,394	14,477	934,872	515%	166,917	1153%
Total revenues	<u>\$ 11,758,751</u>	<u>\$ 7,000,132</u>	<u>\$ 4,046,025</u>	<u>\$ 4,758,619</u>	68%	<u>\$ 2,954,107</u>	73%

#### Automotive & Services and Other Segment

Automotive sales revenue includes revenues related to sale of new Model S, Model X and Model 3 vehicles, including internet connectivity, Supercharger access, and specified software updates for cars equipped with autopilot hardware, as well as sales of regulatory credits to other automotive manufacturers.

Automotive leasing revenue includes the amortization of revenue for Model S and Model X vehicles sold with resale value guarantees accounted for as operating leases under lease accounting. We do not yet offer leasing for Model 3 vehicles.

Services and other revenue consists of maintenance services, sales of used vehicles and sales of electric vehicle powertrain components and systems to other manufacturers.

#### 2017 Compared to 2016

Automotive sales revenue increased \$2.95 billion, or 53%, during the year ended December 31, 2017 compared to the year ended December 31, 2016, primarily related to a 58% increase in deliveries to 80,060 vehicles resulting from increased sales of Model S and Model X, at average selling prices that remained relatively consistent as compared to the prior period, as well as sales of 1,764 Model 3 vehicles since its launch in the third quarter of 2017. Additionally there was an increase of \$58.0 million to \$360.3 million in sales of regulatory credits offset partially by additional deferrals of autopilot 2.0 revenue in the year ended December 31, 2017.

Automotive leasing revenue increased \$344.8 million, or 45%, during the year ended December 31, 2017 compared to the year ended December 31, 2016. The increase was primarily due to an approximately 30% increase in the number of vehicles under leasing programs or programs with a resale value guarantee compared to the year ended December 31, 2016. In addition, during the year ended December 31, 2017, we recognized an increase of \$23.4 million of automotive leasing revenue upon early payoff and expiration of resale value guarantees as compared to the year ended December 31, 2016.

Service and other revenue increased \$533.2 million, or 114%, during the year ended December 31, 2017 compared to the year ended December 31, 2016. This was primarily due to an increase in used vehicle sales as a result of increased automotive sales as well as from the expansion of our trade-in program. Additionally, there was a \$41.1 million increase from the inclusion of engineering service revenue from Grohmann, which we acquired on January 3, 2017, and a \$68.4 million increase in maintenance services revenue as our fleet continued to grow during the year ended December 31, 2017.

### 2016 Compared to 2015

Automotive sales revenue increased \$2.16 billion, or 63% to \$5.59 billion during the year ended December 31, 2016 compared to the year ended December 31, 2015, primarily related to a 55% increase in vehicle deliveries to approximately 50,700. The increase in volume is primarily due to a full-year of Model X deliveries in 2016, as well as increased production and sales of Model S. Further, there was an overall increase in average selling price of 6% primarily due to the introduction of Model X which are higher priced vehicles compared to Model S. In addition, there is an increase of \$133.4 million to \$302.3 million of the sale of regulatory credits from the year ended December 31, 2015 to the corresponding period in 2016. These increases were partially offset by negative impact from the movement of foreign currency exchange rates.

Automotive leasing revenue increased \$452.4 million, or 146%, to \$761.8 million during the year ended December 31, 2016 compared to the year ended December 31, 2015. The increase was primarily due to an 83% increase in cumulative vehicle deliveries under leasing programs and programs with a resale value guarantee from the year ended December 31, 2015 to the year ended December 31, 2016. In addition, during the year ended December 31, 2016, we recognized \$112.6 million in automotive leasing revenue upon the expiration of resale value guarantees.

Service and other revenue increased \$177.4 million, or 61%, to \$468.0 million during the year ended December 31, 2016 compared to the year ended December 31, 2015, primarily due to an increase of \$117.4 million in used vehicle sales as we received more trade-ins and an increase in maintenance service revenue of \$66.6 million as our fleet continues to grow.

### *Energy Generation and Storage Segment*

Energy generation and storage revenue includes sale of solar energy systems and energy storage products, leasing revenue from solar energy systems under operating leases and PPAs and the sale of solar energy systems incentives.

### 2017 Compared to 2016

Energy generation and storage revenue increased by \$934.9 million, or 515%, during the year ended December 31, 2017 compared to the year ended December 31, 2016, predominantly due to the inclusion of the full-year of revenue from our solar business, which we gained by acquiring SolarCity on November 21, 2016.

### 2016 Compared to 2015

Energy generation and storage revenue increased \$166.9 million, or 1,153%, primarily due to \$84.1 million as a result of the inclusion of revenue from SolarCity from the acquisition date of November 21, 2016 through December 31, 2016, as well as an increase of \$82.8 million in energy storage revenue as we ramped up our energy storage sales effort and completed several utility scale projects such as Southern California Edison Mira Loma substation.



### ***Cost of Revenues and Gross Margin***

(Dollars in thousands)	Year Ended December 31,			Change 2017 vs. 2016		Change 2016 vs. 2015	
	2017	2016	2015	\$	%	\$	%
Cost of revenues							
Automotive sales	\$6,724,480	\$4,268,087	\$2,639,926	\$2,456,393	58%	\$1,628,161	62%
Automotive leasing	708,224	481,994	183,376	226,230	47%	298,618	163%
Total automotive cost of revenues	7,432,704	4,750,081	2,823,302	2,682,623	56%	1,926,779	68%
Services and other	1,229,022	472,462	286,933	756,560	160%	185,529	65%
Total automotive & services and other segment cost of revenue	8,661,726	5,222,543	3,110,235	3,439,183	66%	2,112,308	68%
Energy generation and storage segment	874,538	178,332	12,287	696,206	390%	166,045	1351%
Total cost of revenues	<u>\$9,536,264</u>	<u>\$5,400,875</u>	<u>\$3,122,522</u>	<u>\$4,135,389</u>	77%	<u>\$2,278,353</u>	73%
Gross profit total automotive	\$2,208,596	\$1,600,685	\$ 917,671				
Gross margin total automotive	23%	25%	25%				
Gross profit total automotive & services and other segment	\$1,980,759	\$1,596,195	\$ 921,313				
Gross margin total automotive & services and other segment	19%	23%	23%				
Gross profit energy generation and storage segment	\$ 241,728	\$ 3,062	\$ 2,190				
Gross margin energy generation and storage segment	22%	2%	15%				
Total gross profit	\$2,222,487	\$1,599,257	\$ 923,503				
Total gross margin	19%	23%	23%				

### *Automotive & Services and Other Segment*

Cost of automotive sales revenue includes direct parts, material and labor costs, manufacturing overhead, including depreciation costs of tooling and machinery, shipping and logistic costs, vehicle connectivity costs, allocations of electricity and infrastructure costs related to our Supercharger network, and reserves for estimated warranty expenses. Cost of automotive sales revenues also includes adjustments to warranty expense and charges to write down the carrying value of our inventory when it exceeds its estimated net realizable value and to provide for obsolete and on-hand inventory in excess of forecasted demand.

Cost of automotive leasing revenue includes primarily the amortization of operating lease vehicles over the lease term, as well as warranty expenses recognized as incurred.

Cost of services and other revenue includes direct parts, material and labor costs, manufacturing overhead associated with the sales of electric vehicle powertrain components and systems to other manufacturers, costs associated with providing maintenance services and costs to acquire and certify used vehicles.

#### 2017 Compared to 2016

Cost of automotive sales revenues increased \$2.46 billion, or 58%, during the year ended December 31, 2017 compared to the year ended December 31, 2016. This was primarily due to a 58% increase in vehicle deliveries resulting from increased sales of Model S and Model X, as well as the commencement of deliveries of Model 3 in the third quarter of 2017.

Cost of automotive leasing revenue increased \$226.2 million, or 47%, during the year ended December 31, 2017 compared to the year ended December 31, 2016. This was primarily due to an approximately 30% increase in the number of vehicles under leasing programs or programs with a resale value guarantee compared to the year ended December 31, 2016. In addition, during the year ended December 31, 2017, we recognized an increase of \$23.4 million in cost of automotive leasing revenue upon early payoff and the expiration of resale value guarantees.

Cost of services and other revenue increased \$756.6 million, or 160%, during the year ended December 31, 2017 compared to the year ended December 31, 2016, primarily due to the increase in cost of used vehicle sales due to increased volume and the increase in cost to provide maintenance services as our fleet continues to grow.

Gross margin for total automotive decreased from 25% to 23% during the year ended December 31, 2017 compared to the year ended December 31, 2016. The commencement of deliveries of Model 3 in the third quarter of 2017 whereby the full operating costs and depreciation were recorded at much lower production volumes as production ramps, higher current period early payoffs and expirations of resale value guarantees, as compared to the same period in the prior year, contributed to the lower gross margin. Lower material and manufacturing costs for Model S and Model X, as we further improved our vehicle production processes and the partial recognition of autopilot 2.0 revenue in the current period partially offset the overall decrease.

Gross margin for total automotive & services and other segment decreased from 23% to 19% during the year ended December 31, 2017 compared to the year ended December 31, 2016. These decreases are driven by the factors impacting gross margin for total automotive, as explained above, as well as higher costs of maintenance service.

#### 2016 Compared to 2015

Cost of automotive revenues increased \$1.63 billion, or 62%, to \$4.27 billion during the year ended December 31, 2016 compared to the year ended December 31, 2015. The increase was primarily due to a 55% increase in vehicle deliveries as a result of a full-year of Model X deliveries as well as increased deliveries for Model S. In addition, the increase is due to product mix as Model X has a higher cost structure than Model S. The increase in cost of automotive revenue is partially offset by a reduction of warranty expense of \$20.0 million resulting from better vehicle reliability.

Cost of automotive leasing revenue increased \$298.6 million, or 163%, to \$482.0 million during the year ended December 31, 2016 compared to the year ended December 31, 2015. The increase is primarily due to an 83% increase in cumulative vehicle deliveries under leasing programs and programs with resale value guarantees from the year ended December 31, 2015 to the year ended December 31, 2016. In addition, during the year ended December 31, 2016, we recognized \$114.3 million in cost of automotive leasing revenues upon the expiration of resale value guarantees.

Cost of services and other revenue increased \$185.5 million, or 65%, to \$472.5 million during the year ended December 31, 2016 compared to the year ended December 31, 2015, primarily due to an increase of \$120.8 million in cost of used vehicle sales due to increase in volume, and an increase of \$64.9 million in cost to provide maintenance service as our fleet continues to grow.

Gross margin for total automotive remained consistent during the year ended December 31, 2016 compared to the year ended December 31, 2015.

Gross profit for total automotive & services and other segment increased from \$921.3 million for the year ended December 31, 2015 to \$1.60 billion for the year ended December 31, 2016. Gross margin for total automotive & services and other segment increased from 22.9% for the year ended December 31, 2015 to 23.4% for the year ended December 31, 2016. The increase was primarily due to lower material and manufacturing costs as we further improve our production processes, partially offset by a negative impact from the movement in foreign exchange and increased expenditures to build out our service centers and provide maintenance.

#### *Energy Generation and Storage Segment*

Cost of energy generation and storage revenue includes direct material and labor costs, overhead of solar energy systems and energy storage products and the depreciation expense and maintenance costs associated with leased solar energy systems.

#### 2017 Compared to 2016

Cost of energy generation and storage revenue increased by \$696.2 million, or 390%, during the year ended December 31, 2017 compared to the year ended December 31, 2016. This was primarily due to the inclusion of the full-year of costs from our solar business, which we gained by acquiring SolarCity on November 21, 2016.

Gross margin for energy generation and storage increased from 2% to 22% during the year ended December 31, 2017 compared to the year ended December 31, 2016. This was predominantly due to the inclusion of the full-year of revenue and costs from our solar business, which we gained by acquiring SolarCity.

#### 2016 Compared to 2015

Cost of energy generation and storage revenue increased \$166.0 million to \$178.3 million during the year ended December 31, 2016 compared to the year ended December 31, 2015. The increase was due to an increase of \$67.0 million as a result of the inclusion of SolarCity's financial results from the acquisition date of November 21, 2016 to December 31, 2016. The remaining increase was due to increase in the sale of energy storage products and increased expenditures to increase the capacity of energy storage products.

#### *Research and Development Expense*

	Year Ended December 31,			Change 2017 vs.		Change 2016 vs.	
	2017	2016	2015	2016		2015	
(Dollars in thousands)				\$	%	\$	%
Research and development	\$1,378,073	\$ 834,408	\$ 717,900	\$ 543,665	65%	\$ 116,508	16%
As a percentage of revenues	12%	12%	18%				

Research and development ("R&D") expenses consist primarily of personnel costs for our teams in engineering and research, manufacturing engineering and manufacturing test organizations, prototyping expense, contract and professional services and amortized equipment expense.

R&D expenses increased \$543.7 million, or 65%, during the year ended December 31, 2017 compared to the year ended December 31, 2016. This increase was primarily due to a \$274.9 million increase in employee and labor related expenses from increased headcount as a result of our acquisitions as well as headcount growth from the expansion of our automotive and energy generation and storage businesses, and a \$44.3 million increase in stock-based compensation expense related to an increase in headcount and number of employee stock awards granted for new hire and refresher employee stock grants. Additionally, there were increases in facilities expenses, depreciation expenses, professional and outside service expenses and expensed materials to support the development of future products.

R&D expenses increased \$116.5 million, or 16%, to \$834.4 million during the year ended December 31, 2016 compared to the year ended December 31, 2015. The increase of \$116.5 million was primarily due to a \$78.2 million increase in employee and labor related expenses due to a 15% headcount increase as we expanded our vehicle business in the U.S. and internationally, and a \$65.0 million increase in stock-based compensation expense related to an increase in headcount and number of employee stock awards granted for new hire and refresher employee stock grants. This is partially offset by a \$25.9 million decrease in expensed materials related to our Model X development, which was primarily incurred in 2015. The overall increase also includes \$11.0 million related to SolarCity.

### ***Selling, General and Administrative Expense***

(Dollars in thousands)	Year Ended December 31,			Change 2017 vs. 2016		Change 2016 vs. 2015	
	2017	2016	2015	\$	%	\$	%
Selling, general and administrative	\$2,476,500	\$1,432,189	\$ 922,232	\$1,044,311	73%	\$ 509,957	55%
As a percentage of revenues	21%	20%	23%				

Selling, general and administrative (“SG&A”) expenses consist primarily of personnel and facilities costs related to our stores, marketing, sales, executive, finance, human resources, information technology and legal organizations, as well as fees for professional and contract services and litigation settlements.

SG&A expenses increased \$1.04 billion, or 73%, during the year ended December 31, 2017 compared to the year ended December 31, 2016. This increase was primarily due to a \$524.0 million increase in employee and labor related expenses from increased headcount as a result of our acquisitions as well as headcount growth from the expansion of our automotive and energy generation and storage businesses, and a \$64.9 million increase in stock-based compensation expense related to an increase in headcount and number of employee stock awards granted for new hire and refresher employee stock grants. Additionally, the increase was due to a \$310.6 million increase in office, information technology and facilities-related expenses to support the growth of our business as well as sales and marketing activities to handle our expanding market presence and a \$140.6 million increase in professional and outside service expenses to support the growth of our business.

SG&A expenses increased \$510.0 million, or 55%, to \$1.43 billion during the year ended December 31, 2016 compared to the year ended December 31, 2015. The increase in SG&A expenses was primarily due to a \$247.2 million increase in employee and labor related expenses due to a 61% increase in headcount as we expanded our business in the U.S. and internationally, a \$91.0 million increase in office, information technology and facilities-related costs to support the growth of our business as well as sales and marketing activities to handle our expanding market presence, and a \$58.1 million increase in stock-based compensation expense related to increased number of employee stock awards granted for new hire and existing employees. The increase includes \$74.3 million related to SolarCity.

## Interest Expense

(Dollars in thousands)	Year Ended December 31,			Change 2017 vs. 2016		Change 2016 vs. 2015	
	2017	2016	2015	\$	%	\$	%
Interest expense	\$ (471,259)	\$ (198,810)	\$ (118,851)	\$ (272,449)	137%	\$ (79,959)	67%
As a percentage of revenues	4%	3%	3%				

Interest expense for the year ended December 31, 2017 increased \$272.4 million, or 137%, from the year ended December 31, 2016. The increase was primarily due to the inclusion of the full-year of interest expense from SolarCity of \$185.5 million for the year ended December 31, 2017. In addition, our average outstanding indebtedness has increased in the year ended December 31, 2017 as compared to the prior year mainly due to the Convertible Senior Notes due in 2022 and the Senior Notes due in 2025, both of which we issued during 2017.

Interest expense for the year ended December 31, 2016 increased \$80.0 million, or 67%, from the year ended December 31, 2015. The increase as compared to the year ended December 31, 2015 consisted primarily of a \$33.1 million increase in interest expense on vehicles sales that we account for as collateralized borrowing, a \$28.5 million increase in interest expense on build-to-suit leases and a \$22.0 million increase in interest expense associated with SolarCity's indebtedness, financing obligations and capital lease obligations.

## Other Income (Expense), Net

(Dollars in thousands)	Year Ended December 31,			Change 2017 vs. 2016		Change 2016 vs. 2015	
	2017	2016	2015	\$	%	\$	%
Other income (expense), net	\$ (125,373)	\$ 111,272	\$ (41,652)	\$ (236,645)	-213%	\$ 152,924	-367%
As a percentage of revenues	-1%	2%	-1%				

Other income (expense), net, consists primarily of foreign exchange gains and losses related to our foreign currency-denominated assets and liabilities. We expect our foreign exchange gains and losses will vary depending upon movements in the underlying exchange rates. Additionally, other income (expense), net, includes a gain from the acquisition of SolarCity for the year ended December 31, 2016.

Other income (expense), net, decreased by \$236.7 million, or 213%, during the year ended December 31, 2017 as compared to the year ended December 31, 2016. The decrease was primarily due to measurement period adjustments to the acquisition date fair value of SolarCity and fluctuations in foreign currency exchange rates.

Other income, net, increased by \$152.9 million as we recognized a gain from the acquisition of SolarCity of \$88.7 million and a loss on conversion of our 1.50% Convertible Senior Notes due in 2018 of \$7.2 million. The remainder of the change in other income (expense), net, was primarily result of fluctuations in gains (losses) from foreign currency exchange.

## Provision for Income Taxes

(Dollars in thousands)	Year Ended December 31,			Change 2017 vs. 2016		Change 2016 vs. 2015	
	2017	2016	2015	\$	%	\$	%
Provision for income taxes	\$ 31,546	\$ 26,698	\$ 13,039	\$ 4,848	18%	\$ 13,659	105%
Effective tax rate	-1%	-4%	-1%				

Our provision for income taxes increased by \$4.9 million, or 18%, for the year ended December 31, 2017 as compared to the year ended December 31, 2016. This increase was primarily due to the increase in vehicle deliveries in foreign tax jurisdictions, partially offset by \$10.5 million of future U.S. alternative minimum tax refunds as a result of the Tax Act, which previously had an associated valuation allowance.

Our provision for income taxes for the years ended December 31, 2016 and 2015 was \$26.7 million and \$13.0 million, respectively. This increase was primarily due to the increase in taxable income in our international jurisdictions.

### ***Net Income (Loss) Attributable to Noncontrolling Interests and Redeemable Noncontrolling Interests***

Our net income (loss) attributable to noncontrolling interests and redeemable noncontrolling interests was related to financing fund arrangements.

### **Liquidity and Capital Resources**

As of December 31, 2017, we had \$3.37 billion of cash and cash equivalents. Balances held in foreign currencies had a U.S. dollar equivalent of \$521.5 million and consisted primarily of Chinese yuan, euros and Norwegian kroner. Our sources of cash are predominately from our deliveries of vehicles, sales and installations of our energy storage products and solar energy systems, proceeds from debt facilities, proceeds from financing funds and proceeds from equity offerings.

Our sources of liquidity and cash flows enable us to fund ongoing operations, research and development projects, investments in tooling and manufacturing equipment for the production ramp of Model 3, the continued construction of Gigafactory 1 and the continued expansion of our retail stores, service centers, mobile repair services and Supercharger network. We are growing our vehicle manufacturing capacity primarily to fulfill Model 3 production at 5,000 vehicles per week and, in a later phase, to 10,000 vehicles per week. Capital expenditures in 2018 are projected to be slightly more than 2017. We continually evaluate our capital expenditure needs and may raise additional capital to fund the rapid growth of our business.

We have an agreement to spend or incur \$5.00 billion in combined capital, operational expenses, costs of goods sold and other costs in the State of New York during the 10-year period following full production at Gigafactory 2. We anticipate meeting these obligations through our operations at Gigafactory 2 and other operations within the State of New York, and we do not believe that we face a significant risk of default.

We expect that our current sources of liquidity together with our projection of cash flows from operating activities will provide us with adequate liquidity over at least the next 12 months. A large portion of our future expenditures is to fund our growth, and we can adjust our capital and operating expenditures by operating segment, including future expansion of our product offerings, stores, service centers, delivery centers and Supercharger network. We may need or want to raise additional funds in the future, and these funds may not be available to us when we need or want them, or at all. If we cannot raise additional funds when we need or want them, our operations and prospects could be negatively affected.

In addition, we had \$2.04 billion of unused committed amounts under our credit facilities and financing funds, some of which are subject to satisfying specified conditions prior to draw-down. For details regarding our indebtedness and financing funds, refer to Note 13, *Convertible and Long-Term Debt Obligations*, and Note 18, *VIE Arrangements*, to the consolidated financial statements included elsewhere in this Annual Report on Form 10-K.

### ***Summary of Cash Flows***

	Year Ended December 31,		
	2017	2016	2015
(Dollars in thousands)			
Net cash used in operating activities	\$ (60,654)	\$ (123,829)	\$ (524,499)
Net cash used in investing activities	\$ (4,418,967)	\$ (1,416,430)	\$ (1,673,551)
Net cash provided by financing activities	\$ 4,414,864	\$ 3,743,976	\$ 1,523,523

### ***Cash Flows from Operating Activities***

Our cash flows from operating activities are significantly affected by our cash investments to support the growth of our business in areas such as research and development and selling, general and administrative. Our operating cash inflows include cash from vehicle sales, lease payments directly from customers, customer deposits, sales of regulatory credits and energy generation and storage products. These cash inflows are offset by our

payments to suppliers for production materials and parts used in our manufacturing process, employee compensation, operating lease payments and interest payments on our financings.

Net cash used in operating activities during the year ended December 31, 2017 decreased by \$63.2 million as compared to the year ended December 31, 2016 due to the decrease in net operating assets and liabilities of \$197.3 million partially offset by the decrease in net loss, excluding non-cash expenses and gains, of \$134.1 million. The decrease in working capital was mainly driven by faster processing of payments for our vehicles and our focus on reducing inventory in the fourth quarter of 2017.

During the year ended December 31, 2016, cash used in operating activities was primarily a result of our net loss of \$773.0 million, the increase in accounts payable and accrued liabilities of \$750.6 million as our business expanded, the increase in resale value guarantees of \$326.9 million and deferred revenue of \$383.0 million as the number of vehicles with a resale value guarantee increased and the increase in customer deposits of \$388.4 million primarily due to Model 3 reservations. These increases were partially offset by the increase in inventories and operating lease vehicles of \$2.47 billion as we expanded our program for direct leases and vehicles with a resale value guarantee.

During the year ended December 31, 2015, cash used in operating activities was primarily a result of our net loss of \$888.7 million and the increase in inventories and operating lease vehicles of \$1.57 billion as we expanded our program for direct leases and vehicles with a resale value guarantee. These increases were partially offset by the increase in resale value guarantees of \$442.3 million and deferred revenue of \$322.2 million as the number vehicles with a resale value guarantee increased.

#### *Cash Flows from Investing Activities*

Cash flows from investing activities and their variability across each period related primarily to capital expenditures, which were \$4.08 billion during 2017, \$1.44 billion during 2016 and \$1.63 billion during 2015. Capital expenditures during 2017 were from \$3.41 billion of purchases of property and equipment (mainly for Model 3 production) and \$666.5 million for the design, acquisition and installation of solar energy systems under operating leases with customers. We also paid \$114.5 million, net of the cash acquired, for acquisitions in 2017.

In 2014, we began construction of Gigafactory 1. During 2017, we used cash of \$1.45 billion towards Gigafactory 1 construction.

#### *Cash Flows from Financing Activities*

Cash flows from financing activities during the year ended December 31, 2017 consisted primarily of \$966.4 million from the issuance of the Convertible Senior Notes due in 2022, \$1.77 billion from the issuance of the Senior Notes due in 2025 and \$400.2 million from our March 2017 public offering of common stock, net of underwriter fees. However, we paid \$151.2 million for the purchase of bond hedges net of the amount we received from the sale of warrants. Furthermore, we received \$511.3 million of net proceeds from collateralized lease borrowings and \$527.5 million of net proceeds from fund investors.

Cash flows from financing activities during the year ended December 31, 2016 consisted primarily of \$1.70 billion from our May 2016 public offering of common stock, net of underwriter fees, \$995.4 million of proceeds from issuances of debt net of repayments and \$769.7 million of net proceeds from collateralized lease borrowings. The net proceeds from issuances of debt consisted primarily of \$834.0 million of net borrowings under our senior secured asset-based revolving credit agreement and \$390.0 million of borrowings under the vehicle lease-backed loan and security agreement entered into in 2016, partially offset by settlements of \$454.7 million for certain conversions of the Convertible Senior Notes due in 2018. Furthermore, we received \$180.3 million of net proceeds from fund investors.

Cash flows from financing activities during the year ended December 31, 2015 consisted primarily of \$730.0 million from our August 2015 public offering of common stock and \$568.7 million of net proceeds from collateralized lease borrowings.

### Contractual Obligations

We are party to contractual obligations involving commitments to make payments to third parties, including certain debt financing arrangements and leases, primarily for stores, service centers, certain manufacturing and corporate offices. These also include, as part of our normal business practices, contracts with suppliers for purchases of certain raw materials, components and services to facilitate adequate supply of these materials and services and capacity reservation contracts. The following table sets forth, as of December 31, 2017, certain significant obligations that will affect our future liquidity (in thousands):

	Year Ended December 31,						
	Total	2018	2019	2020	2021	2022	Thereafter
Operating lease obligations	\$ 1,317,226	\$ 224,630	\$ 204,335	\$ 175,612	\$ 156,552	\$ 130,802	\$ 425,295
Capital lease obligations, including interest	785,215	127,180	137,313	167,281	138,042	133,772	81,627
Purchase obligations (1)	17,525,445	2,761,819	2,279,682	3,484,953	3,433,787	3,435,956	2,129,248
Long-term debt (2)	11,797,022	2,506,499	2,173,097	413,430	1,798,676	1,582,240	3,323,080
Total	<u>\$31,424,908</u>	<u>\$5,620,128</u>	<u>\$4,794,427</u>	<u>\$4,241,276</u>	<u>\$5,527,057</u>	<u>\$5,282,770</u>	<u>\$5,959,250</u>

These amounts represent (i) purchase orders of \$1.18 billion issued under binding and enforceable agreements with all vendors as of December 31, 2017 and (ii) \$16.34 billion in other estimable purchase obligations pursuant to such agreements, primarily relating to the purchase of lithium-ion cells to be produced by Panasonic at Gigafactory 1, including any additional amounts we may have to pay vendors if we do not meet certain minimum purchase obligations. In cases where no purchase orders were outstanding under binding and enforceable agreements as of December 31, 2017, we have included estimated amounts based on our best estimates and assumptions or discussions with the relevant vendors as of such date or, where applicable, on amounts or assumptions included in such agreements for purposes of discussion or reference. In certain cases, such estimated amounts were subject to contingent events. Furthermore, these amounts do not include future payments for purchase obligations that were recorded in accounts payable or accrued liabilities as of December 31, 2017.

- (2) Long-term debt includes our non-recourse indebtedness of \$ 2.93 billion. Non-recourse debt refers to debt that is recourse to only specified assets of our subsidiaries.

The table above excludes unrecognized tax benefits of \$191.0 million because if recognized, they would be an adjustment to our deferred tax assets.

### Off-Balance Sheet Arrangements

During the periods presented, we did not have relationships with unconsolidated entities or financial partnerships, such as entities often referred to as structured finance or special purpose entities, which were established for the purpose of facilitating off-balance sheet arrangements or other contractually narrow or limited purposes.

## ITEM 7A. QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISK

### Foreign Currency Risk

We transact business globally in multiple currencies. Our foreign operations expose us to the risk of fluctuations in foreign currency exchange rates against the functional currencies of our foreign subsidiaries and against the U.S. dollar. Upon consolidation, as foreign currency exchange rates vary, revenues and expenses may be significantly impacted, and we may record significant gains or losses on the re-measurement of our monetary assets and liabilities, including intercompany balances. As of December 31, 2017, our largest foreign currency exposures were from the euro, Canadian dollar and Norwegian krone.



We considered the historical trends in foreign currency exchange rates and determined that it is reasonably possible that adverse changes in foreign exchange rates of 10% for all currencies could be experienced in the near-term. These reasonably possible adverse changes were applied to our total monetary assets and liabilities denominated in currencies other than our functional currencies as of December 31, 2017 to compute the adverse impact these changes would have had on our income (loss) before income taxes. These changes would have resulted in an adverse impact of \$116.0 million.

**Interest Rate Risk**

We are exposed to interest rate risk on our borrowings that bear interest at floating rates. Pursuant to our risk management policies, in certain cases, we utilize derivative instruments to manage some of this risk. We do not enter into derivative instruments for trading or speculative purposes. A hypothetical 10% change in our interest rates would have increased our interest expense for the year ended December 31, 2017 by \$7.6 million.

## ITEM 8. FINANCIAL STATEMENTS AND SUPPLEMENTARY DATA

The sections titled “Report of Independent Registered Public Accounting Firm”, “Consolidated Balance Sheets”, “Consolidated Statements of Operations”, “Consolidated Statements of Equity”, “Consolidated Statements of Cash Flows” and “Notes to Consolidated Financial Statements” in Part II, Item 8 of the Annual Report on Form 10-K of SolarCity Corporation (File No. 001-35758) for the fiscal year ended December 31, 2016, filed with the Securities and Exchange Commission on March 1, 2017, are hereby incorporated by reference into this Annual Report on Form 10-K and are filed as Exhibit 99.1 hereto.

### Index to Consolidated Financial Statements

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## **Report of Independent Registered Public Accounting Firm**

To the Board of Directors and Stockholders of Tesla, Inc.

### Opinions on the Financial Statements and Internal Control over Financial Reporting

We have audited the accompanying consolidated balance sheets of Tesla, Inc. and its subsidiaries as of December 31, 2017 and 2016, and the related consolidated statements of operations, of comprehensive loss, of redeemable noncontrolling interests and equity, and of cash flows for each of the three years in the period ended December 31, 2017, including the related notes (collectively referred to as the “consolidated financial statements”). We also have audited the Company’s internal control over financial reporting as of December 31, 2017, based on criteria established in *Internal Control – Integrated Framework* (2013) issued by the Committee of Sponsoring Organizations of the Treadway Commission (COSO).

In our opinion, based on our audits and, with respect to the December 31, 2016 balance sheet, the report of other auditors, the consolidated financial statements referred to above present fairly, in all material respects, the financial position of the Company as of December 31, 2017 and 2016, and the results of its operations and its cash flows for each of the three years in the period ended December 31, 2017 in conformity with accounting principles generally accepted in the United States of America. Also in our opinion, based on our audit, the Company maintained, in all material respects, effective internal control over financial reporting as of December 31, 2017, based on criteria established in *Internal Control – Integrated Framework* (2013) issued by the COSO.

We did not audit the pre-acquisition historical basis balance sheet of SolarCity Corporation, a wholly owned subsidiary, as of December 31, 2016, which reflects total assets and total liabilities of \$9.1 billion and \$6.9 billion, respectively, as of December 31, 2016. The pre-acquisition historical basis balance sheet of SolarCity Corporation was audited by other auditors whose report thereon has been furnished to us, and our opinion on the financial statements expressed herein, insofar as it relates to the pre-acquisition historical basis amounts included for SolarCity Corporation as of December 31, 2016, is based solely on the report of the other auditors. We audited the adjustments necessary to convert the December 31, 2016 pre-acquisition historical basis balance sheet of SolarCity Corporation to the basis reflected in the Company’s consolidated financial statements.

### Basis for Opinions

The Company’s management is responsible for these consolidated financial statements, for maintaining effective internal control over financial reporting, and for its assessment of the effectiveness of internal control over financial reporting, included in Management’s Report on Internal Control over Financial Reporting appearing under Item 9A. Our responsibility is to express opinions on the Company’s consolidated financial statements and on the Company’s internal control over financial reporting based on our audits. We are a public accounting firm registered with the Public Company Accounting Oversight Board (United States) (“PCAOB”) and are required to be independent with respect to the Company in accordance with the U.S. federal securities laws and the applicable rules and regulations of the Securities and Exchange Commission and the PCAOB.

We conducted our audits in accordance with the standards of the PCAOB. Those standards require that we plan and perform the audits to obtain reasonable assurance about whether the consolidated financial statements are free of material misstatement, whether due to error or fraud, and whether effective internal control over financial reporting was maintained in all material respects.

Our audits of the consolidated financial statements included performing procedures to assess the risks of material misstatement of the consolidated financial statements, whether due to error or fraud, and performing procedures that respond to those risks. Such procedures included examining, on a test basis, evidence regarding the amounts and disclosures in the consolidated financial statements. Our audits also included evaluating the accounting principles used and significant estimates made by management, as well as evaluating the overall presentation of the consolidated financial statements. Our audit of internal control over financial reporting included obtaining an understanding of internal control over financial reporting, assessing the risk that a material weakness exists, and testing and evaluating the design and operating effectiveness of internal control based on the assessed risk. Our audits also included performing such other procedures as we considered necessary in the circumstances. We believe that our audits and the report of other auditors provide a reasonable basis for our opinions.

#### Definition and Limitations of Internal Control over Financial Reporting

A company's internal control over financial reporting is a process designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles. A company's internal control over financial reporting includes those policies and procedures that (i) pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of the assets of the company; (ii) provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with generally accepted accounting principles, and that receipts and expenditures of the company are being made only in accordance with authorizations of management and directors of the company; and (iii) provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use, or disposition of the company's assets that could have a material effect on the financial statements.

Because of its inherent limitations, internal control over financial reporting may not prevent or detect misstatements. Also, projections of any evaluation of effectiveness to future periods are subject to the risk that controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate.

/s/ PricewaterhouseCoopers LLP

San Jose, California  
February 22, 2018

We have served as the Company's auditor since 2005.

**Tesla, Inc.**  
**Consolidated Balance Sheets**  
(in thousands, except per share data)

	December 31, 2017	December 31, 2016
<b>Assets</b>		
Current assets		
Cash and cash equivalents	\$ 3,367,914	\$ 3,393,216
Restricted cash	155,323	105,519
Accounts receivable, net	515,381	499,142
Inventory	2,263,537	2,067,454
Prepaid expenses and other current assets	268,365	194,465
Total current assets	6,570,520	6,259,796
Operating lease vehicles, net	4,116,604	3,134,080
Solar energy systems, leased and to be leased, net	6,347,490	5,919,880
Property, plant and equipment, net	10,027,522	5,982,957
Intangible assets, net	361,502	376,145
Goodwill	60,237	—
MyPower customer notes receivable, net of current portion	456,652	506,302
Restricted cash, net of current portion	441,722	268,165
Other assets	273,123	216,751
<b>Total assets</b>	<b>\$ 28,655,372</b>	<b>\$ 22,664,076</b>
<b>Liabilities</b>		
Current liabilities		
Accounts payable	\$ 2,390,250	\$ 1,860,341
Accrued liabilities and other	1,731,366	1,210,028
Deferred revenue	1,015,253	763,126
Resale value guarantees	787,333	179,504
Customer deposits	853,919	663,859
Current portion of long-term debt and capital leases	796,549	984,211
Current portion of solar bonds and promissory notes issued to related parties	100,000	165,936
Total current liabilities	7,674,670	5,827,005
	9,415,700	5,860,049

Long-term debt and capital leases, net of current portion		
Solar bonds issued to related parties, net of current portion	100	99,164
Convertible senior notes issued to related parties	2,519	10,287
Deferred revenue, net of current portion	1,177,799	851,790
Resale value guarantees, net of current portion	2,309,222	2,210,423
Other long-term liabilities	2,442,970	1,891,449
<b>Total liabilities</b>	<b>23,022,980</b>	<b>16,750,167</b>
Commitments and contingencies (Note 17)		
Redeemable noncontrolling interests in subsidiaries	397,734	367,039
Convertible senior notes (Note 13)	70	8,784
<b>Equity</b>		
Stockholders' equity		
Preferred stock; \$0.001 par value; 100,000 shares authorized; no shares issued and outstanding	—	—
Common stock; \$0.001 par value; 2,000,000 shares authorized; 168,797 and 161,561 shares issued and outstanding as of December 31, 2017 and December 31, 2016, respectively	169	161
Additional paid-in capital	9,178,024	7,773,727
Accumulated other comprehensive gain (loss)	33,348	(23,740)
Accumulated deficit	(4,974,299)	(2,997,237)
Total stockholders' equity	4,237,242	4,752,911
Noncontrolling interests in subsidiaries	997,346	785,175
<b>Total liabilities and equity</b>	<b>\$ 28,655,372</b>	<b>\$ 22,664,076</b>

The accompanying notes are an integral part of these consolidated financial statements.

**Tesla, Inc.**  
**Consolidated Statements of Operations**  
(in thousands, except per share data)

	Year Ended December 31,		
	2017	2016	2015
<b>Revenues</b>			
Automotive sales	\$ 8,534,752	\$ 5,589,007	\$ 3,431,587
Automotive leasing	1,106,548	761,759	309,386
Total automotive revenues	9,641,300	6,350,766	3,740,973
Energy generation and storage	1,116,266	181,394	14,477
Services and other	1,001,185	467,972	290,575
Total revenues	11,758,751	7,000,132	4,046,025
<b>Cost of revenues</b>			
Automotive sales	6,724,480	4,268,087	2,639,926
Automotive leasing	708,224	481,994	183,376
Total automotive cost of revenues	7,432,704	4,750,081	2,823,302
Energy generation and storage	874,538	178,332	12,287
Services and other	1,229,022	472,462	286,933
Total cost of revenues	9,536,264	5,400,875	3,122,522
<b>Gross profit</b>	2,222,487	1,599,257	923,503
<b>Operating expenses</b>			
Research and development	1,378,073	834,408	717,900
Selling, general and administrative	2,476,500	1,432,189	922,232
Total operating expenses	3,854,573	2,266,597	1,640,132
<b>Loss from operations</b>	(1,632,086)	(667,340)	(716,629)
Interest income	19,686	8,530	1,508
Interest expense	(471,259)	(198,810)	(118,851)
Other (expense) income, net	(125,373)	111,272	(41,652)
<b>Loss before income taxes</b>	(2,209,032)	(746,348)	(875,624)
Provision for income taxes	31,546	26,698	13,039
<b>Net loss</b>	(2,240,578)	(773,046)	(888,663)
Net loss attributable to noncontrolling interests and redeemable noncontrolling interests in subsidiaries	(279,178)	(98,132)	—
<b>Net loss attributable to common stockholders</b>	<u>\$ (1,961,400)</u>	<u>\$ (674,914)</u>	<u>\$ (888,663)</u>
Net loss per share of common stock attributable to common stockholders			
Basic	<u>\$ (11.83)</u>	<u>\$ (4.68)</u>	<u>\$ (6.93)</u>
Diluted	<u>\$ (11.83)</u>	<u>\$ (4.68)</u>	<u>\$ (6.93)</u>
Weighted average shares used in computing net loss per share of common stock			
Basic	<u>165,758</u>	<u>144,212</u>	<u>128,202</u>
Diluted	<u>165,758</u>	<u>144,212</u>	<u>128,202</u>

The accompanying notes are an integral part of these consolidated financial statements.



**Tesla, Inc.**  
**Consolidated Statements of Comprehensive Loss**  
(in thousands)

	Year Ended December 31,		
	2017	2016	2015
Net loss attributable to common stockholders	\$ (1,961,400)	\$ (674,914)	\$ (888,663)
Unrealized gains (losses) on derivatives:			
Change in net unrealized gain	—	43,220	7,443
Less: Reclassification adjustment for net (gains) losses into net loss	(5,570)	(44,904)	22
Net unrealized (loss) gain on derivatives	(5,570)	(1,684)	7,465
Foreign currency translation adjustment	62,658	(18,500)	(10,999)
Other comprehensive income (loss)	57,088	(20,184)	(3,534)
Comprehensive loss	<u>\$ (1,904,312)</u>	<u>\$ (695,098)</u>	<u>\$ (892,197)</u>

The accompanying notes are an integral part of these consolidated financial statements.

Tesla, Inc.

Consolidated Statements of Redeemable Noncontrolling Interests and Equity  
(in thousands, except per share data)

	Redeemable Noncontrolling Interests	Common Stock Shares	Common Stock Amount	Additional Paid-In Capital	Accumulated Deficit	Other Comprehensive Loss	Total Stockholders' Equity	Noncontrolling Interests in Subsidiaries	Total Equity
<b>Balance as of December 31, 2014</b>	\$ —	125,688	\$ 126	\$ 2,345,266	\$ (1,433,668)	(22)	\$ 911,710	\$ —	\$ 911,710
Reclassification from mezzanine equity to equity for Convertible Senior Notes due in 2018	—	—	—	10,910	—	—	10,910	—	10,910
Issuance of common stock in August 2015 public offering at \$242.00 per share, net of issuance costs of \$11,122	—	3,099	3	738,405	—	—	738,408	—	738,408
Common stock issued, net of shares withheld for employee taxes	—	2,638	2	106,533	—	—	106,535	—	106,535
Stock-based compensation	—	—	—	208,338	—	—	208,338	—	208,338
Net loss	—	—	—	—	(888,663)	—	(888,663)	—	(888,663)
Other comprehensive loss	—	—	—	—	—	(3,534)	(3,534)	—	(3,534)
<b>Balance as of December 31, 2015</b>	<u>—</u>	<u>131,425</u>	<u>131</u>	<u>3,409,452</u>	<u>(2,322,323)</u>	<u>(3,556)</u>	<u>1,083,704</u>	<u>—</u>	<u>1,083,704</u>
Reclassification from mezzanine equity to equity for Convertible Senior Notes due in 2018	—	—	—	38,501	—	—	38,501	—	38,501
Exercises of conversion feature of Convertible Senior Notes due in 2018	—	—	—	(15,056)	—	—	(15,056)	—	(15,056)
Common stock issued, net of shares withheld for employee taxes	—	11,096	11	163,817	—	—	163,828	—	163,828
Issuance of common stock in May 2016 public offering at \$215.00 per share, net of issuance costs of \$14,595	—	7,915	8	1,687,139	—	—	1,687,147	—	1,687,147
Issuance of common stock upon acquisition of SolarCity and assumed awards	—	11,125	11	2,145,977	—	—	2,145,988	—	2,145,988
Stock-based compensation	—	—	—	347,357	—	—	347,357	—	347,357
Assumption of capped calls	—	—	—	(3,460)	—	—	(3,460)	—	(3,460)
Assumption of noncontrolling interests through acquisition	315,943	—	—	—	—	—	—	750,574	750,574
Contributions from noncontrolling interests through acquisition	100,996	—	—	—	—	—	—	100,531	100,531
Distributions to noncontrolling interests through acquisition	(7,137)	—	—	—	—	—	—	(10,561)	(10,561)
Net loss	(42,763)	—	—	—	(674,914)	—	(674,914)	(55,369)	(730,283)
Other comprehensive loss	—	—	—	—	—	(20,184)	(20,184)	—	(20,184)
<b>Balance as of December 31, 2016</b>	<u>367,039</u>	<u>161,561</u>	<u>161</u>	<u>7,773,727</u>	<u>(2,997,237)</u>	<u>(23,740)</u>	<u>4,752,911</u>	<u>785,175</u>	<u>5,538,086</u>
Adjustment of prior periods due to adoption of Accounting Standards Update No. 2016-09	—	—	—	15,662	(15,662)	—	—	—	—
Conversion feature of Convertible Senior Notes due in 2022	—	—	—	145,613	—	—	145,613	—	145,613
Purchases of bond hedges	—	—	—	(204,102)	—	—	(204,102)	—	(204,102)
Sales of warrants	—	—	—	52,883	—	—	52,883	—	52,883
Reclassification from mezzanine equity to equity for Convertible Senior Notes due in 2018	—	—	—	8,714	—	—	8,714	—	8,714
Exercises of conversion feature of Convertible Senior Notes due in 2018	—	1,408	2	230,151	—	—	230,153	—	230,153
Common stock issued, net of shares withheld for employee taxes	—	4,257	4	259,381	—	—	259,385	—	259,385
Issuance of common stock in March 2017 public offering at \$262.00 per share, net of issuance costs of \$2,854	—	1,536	2	399,645	—	—	399,647	—	399,647
Issuance of common stock upon acquisitions and assumed awards	—	35	0	10,528	—	—	10,528	—	10,528
Stock-based compensation	—	—	—	485,822	—	—	485,822	—	485,822
Contributions from noncontrolling interests	192,421	—	—	—	—	—	—	597,282	597,282
Distributions to noncontrolling interests	(100,705)	—	—	—	—	—	—	(163,626)	(163,626)
Buy-outs of noncontrolling interests	(2,921)	—	—	—	—	—	—	(409)	(409)
Net loss	(58,102)	—	—	—	(1,961,400)	—	(1,961,400)	(221,076)	(2,182,476)
Other comprehensive loss	—	—	—	—	—	57,088	57,088	—	57,088
<b>Balance as of December 31, 2017</b>	<u>\$ 397,734</u>	<u>168,797</u>	<u>\$ 169</u>	<u>\$ 9,178,024</u>	<u>\$ (4,974,299)</u>	<u>\$ 33,348</u>	<u>\$ 4,237,245</u>	<u>\$ 997,346</u>	<u>\$ 5,234,588</u>

sThe accompanying notes are an integral part of these consolidated financial statements.

**Tesla, Inc.**  
**Consolidated Statements of Cash Flows**  
**(in thousands)**

	Year Ended December 31,		
	2017	2016	2015
<b>Cash Flows from Operating Activities</b>			
Net loss	\$ (2,240,578)	\$ (773,046)	\$ (888,663)
Adjustments to reconcile net loss to net cash used in operating activities:			
Depreciation and amortization	1,636,003	947,099	422,590
Stock-based compensation	466,760	334,225	197,999
Amortization of debt discounts and issuance costs	91,037	94,690	78,054
Inventory write-downs	131,665	65,520	44,940
Loss on disposals of fixed assets	105,770	34,633	37,723
Foreign currency transaction losses (gains)	52,309	(29,183)	55,765
Loss (gain) related to SolarCity acquisition	57,746	(88,727)	—
Non-cash interest and other operating activities	135,237	(15,179)	20,382
Changes in operating assets and liabilities, net of effect of business combinations:			
Accounts receivable	(24,635)	(216,565)	46,267
Inventories	(178,850)	(632,867)	(369,364)
Operating lease vehicles	(1,522,573)	(1,832,836)	(1,204,496)
Prepaid expenses and other current assets	(72,084)	56,806	(29,595)
MyPower customer notes receivable and other assets	(15,453)	(49,353)	(24,362)
Accounts payable and accrued liabilities	388,206	750,640	263,345
Deferred revenue	468,902	382,962	322,203
Customer deposits	170,027	388,361	36,721
Resale value guarantee	208,718	326,934	442,295
Other long-term liabilities	81,139	132,057	23,697
Net cash used in operating activities	(60,654)	(123,829)	(524,499)
<b>Cash Flows from Investing Activities</b>			
Purchases of property and equipment excluding capital leases, net of sales	(3,414,814)	(1,280,802)	(1,634,850)

Maturities of short-term marketable securities	—	16,667	—
Purchases of solar energy systems, leased and to be leased	(666,540)	(159,669)	—
Increases in restricted cash	(223,090)	(206,149)	(26,441)
Business combinations, net of cash acquired	(114,523)	213,523	(12,260)
Net cash used in investing activities	(4,418,967)	(1,416,430)	(1,673,551)
<b>Cash Flows from Financing Activities</b>			
Proceeds from issuances of common stock in public offerings	400,175	1,701,734	730,000
Proceeds from issuances of convertible and other debt	7,138,055	2,852,964	318,972
Repayments of convertible and other debt	(3,995,484)	(1,857,594)	—
Repayments of borrowings under Solar Bonds issued to related parties	(165,000)	—	—
Collateralized lease borrowings	511,321	769,709	568,745
Proceeds from exercises of stock options and other stock issuances	259,116	163,817	106,611
Principal payments on capital leases	(103,304)	(46,889)	(203,780)
Common stock and debt issuance costs	(63,111)	(20,042)	(17,025)
Purchases of convertible note hedges	(204,102)	—	—
Proceeds from settlements of convertible note hedges	287,213	—	—
Proceeds from issuances of warrants	52,883	—	—
Proceeds from issuance of common stock in private placement	—	—	20,000
Payments for settlements of warrants	(230,385)	—	—
Proceeds from investments by noncontrolling interests in subsidiaries	789,704	201,527	—
Distributions paid to noncontrolling interests in subsidiaries	(261,844)	(21,250)	—
Payments for buy-outs of noncontrolling interests in subsidiaries	(373)	—	—
Net cash provided by financing activities	4,414,864	3,743,976	1,523,523
Effect of exchange rate changes on cash and cash equivalents	39,455	(7,409)	(34,278)
Net (decrease) increase in cash and cash equivalents	(25,302)	2,196,308	(708,805)
Cash and cash equivalents, beginning of period	3,393,216	1,196,908	1,905,713
	\$ 3,367,914	\$ 3,393,216	\$ 1,196,908

Cash and cash equivalents, end of period			
<b>Supplemental Non-Cash Investing and Financing Activities</b>			
Shares issued in connection with business combinations and assumed vested awards	\$ 10,528	\$ 2,145,977	\$ —
Acquisitions of property and equipment included in liabilities	\$ 914,108	\$ 663,771	\$ 267,334
Estimated fair value of facilities under build-to-suit leases	\$ 313,483	\$ 307,879	\$ 174,749
<b>Supplemental Disclosures</b>			
Cash paid during the period for interest, net of amounts capitalized	\$ 182,571	\$ 38,693	\$ 32,060
Cash paid during the period for taxes, net of refunds	\$ 65,695	\$ 16,385	\$ 9,461

The accompanying notes are an integral part of these consolidated financial statements.

**Tesla, Inc.**  
**Notes to Consolidated Financial Statements**

**Note 1 – Overview**

Tesla, Inc. (“Tesla”, the “Company”, “we”, “us” or “our”) was incorporated in the State of Delaware on July 1, 2003. We design, develop, manufacture and sell high-performance fully electric vehicles and design, manufacture, install and sell solar energy generation and energy storage products. Our Chief Executive Officer, as the chief operating decision maker (“CODM”), organizes the Company, manages resource allocations and measures performance among two operating segments: (i) automotive and (ii) energy generation and storage.

**Note 2 – Summary of Significant Accounting Policies**

***Basis of Presentation and Preparation***

*Principles of Consolidation*

The accompanying consolidated financial statements have been prepared in conformity with U.S. generally accepted accounting principles (“GAAP”) and reflect our accounts and operations and those of our subsidiaries in which we have a controlling financial interest. In accordance with the provisions of Accounting Standards Codification (“ASC”) 810, *Consolidation*, we consolidate any variable interest entity (“VIE”) of which we are the primary beneficiary. We form VIEs with financing fund investors in the ordinary course of business in order to facilitate the funding and monetization of certain attributes associated with solar energy systems. The typical condition for a controlling financial interest ownership is holding a majority of the voting interests of an entity; however, a controlling financial interest may also exist in entities, such as VIEs, through arrangements that do not involve controlling voting interests. ASC 810 requires a variable interest holder to consolidate a VIE if that party has the power to direct the activities of the VIE that most significantly impact the VIE’s economic performance and the obligation to absorb losses of the VIE that could potentially be significant to the VIE or the right to receive benefits from the VIE that could potentially be significant to the VIE. We do not consolidate a VIE in which we have a majority ownership interest when we are not considered the primary beneficiary. We have determined that we are the primary beneficiary of a number of VIEs (see Note 18, *VIE Arrangements*). We evaluate our relationships with all the VIEs on an ongoing basis to ensure that we continue to be the primary beneficiary. All intercompany transactions and balances have been eliminated upon consolidation.

*Reclassifications*

Certain prior period balances have been reclassified to conform to the current period presentation in the consolidated financial statements and the accompanying notes.

*Use of Estimates*

The preparation of financial statements in conformity with GAAP requires management to make estimates and assumptions that affect the reported amounts of assets, liabilities and disclosures in the accompanying notes. Estimates are used for, but not limited to, determining the selling price of products and services in multiple element revenue arrangements and determining the amortization period of these elements, the collectability of accounts receivable, inventory valuation, fair value of long-lived assets, fair value of financial instruments, residual value of operating lease vehicles, depreciable lives of property and equipment and solar energy systems, fair value and residual value of solar energy systems subject to leases, warranty liabilities, income taxes, contingencies, the accrued liability for solar energy system performance guarantees, determining lease pass-through financing obligations, the discount rates used to determine the fair value of investment tax credits, the valuation of build-to-suit lease assets, fair value of interest rate swaps and inputs used to value stock-based compensation. In addition, estimates and assumptions are used for the accounting for business combinations, including the fair values and useful lives of acquired assets, assumed liabilities and noncontrolling interests. Management bases its estimates on historical experience and on various other assumptions believed to be reasonable, the results of which form the basis for making judgments about the carrying values of assets and liabilities. Actual results could differ from those estimates.

## ***Summary of Significant Accounting Policies***

### ***Revenue Recognition***

We recognize revenue for products and services when: (i) a persuasive evidence of an arrangement exists; (ii) delivery has occurred and there are no uncertainties regarding customer acceptance; (iii) pricing or fees are fixed or determinable and (iv) collection is reasonably assured.

#### ***Automotive Revenue***

Automotive revenue includes revenues related to deliveries of new vehicles, sales of regulatory credits to other automotive manufacturers and specific other elements that meet the definition of a deliverable under multiple-element accounting guidance, including free internet connectivity, free access to our Supercharger network and future free over-the-air software updates. These other elements are valued on a stand-alone basis, and we recognize their revenue over our performance period, which is generally the eight-year life of the vehicle, except for internet connectivity, which is over the free four-year period. If we sell a deliverable separately, we use that pricing to determine its fair value; otherwise, we use our best estimated selling price by considering costs used to develop and deliver the service, third-party pricing of similar options and other information that may be available. At the time of revenue recognition, we record a reserve against revenue for estimated future product returns. Such estimates are based on historical experience and are immaterial in all periods presented. In addition, any fees that are paid or payable by us to a customer's lender, when we arrange the financing, would be recognized as an offset against automotive sales revenue, in accordance with ASC 605-50, *Customer Payments and Incentives*.

As of December 31, 2017 and 2016, we had deferred \$498.9 million and \$291.2 million, respectively, related to the purchase of vehicle maintenance and service plans, access to our Supercharger network, internet connectivity, autopilot and over-the-air software updates.

#### ***Automotive Leasing Revenue***

Automotive leasing revenue includes revenue recognized under lease accounting guidance for our direct leasing programs as well as programs with resale value guarantees. See "Vehicle sales to customers with a resale value guarantee," "Vehicle sales to leasing partners with a resale value guarantee" and "Direct Vehicle Leasing Program" for further details.

#### ***Resale Value Guarantees and Other Financing Programs***

##### **Vehicle sales to customers with a resale value guarantee**

Prior to June 30, 2016, we offered resale value guarantees or similar buy-back terms to all customers who purchased vehicles and who financed their vehicles through one of our specified commercial banking partners. Since June 30, 2016, this program is available only in certain international markets. Under this program, customers have the option of selling their vehicle back to us during the guarantee period, which currently is generally at the end of the term of the applicable loan or financing program, for a determined resale value. Although we receive full payment for the vehicle sales price at the time of delivery, we are required to account for these transactions as operating leases. The amount of sale proceeds equal to the resale value guarantee is deferred until the guarantee expires or is exercised. The remaining sale proceeds are deferred and recognized on a straight-line basis over the stated guarantee period to automotive leasing revenue. The guarantee period expires at the earlier of the end of the guarantee period or the pay-off of the initial loan. We capitalize the cost of these vehicles on the consolidated balance sheet as operating lease vehicles, net, and depreciate their value, less salvage value, to cost of automotive leasing revenue over the same period.

In cases where a customer retains ownership of a vehicle at the end of the guarantee period, the resale value guarantee liability and any remaining deferred revenue balances related to the vehicle are settled to automotive leasing revenue, and the net book value of the leased vehicle is expensed to cost of automotive leasing revenue. If a customer returns the vehicle to us during the guarantee period, we purchase the vehicle from the customer in an amount equal to the resale value guarantee and settle any remaining deferred balances to automotive leasing revenue, and we reclassify the net book value of the vehicle on the consolidated balance sheet to used vehicle inventory. As of December 31, 2017 and 2016, \$375.7 million and \$179.5 million, respectively, of the guarantees were exercisable by customers within the next 12 months.

#### Vehicle sales to leasing partners with a resale value guarantee

We also offer resale value guarantees in connection with automobile sales to certain leasing partners. As we have guaranteed the value of these vehicles and as the vehicles are leased to end-customers, we account for these transactions as interest bearing collateralized borrowings as required under ASC 840, *Leases*. Under this program, cash is received for the full price of the vehicle and is recorded within resale value guarantees for the long-term portion and deferred revenue for the current portion. We accrete the deferred revenue amount to automotive leasing revenue on a straight-line basis over the guarantee period and accrue interest expense based on our borrowing rate. We capitalize vehicles under this program to operating lease vehicles, net, on the consolidated balance sheet, and we record depreciation from these vehicles to cost of automotive leasing revenue during the period the vehicle is under a lease arrangement. Cash received for these vehicles, net of revenue recognized during the period, is classified as collateralized lease borrowings within cash flows from financing activities in the consolidated statement of cash flows.

At the end of the lease term, we settle our liability in cash by either purchasing the vehicle from the leasing partner for the resale value guarantee amount or paying a shortfall to the guarantee amount the leasing partner may realize on the sale of the vehicle. Any remaining balances within deferred revenue and resale value guarantee will be settled to automotive leasing revenue. In cases where the leasing partner retains ownership of the vehicle after the end of our guarantee period, we expense the net value of the leased vehicle to cost of automotive leasing revenue. The maximum amount we could be required to pay under this program, should we decide to repurchase all vehicles, was \$742.9 million and \$855.9 million as of December 31, 2017 and 2016, respectively, including \$411.6 million within a 12-month period from December 31, 2017.

As of December 31, 2017 and 2016, we had \$1.64 billion and \$1.18 billion of such borrowings recorded in resale value guarantees and \$339.5 million and \$289.1 million recorded in deferred revenue liability, respectively. As of December 31, 2017 and 2016, we had a total of \$26.2 million and \$57.0 million, respectively, in accounts receivable from our leasing partners.

On a quarterly basis, we assess the estimated market values of vehicles under our resale value guarantee program to determine if we have sustained a loss on any of these contracts. As we accumulate more data related to the resale values of our vehicles or as market conditions change, there may be material changes to their estimated values.



Activity related to our resale value guarantee and similar programs consisted of the following (in thousands):

	Year Ended December 31,	
	2017	2016
<b>Operating Lease Vehicles</b>		
Operating lease vehicles—beginning of period	\$ 2,462,061	\$ 1,556,529
Net increase in operating lease vehicles	1,208,445	1,355,128
Depreciation expense recorded in cost of automotive leasing revenues	(377,491)	(255,167)
Additional depreciation expense recorded in cost of automotive leasing revenues as a result of early cancellation of resale value guarantee	(22,156)	(13,495)
Additional depreciation expense recorded in cost of automotive leasing revenues as a result of expiration	(138,760)	(114,264)
Increases to inventory from vehicles returned under our trade-in program and exercises of resale value guarantee	(76,675)	(66,670)
Operating lease vehicles—end of period	<u>\$ 3,055,424</u>	<u>\$ 2,462,061</u>
<b>Deferred Revenue</b>		
Deferred revenue—beginning of period	\$ 916,652	\$ 679,132
Net increase in deferred revenue from new vehicle deliveries and reclassification of collateralized borrowing from long-term to short-term	742,817	715,011
Amortization of deferred revenue and short-term collateralized borrowing recorded in automotive leasing revenue	(634,317)	(457,113)
Additional revenue recorded in automotive leasing revenue as a result of early cancellation of resale value guarantee	(3,451)	(5,192)
Recognition of deferred revenue resulting from return of vehicle under trade-in program, expiration, and exercises of resale value guarantee	(15,765)	(15,186)
Deferred revenue—end of period	<u>\$ 1,005,936</u>	<u>\$ 916,652</u>
<b>Resale Value Guarantee</b>		
Resale value guarantee liability—beginning of period	\$ 2,389,927	\$ 1,430,573
Increase in resale value guarantee	1,201,660	1,267,445
Reclassification from long-term to short-term collateralized borrowing	(257,075)	(116,078)
Additional revenue recorded in automotive leasing revenue as a result of early cancellation of resale value guarantee	(18,781)	(16,543)
Release of resale value guarantee resulting from return of vehicle under trade-in program and exercises	(80,599)	(62,919)
Release of resale value guarantee resulting from expiration of resale value guarantee	(138,577)	(112,551)
Resale value guarantee liability—end of period	<u>\$ 3,096,555</u>	<u>\$ 2,389,927</u>

#### *Direct Vehicle Leasing Program*

We offer a vehicle leasing program in certain locations in the North America and Europe. Qualifying customers are permitted to lease a vehicle directly from Tesla for up to 48 months. At the end of the lease term,

customers have the option of either returning the vehicle to us or purchasing it for a pre-determined residual value. We account for these leasing transactions as operating leases, and we recognize leasing revenues on a straight-line basis over the contractual term and record the depreciation of these vehicles to cost of automotive leasing revenue. As of December 31, 2017 and 2016, we had deferred \$96.6 million and \$67.2 million, respectively, of lease-related upfront payments which will be recognized on a straight-line basis over the contractual term of the individual leases. Lease revenues are recorded in automotive leasing revenue, and for the years ended December 31, 2017, 2016 and 2015, we recognized \$220.6 million, \$112.7 million and \$41.2 million, respectively.

#### *Regulatory Credits*

California and certain other states have laws in place requiring vehicle manufacturers to ensure that a portion of the vehicles delivered for sale in that state during each model year are zero-emission vehicles. These laws and regulations provide that a manufacturer of zero-emission vehicles may earn regulatory credits ("ZEV credits") and may sell excess credits to other manufacturers who apply such credits to comply with these regulatory requirements. Similar regulations exist at the federal level that require compliance related to greenhouse gas ("GHG") emissions and also allow for the sale of excess credits by one manufacturer to other manufacturers. As a manufacturer solely of zero-emission vehicles, we have earned emission credits, such as ZEV and GHG credits, on our vehicles, and we expect to continue to earn these credits in the future. We enter into contractual agreements with third-parties to purchase our regulatory credits.

We recognize revenue on the sale of regulatory credits at the time legal title to the regulatory credits is transferred to the purchasing party as automotive revenue in the consolidated statement of operations. Revenue from the sale of regulatory credits totaled \$360.3 million, \$302.3 million and \$168.7 million for the years ended December 31, 2017, 2016 and 2015, respectively.

Additionally, we have entered into agreements with the State of Nevada and Storey County in Nevada that will provide abatements for sales, use, real property, personal property and employer excise taxes, discounts to the base tariff energy rates and transferable tax credits. These incentives are available for the applicable periods beginning on October 17, 2014 and ending on June 30, 2034, subject to capital investments by us and our partners for Gigafactory 1 of at least \$3.50 billion in the aggregate on or before June 30, 2024, which were met as of December 31, 2017, and certain other conditions specified in the agreements. If we do not satisfy one or more conditions under the agreement, we would be required to repay to the respective taxing authorities the amounts of the tax incentives incurred plus interest. As of December 31, 2017 and 2016, we had earned \$163.0 million and \$45 million, respectively, of transferable tax credits under these agreements. We record these credits as earned when we have evidence there is a market for their sale. Credits are applied as a cost offset to either employee expense or to capital assets, depending on the source of the credits. Credits earned from employee hires or capital spending by our partners at Gigafactory 1 are recorded as a reduction to operating expenses.

#### *Service and Other Revenue*

Service and other revenue consists of repair and maintenance services, service plans, merchandise, sales of used Tesla vehicles, sales of electric vehicle powertrain components and systems to other manufacturers and sales of non-Tesla vehicle trade-ins.

#### *Energy Generation and Storage Segment*

For solar energy systems and components sales wherein customers pay the full purchase price, either directly or through the solar loan program, revenue is recognized when we install a solar energy system and the solar energy system passes inspection by the utility or the authority having jurisdiction, provided all other revenue recognition criteria have been met. In instances where there are multiple deliverables in a single arrangement, we allocate the arrangement consideration to the various elements in the arrangement based on the relative selling price method. Costs incurred on residential installations before the solar energy systems are completed are included in inventories as work-in-progress in the consolidated balance sheet. However, any fees that are paid or payable by us to a solar loan lender would be recognized as an offset against energy generation and storage revenue, in accordance with ASC 605-50, *Customer Payments and Incentives*. Revenue from an energy storage product sale is recognized when the product has been delivered, installed and accepted by the customer, provided all other revenue recognition criteria have been met.

For revenue arrangements where we are the lessor under operating lease agreements for solar energy systems, including energy storage products, we record lease revenue from minimum lease payments, including upfront rebates and incentives earned from such systems, on a straight-line basis over the life of the lease term, assuming all other revenue recognition criteria have been met. For incentives that are earned based on the amount of electricity generated by the system, we record revenue as the amounts are earned. The difference between the payments received and the revenue recognized is recorded as deferred revenue on the consolidated balance sheet.

For solar energy systems where customers purchase electricity from us under power purchase agreements, we have determined that these agreements should be accounted for, in substance, as operating leases pursuant to ASC 840. Revenue is recognized based on the amount of electricity delivered at rates specified under the contracts, assuming all other revenue recognition criteria are met.

We record as deferred revenue any amounts that are collected from customers, including lease prepayments, in excess of revenue recognized. Deferred revenue also includes the portion of rebates and incentives received from utility companies and various local and state government agencies, which are recognized as revenue over the lease term, as well as the fees charged for remote monitoring service, which is recognized as revenue ratably over the respective customer contract term. As of December 31, 2017 and 2016, deferred revenue related to such customer payments amounted to \$320.0 million and \$268.2 million, respectively. As of December 31, 2017 and 2016, deferred revenue from rebates and incentives was not material.

We capitalize initial direct costs from the origination of solar energy system leases or power purchase agreements (i.e. the incremental cost of contract administration, referral fees and sales commissions) as an element of solar energy systems, leased and to be leased, net, and subsequently amortize these costs over the term of the related lease or power purchase agreement.

#### *Cost of Revenue*

##### *Automotive*

Cost of automotive revenue includes direct parts, material and labor costs, manufacturing overhead (including amortized tooling costs), shipping and logistic costs, vehicle internet connectivity costs, allocations of electricity and infrastructure costs related to our Supercharger network and reserves for estimated warranty expenses. Cost of automotive revenue also includes adjustments to warranty expense and charges to write-down the carrying value of our inventory when it exceeds its estimated net realizable value and to provide for on-hand inventory that is either obsolete or in excess of forecasted demand.

##### *Automotive Leasing*

Cost of automotive leasing revenue includes primarily the amortization of operating lease vehicles over the lease term as well as warranty expenses recognized as incurred.

##### *Service and Other*

Cost of service and other revenue includes direct parts, material and labor costs, manufacturing overhead associated with sales of electric vehicle powertrain components and systems to other manufacturers, costs associated with providing maintenance and development services and costs associated with sales of used vehicles.

##### *Energy Generation and Storage*

Energy generation and storage cost of revenue includes direct and indirect material and labor costs, warehouse rent, freight, warranty expense, other overhead costs and amortization of certain acquired intangible assets. In addition, where arrangements are accounted for as operating leases, the cost of revenue is primarily comprised of depreciation of the cost of leased solar energy systems, maintenance costs associated with those systems and amortization of any initial direct costs.

##### *Sales and Other Use Taxes*

Taxes assessed by various government entities, such as sales, use and value added taxes, collected at the time of sale are excluded from automotive net sales and revenue.

#### *Transportation Costs*

Amounts billed to customers related to shipping and handling are classified as automotive revenue, and the related transportation costs are included in cost of automotive revenue.

#### *Research and Development Costs*

Research and development costs are expensed as incurred.

#### *Marketing, Promotional and Advertising Costs*

Marketing, promotional and advertising costs are expensed as incurred and are included as an element of selling, general and administrative expense in the consolidated statement of operations. We incurred marketing, promotional and advertising costs of \$66.5 million, \$48.0 million and \$58.3 million in the years ended December 31, 2017, 2016 and 2015, respectively.

#### *Income Taxes*

Income taxes are computed using the asset and liability method, under which deferred tax assets and liabilities are determined based on the difference between the financial statement and tax bases of assets and liabilities using enacted tax rates in effect for the year in which the differences are expected to affect taxable income. Valuation allowances are established when necessary to reduce deferred tax assets to the amount expected to be realized.

We record liabilities related to uncertain tax positions when, despite our belief that our tax return positions are supportable, we believe that it is more likely than not that those positions may not be fully sustained upon review by tax authorities. Accrued interest and penalties related to unrecognized tax benefits are classified as income tax expense.

#### *Comprehensive Income (Loss)*

Comprehensive income (loss) is comprised of net income (loss) and other comprehensive income (loss). Other comprehensive income (loss) consists of unrealized gains and losses on cash flow hedges and available-for-sale marketable securities and foreign currency translation adjustments that have been excluded from the determination of net income (loss).

#### *Stock-Based Compensation*

We recognize compensation expense for costs related to all share-based payments, including stock options, restricted stock units ("RSUs") and our employee stock purchase plan (the "ESPP"). The fair value of stock options and the ESPP is estimated on the grant or offering date using the Black-Scholes option-pricing model. The fair value of RSUs is measured on the grant date based on the closing fair market value of our common stock. Stock-based compensation expense is recognized on a straight-line basis over the requisite service period, net of actual forfeitures in the period (prior to 2017, net of estimated projected forfeitures). Stock-based compensation associated with awards assumed from the acquisition of SolarCity Corporation ("SolarCity") is measured as of the acquisition date using the relevant assumptions and recognized on a straight-line basis over the remaining requisite service period, net of actual forfeitures in the period (prior to 2017, net of estimated projected forfeitures).

For performance-based awards, stock-based compensation expense is recognized over the expected performance achievement period of individual performance milestones when the achievement of each individual performance milestone becomes probable. For performance-based awards with a vesting schedule based entirely on the attainment of both performance and market conditions, stock-based compensation expense is recognized for each pair of performance and market conditions over the longer of the expected achievement period of the performance and market conditions, beginning at the point in time that the relevant performance condition is considered probable of achievement. The fair value of such awards is estimated on the grant date using Monte Carlo simulations (see Note 15, *Equity Incentive Plans*).

#### *Noncontrolling Interests and Redeemable Noncontrolling Interests*

Noncontrolling interests and redeemable noncontrolling interests represent third-party interests in the net assets under certain funding arrangements, or funds, that we enter into to finance the costs of solar energy systems

and vehicles under operating leases. We have determined that the contractual provisions of the funds represent substantive profit sharing arrangements. We have further determined that the appropriate methodology for calculating the noncontrolling interest and redeemable noncontrolling interest balances that reflects the substantive profit sharing arrangements is a balance sheet approach using the hypothetical liquidation at book value (“HLBV”) method. We, therefore, determine the amount of the noncontrolling interests and redeemable noncontrolling interests in the net assets of the funds at each balance sheet date using the HLBV method, which is presented on the consolidated balance sheet as noncontrolling interests in subsidiaries and redeemable noncontrolling interests in subsidiaries. Under the HLBV method, the amounts reported as noncontrolling interests and redeemable noncontrolling interests in the consolidated balance sheet represent the amounts the third-parties would hypothetically receive at each balance sheet date under the liquidation provisions of the funds, assuming the net assets of the funds were liquidated at their recorded amounts determined in accordance with GAAP and with tax laws effective at the balance sheet date and distributed to the third-parties. The third-parties’ interests in the results of operations of the funds are determined as the difference in the noncontrolling interest and redeemable noncontrolling interest balances in the consolidated balance sheets between the start and end of each reporting period, after taking into account any capital transactions between the funds and the third-parties. However, the redeemable noncontrolling interest balance is at least equal to the redemption amount. The redeemable noncontrolling interest balance is presented as temporary equity in the mezzanine section of the consolidated balance sheet since these third-parties have the right to redeem their interests in the funds for cash or other assets.

#### *Net Income (Loss) per Share of Common Stock Attributable to Common Stockholders*

Basic net income (loss) per share of common stock attributable to common stockholders is calculated by dividing net income (loss) attributable to common stockholders by the weighted-average shares of common stock outstanding for the period. Potentially dilutive shares, which are based on the weighted-average shares of common stock underlying outstanding stock-based awards, warrants and convertible senior notes using the treasury stock method or the if-converted method, as applicable, are included when calculating diluted net income (loss) per share of common stock attributable to common stockholders when their effect is dilutive. Since we expect to settle in cash the principal outstanding under the 0.25% Convertible Senior Notes due in 2019, the 1.25% Convertible Senior Notes due in 2021 and the 2.375% Convertible Senior Notes due in 2022, we use the treasury stock method when calculating their potential dilutive effect, if any. The following table presents the potentially dilutive shares that were excluded from the computation of diluted net income (loss) per share of common stock attributable to common stockholders, because their effect was anti-dilutive:

	<b>Year Ended December 31,</b>		
	<b>2017</b>	<b>2016</b>	<b>2015</b>
Stock-based awards	10,456,363	12,091,473	15,592,736
Convertible senior notes	2,315,463	841,191	2,431,265
Warrants	579,137	262,702	1,049,791

#### *Business Combinations*

We account for business acquisitions under ASC 805, *Business Combinations*. The total purchase consideration for an acquisition is measured as the fair value of the assets given, equity instruments issued and liabilities assumed at the acquisition date. Costs that are directly attributable to the acquisition are expensed as incurred. Identifiable assets (including intangible assets), liabilities assumed (including contingent liabilities) and noncontrolling interests in an acquisition are measured initially at their fair values at the acquisition date. We recognize goodwill if the fair value of the total purchase consideration and any noncontrolling interests is in excess of the net fair value of the identifiable assets acquired and the liabilities assumed. We recognize a bargain purchase gain within other income (expense), net, on the consolidated statement of operations if the net fair value of the identifiable assets acquired and the liabilities assumed is in excess of the fair value of the total purchase consideration and any noncontrolling interests. We include the results of operations of the acquired business in the consolidated financial statements beginning on the acquisition date.

#### *Cash and Cash Equivalents*

All highly liquid investments with an original maturity of three months or less at the date of purchase are considered cash equivalents. Our cash equivalents are primarily comprised of money market funds.

### *Restricted Cash and Deposits*

We maintain certain cash balances restricted as to withdrawal or use. Our restricted cash is comprised primarily of cash as collateral for our sales to lease partners with a resale value guarantee, letters of credit, real estate leases, insurance policies, credit card borrowing facilities and certain operating leases. In addition, restricted cash includes cash received from certain fund investors that have not been released for use by us and cash held to service certain payments under various secured debt facilities.

### *Accounts Receivable and Allowance for Doubtful Accounts*

Accounts receivable primarily include amounts related to sales of powertrain systems, sales of energy generation and storage products, receivables from financial institutions and leasing companies offering various financing products to our customers, sales of regulatory credits to other automotive manufacturers and maintenance services on vehicles owned by leasing companies. We provide an allowance against accounts receivable to the amount we reasonably believe will be collected. We write-off accounts receivable when they are deemed uncollectible.

We typically do not carry significant accounts receivable related to our vehicle and related sales as customer payments are due prior to vehicle delivery, except for amounts due from commercial financial institutions for approved financing arrangements between our customers and the financial institutions.

### *MyPower Customer Notes Receivable*

We have customer notes receivable under the legacy MyPower loan program. MyPower was offered by SolarCity to provide residential customers with the option to finance the purchase of a solar energy system through a 30-year loan. The outstanding balances, net of any allowance for potentially uncollectible amounts, are presented on the consolidated balance sheet as a component of prepaid expenses and other current assets for the current portion and as MyPower customer notes receivable, net of current portion, for the long-term portion. In determining the allowance and credit quality for customer notes receivable, we identify significant customers with known disputes or collection issues and also consider our historical level of credit losses and current economic trends that might impact the level of future credit losses. Customer notes receivable that are individually impaired are charged-off as a write-off of the allowance for losses. Since acquisition, there have been no new significant customers with known disputes or collection issues, and the amount of potentially uncollectible amounts has been insignificant. Accordingly, we did not establish an allowance for losses against customer notes receivable. In addition, there were no material non-accrual or past due customer notes receivable as of December 31, 2017.

### *Concentration of Risk*

#### *Credit Risk*

Financial instruments that potentially subject us to a concentration of credit risk consist of cash, cash equivalents, restricted cash, accounts receivable and interest rate swaps. Our cash balances are primarily invested in money market funds or on deposit at high credit quality financial institutions in the U.S. At times, these deposits may be in excess of insured limits. As of December 31, 2017, no entity represented 10% or more of our total accounts receivable balance. As of December 31, 2016, one entity represented approximately 10% of our total accounts receivable balance. The risk of concentration for our interest rate swaps is mitigated by transacting with several highly-rated multinational banks.

#### *Supply Risk*

We are dependent on our suppliers, the majority of which are single source suppliers, and the inability of these suppliers to deliver necessary components of our products in a timely manner at prices, quality levels and volumes acceptable to us, or our inability to efficiently manage these components from these suppliers, could have a material adverse effect on our business, prospects, financial condition and operating results.

### *Inventory Valuation*

Inventories are stated at the lower of cost or net realizable value. Cost is computed using standard cost for vehicles and energy storage products, which approximates actual cost on a first-in, first-out basis. In addition, cost

for solar energy systems are recorded using actual cost. We record inventory write-downs for excess or obsolete inventories based upon assumptions about on current and future demand forecasts. If our inventory on-hand is in excess of our future demand forecast, the excess amounts are written-off.

We also review our inventory to determine whether its carrying value exceeds the net amount realizable upon the ultimate sale of the inventory. This requires us to determine the estimated selling price of our vehicles less the estimated cost to convert the inventory on-hand into a finished product. Once inventory is written-down, a new, lower cost basis for that inventory is established and subsequent changes in facts and circumstances do not result in the restoration or increase in that newly established cost basis.

Should our estimates of future selling prices or production costs change, additional and potentially material increases to this reserve may be required. A small change in our estimates may result in a material charge to our reported financial results.

#### *Operating Lease Vehicles*

Vehicles delivered under our resale value guarantee program, vehicles that are leased as part of our leasing programs as well as any vehicles that are sold with a significant buy-back guarantee are classified as operating lease vehicles as the related revenue transactions are treated as operating leases. Operating lease vehicles are recorded at cost less accumulated depreciation. Depreciation is computed using the straight-line method over the expected operating lease term. The total cost of operating lease vehicles recorded on the consolidated balance sheets as of December 31, 2017 and 2016 was \$4.85 billion and \$3.53 billion, respectively. Accumulated depreciation related to leased vehicles as of December 31, 2017, and 2016 was \$733.3 million and \$399.5 million, respectively.

#### *Solar Energy Systems, Leased and To Be Leased*

We are the lessor of solar energy systems under leases that qualify as operating leases. Our leases are accounted for in accordance with ASC 840. To determine lease classification, we evaluate the lease terms to determine whether there is a transfer of ownership or bargain purchase option at the end of the lease, whether the lease term is greater than 75% of the useful life or whether the present value of the minimum lease payments exceed 90% of the fair value at lease inception. We utilize periodic appraisals to estimate useful lives and fair values at lease inception and residual values at lease termination. Solar energy systems are stated at cost less accumulated depreciation.

Depreciation and amortization is calculated using the straight-line method over the estimated useful lives of the respective assets, as follows:

Solar energy systems leased to customers	30 to 35 years
Initial direct costs related to customer solar energy system lease acquisition costs	Lease term (up to 25 years)

Solar energy systems held for lease to customers are installed systems pending interconnection with the respective utility companies and will be depreciated as solar energy systems leased to customers when they have been interconnected and placed in-service. Solar energy systems under construction represents systems that are under installation, which will be depreciated as solar energy systems leased to customers when they are completed, interconnected and leased to customers. Initial direct costs related to customer solar energy system lease acquisition costs are capitalized and amortized over the term of the related customer lease agreements.

### *Property, Plant and Equipment*

Property, plant and equipment, including leasehold improvements, are recognized at cost less accumulated depreciation and amortization. Depreciation is generally computed using the straight-line method over the estimated useful lives of the respective assets, as follows:

Machinery, equipment, vehicles and office furniture	2 to 12 years
Building and building improvements	15 to 30 years
Computer equipment and software	3 to 10 years

Depreciation for tooling is computed using the units-of-production method whereby capitalized costs are amortized over the total estimated productive life of the respective assets. As of December 31, 2017, the estimated productive life for Model S and X tooling was 250,000 vehicles based on our current estimates of production. As of December 31, 2017, the estimated productive life for Model 3 tooling was 1,000,000 vehicles based on our current estimates of production.

Leasehold improvements are amortized on a straight-line basis over the shorter of their estimated useful lives or the terms of the related leases.

Upon the retirement or sale of our property, plant and equipment, the cost and associated accumulated depreciation are removed from the consolidated balance sheet, and the resulting gain or loss is reflected on the consolidated statement of operations. Maintenance and repair expenditures are expensed as incurred while major improvements that increase the functionality, output or expected life of an asset are capitalized and depreciated ratably over the identified useful life.

Interest expense on outstanding debt is capitalized during the period of significant capital asset construction. Capitalized interest on construction-in-progress is included within property, plant and equipment and is amortized over the life of the related assets.

Furthermore, we are deemed to be the owner, for accounting purposes, during the construction phase of certain long-lived assets under build-to-suit lease arrangements because of our involvement with the construction, our exposure to any potential cost overruns or our other commitments under the arrangements. In these cases, we recognize build-to-suit lease assets under construction and corresponding build-to-suit lease liabilities on the consolidated balance sheet, in accordance with ASC 840. Once construction is completed, if a lease meets certain "sale-leaseback" criteria, we remove the asset and liability and account for the lease as an operating lease. Otherwise, the lease is accounted for as a capital lease.

### *Long-Lived Assets Including Acquired Intangible Assets*

We review our property, plant and equipment, long-term prepayments and intangible assets for impairment whenever events or changes in circumstances indicate that the carrying amount of an asset (or asset group) may not be recoverable. We measure recoverability by comparing the carrying amount to the future undiscounted cash flows that the asset is expected to generate. If the asset is not recoverable, its carrying amount would be adjusted-down to its fair value. We have recognized no material impairments of our long-lived assets in any of the periods presented.

Intangible assets with definite lives are amortized on a straight-line basis over their estimated useful lives, which range from two to thirty years.

### *Capitalization of Software Costs*

For costs incurred in development of internal use software, we capitalize costs incurred during the application development stage. Costs related to preliminary project activities and post-implementation activities are expensed as incurred. Internal use software is amortized on a straight-line basis over its estimated useful life of three to ten years. We evaluate the useful lives of these assets on an annual basis, and we test for impairment whenever events or changes in circumstances occur that could impact the recoverability of these assets.



### *Foreign Currency*

We determine the functional and reporting currency of each of our international subsidiaries and their operating divisions based on the primary currency in which they operate. In cases where the functional currency is not the U.S. dollar, we recognize a cumulative translation adjustment created by the different rates we apply to accumulated deficits, including current period income or loss, and the balance sheet. For each subsidiary, we apply the monthly average functional currency rate to its income or loss and the month-end functional currency rate to translate the balance sheet.

Beginning on January 1, 2015, the functional currency of each of our foreign subsidiaries was changed to their local country's currency. This change was based on the culmination of facts and circumstances that had developed as we expanded our foreign operations. The adjustment of \$10.0 million attributable to the translation of non-monetary assets and liabilities as of the date of change is included in accumulated other comprehensive loss on the consolidated balance sheet.

Foreign currency transaction gains and losses are a result of the effect of exchange rate changes on transactions denominated in currencies other than the functional currency. Transaction gains and losses are recognized in other income (expense), net, on the consolidated statement of operations. For the years ended December 31, 2017, 2016 and 2015, we recorded foreign currency transaction gains (losses) of \$52.3 million, \$26.1 million and (\$45.6) million, respectively.

### *Warranties*

We provide a manufacturer's warranty on all new and used vehicles, production powertrain components and systems and energy products we sell. In addition, we also provide a warranty on the installation and components of the solar energy systems we sell for periods typically between 10 to 30 years. We accrue a warranty reserve for the products sold by us, which includes our best estimate of the projected costs to repair or replace items under warranty. These estimates are based on actual claims incurred to date and an estimate of the nature, frequency and costs of future claims. These estimates are inherently uncertain given our relatively short history of sales, and changes to our historical or projected warranty experience may cause material changes to the warranty reserve in the future. The warranty reserve does not include projected warranty costs associated with our vehicles subject to lease accounting and our solar energy systems under lease contracts or power purchase agreements, as the costs to repair these warranty claims are expensed as incurred. The portion of the warranty reserve expected to be incurred within the next 12 months is included within accrued liabilities and other while the remaining balance is included within other long-term liabilities on the consolidated balance sheet. Warranty expense is recorded as a component of cost of revenues. Accrued warranty activity consisted of the following (in thousands):

	<b>Year Ended December 31,</b>		
	<b>2017</b>	<b>2016</b>	<b>2015</b>
Accrued warranty—beginning of period	\$ 266,655	\$ 180,754	\$ 129,043
Assumed warranty liability from acquisition	4,737	31,366	—
Warranty costs incurred	(122,510)	(79,147)	(52,760)
Net changes in liability for pre-existing warranties, including expirations and foreign exchange impact	4,342	(20,084)	1,470
Provision for warranty	248,566	153,766	103,001
Accrued warranty—end of period	<u>\$ 401,790</u>	<u>\$ 266,655</u>	<u>\$ 180,754</u>

For the years ended December 31, 2017 and 2016, warranty costs incurred for vehicles accounted for as operating leases or collateralized debt arrangements were \$35.5 million and \$19.0 million, respectively.

### *Solar Energy Systems Performance Guarantees*

We guarantee certain specified minimum solar energy production output for certain solar energy systems leased or sold to customers, generally for a term of up to 30 years. We monitor the solar energy systems to ensure that these outputs are being achieved. We evaluate if any amounts are due to our customers and make any payments periodically as specified in the customer agreements. As of December 31, 2017 and 2016, we had recognized a

liability of \$6.3 million and \$6.6 million, respectively, within accrued liabilities and other on the consolidated balance sheets, related to these guarantees based on our assessment of the exposure.

#### *Solar Renewable Energy Credits*

We account for solar renewable energy credits (“SRECs”) when they are purchased by us or sold to third-parties. For SRECs generated by solar energy systems owned by us and minted by government agencies, we do not recognize any specifically identifiable costs for those SRECs as there are no specific incremental costs incurred to generate the SRECs. For SRECs purchased by us, we record these SRECs at their cost, subject to impairment testing. We recognize revenue from the sale of an SREC when the SREC is transferred to the buyer, and the cost of the SREC, if any, is then recorded to cost of revenue.

#### *Deferred Investment Tax Credit Revenue*

We have solar energy systems that are eligible for investment tax credits (“ITCs”) that accrue to eligible property under the Internal Revenue Code (“IRC”). Under Section 50(d)(5) of the IRC and the related regulations, a lessor of qualifying property may elect to treat the lessee as the owner of such property for the purposes of claiming the ITCs associated with such property. These regulations enable the ITCs to be separated from the ownership of the property and allow the transfer of the ITCs. Under our lease pass-through fund arrangements, we can make a tax election to pass-through the ITCs to the investors, who are the legal lessee of the property. Therefore, we are able to monetize these ITCs to the investors who can utilize them in return for cash payments. We consider the monetization of ITCs to constitute one of the key elements of realizing the value associated with solar energy systems. Consequently, we consider the proceeds from the monetization of ITCs to be a component of revenue generated from solar energy systems.

In accordance with the relevant FASB guidance, we recognize revenue from the monetization of ITCs when (1) persuasive evidence of an arrangement exists, (2) delivery has occurred or services have been rendered, (3) the sales price is fixed or determinable and (4) collection of the related receivable is reasonably assured. An ITC is subject to recapture under the IRC if the underlying solar energy system either ceases to be a qualifying property or undergoes a change in ownership within five years of its placed-in-service date; the recapture amount decreases on each anniversary of the placed-in-service date. Since we have an obligation to ensure that the solar energy system is in-service and operational for a term of five years in order to avoid any recapture of the ITC, we recognize revenue as the recapture amount decreases, assuming the other revenue recognition criteria above have been met. As a result, the monetized ITC is initially recorded as deferred revenue on the consolidated balance sheets, and subsequently, one-fifth of the monetized ITC is recognized as energy generation and storage revenue on the consolidated statement of operations on each anniversary of the solar energy system’s placed-in-service date over five years.

We indemnify the investors for any recapture of ITCs due to our non-compliance. We have concluded that the likelihood of a recapture event is remote, and consequently, we have not recognized a liability for this indemnification on the consolidated balance sheets.

#### *Recent Accounting Pronouncements*

In May 2014, the Financial Accounting Standards Board (“FASB”) issued Accounting Standards Update (“ASU”) No. 2014-09, *Revenue from Contracts with Customers*, to replace the existing revenue recognition criteria for contracts with customers. In August 2015, the FASB issued ASU No. 2015-14, *Deferral of the Effective Date*, to defer the effective date of ASU No. 2014-09 to interim and annual periods beginning after December 15, 2017. Subsequently, the FASB issued ASU No. 2016-08, *Principal versus Agent Considerations*, ASU No. 2016-10, *Identifying Performance Obligations and Licensing*, ASU No. 2016-11, *Rescission of SEC Guidance Because of Accounting Standards Updates 2014-09 and 2014-16 Pursuant to Staff Announcements at the March 3, 2016 EITF Meeting*, ASU No. 2016-12, *Narrow-Scope Improvements and Practical Expedients*, and ASU No. 2016-20, *Technical Corrections and Improvements*, to clarify and amend the guidance in ASU No. 2014-09. We will adopt the ASUs on January 1, 2018 on a modified retrospective basis through a cumulative adjustment to accumulated deficit. The adoption of the ASUs will accelerate the revenue recognition of certain vehicle sales to customers or leasing partners with a resale value guarantee, which will therefore qualify to be accounted for as sales with a right of return as opposed to the current accounting as operating leases or collateralized lease borrowings. Our interpretation is subject to change as a result of future changes in market conditions, incentives or program offerings. Upon adoption of the ASUs, we currently estimate a decrease to our beginning accumulated deficit in the range of

\$520.0 million to \$570.0 million before income tax effects (which are still being assessed), including the impact of adjusting deferred revenue for ITC balances, as of January 1, 2018. We are continuing to assess the impact of adopting the ASUs on the consolidated financial statements, and we are continuing to adjust our accounting policies, operational and financial reporting processes, systems and related internal controls accordingly.

In February 2016, the FASB issued ASU No. 2016-02, *Leases*, to require lessees to recognize all leases, with certain exceptions, on the balance sheet, while recognition on the statement of operations will remain similar to current lease accounting. The ASU also eliminates real estate-specific provisions and modifies certain aspects of lessor accounting. The ASU is effective for interim and annual periods beginning after December 15, 2018, with early adoption permitted. We currently expect to adopt the ASU on January 1, 2019. We will be required to recognize and measure leases existing at, or entered into after, the beginning of the earliest comparative period presented using a modified retrospective approach, with certain practical expedients available. We intend to elect the available practical expedients upon adoption. Upon adoption, we expect the consolidated balance sheet to include a right of use asset and liability related to substantially all of our lease arrangements. We are continuing to assess the impact of adopting the ASU on our financial position, results of operations and related disclosures and have not yet concluded whether the effect on the consolidated financial statements will be material.

In March 2016, the FASB issued ASU No. 2016-06, *Contingent Put and Call Options in Debt Instruments*, to clarify when a contingent put or call option to accelerate the repayment of debt is an embedded derivative. The ASU is effective for interim and annual periods beginning after December 15, 2016. Adoption of the ASU is modified retrospective. We adopted the ASU on January 1, 2017, but the ASU did not have an impact on the consolidated financial statements.

In March 2016, the FASB issued ASU No. 2016-09, *Improvements to Employee Share-Based Payment Accounting*, to simplify the accounting for the income tax effects from share-based compensation, the accounting for forfeitures and the accounting for statutory income tax withholding, among others. In particular, the ASU requires all income tax effects from share-based compensation to be recognized in the consolidated statement of operations when the awards vest or are settled, the ASU permits accounting for forfeitures as they occur, and the ASU permits a higher level of statutory income tax withholding without triggering liability accounting. Adoption of the ASU is modified retrospective, retrospective and prospective, depending on the specific provision being adopted. We adopted the ASU on January 1, 2017, which increased our beginning accumulated deficit and additional paid-in capital by \$15.7 million. Furthermore, our gross U.S. deferred tax assets increased by \$909.1 million, which was fully offset by a corresponding increase to our valuation allowance, upon adoption. In addition, beginning on January 1, 2017, we account for forfeitures as they occur.

In August 2016, the FASB issued ASU No. 2016-15, *Classification of Certain Cash Receipts and Cash Payments*, to reduce the diversity in practice with respect to the classification of certain cash receipts and cash payments on the statement of cash flows. The ASU is effective for interim and annual periods beginning after December 15, 2017. Adoption of the ASU is retrospective. We will adopt the ASU on January 1, 2018, which will impact the classifications within the consolidated statement of cash flows.

In October 2016, the FASB issued ASU No. 2016-16, *Intra-Entity Transfers of Assets Other Than Inventory*, to require the recognition of the income tax effects from an intra-entity transfer of an asset other than inventory. The ASU is effective for interim and annual periods beginning after December 15, 2017. Adoption of the ASU is modified retrospective. We early adopted the ASU on January 1, 2017. Our adoption did not have a material impact on the consolidated financial statements.

In November 2016, the FASB issued ASU No. 2016-18, *Statement of Cash Flows: Restricted Cash*, which requires entities to present the aggregate changes in cash, cash equivalents, restricted cash and restricted cash equivalents in the statement of cash flows. As a result, the statement of cash flows will be required to present restricted cash and restricted cash equivalents as a part of the beginning and ending balances of cash and cash equivalents. The ASU is effective for interim and annual periods beginning after December 15, 2017. Adoption of the ASU is retrospective. We will adopt the ASU on January 1, 2018, which will result in restricted cash being combined with unrestricted cash reconciling beginning and ending balances.

In January 2017, the FASB issued ASU No. 2017-01, *Clarifying the Definition of a Business*, to clarify the definition of a business with the objective of assisting entities with evaluating whether transactions should be

accounted for as acquisitions (or disposals) of assets or businesses. The ASU is effective for interim and annual periods beginning after December 15, 2017. Adoption of the ASU is prospective. We will adopt the ASU on January 1, 2018, which we anticipate will result in more transactions being accounted for as asset acquisitions rather than business acquisitions.

In January 2017, the FASB issued ASU No. 2017-04, *Simplifying the Test for Goodwill Impairment*, to simplify the test for goodwill impairment by removing Step 2. An entity will, therefore, perform the goodwill impairment test by comparing the fair value of a reporting unit with its carrying amount, recognizing an impairment charge for the amount by which the carrying amount exceeds the fair value, not to exceed the total amount of goodwill allocated to the reporting unit. An entity still has the option to perform a qualitative assessment to determine if the quantitative impairment test is necessary. The ASU is effective for interim and annual periods beginning after December 15, 2019, with early adoption permitted for interim or annual goodwill impairment tests performed on testing dates after January 1, 2017. Adoption of the ASU is prospective. We have not yet selected an adoption date, and the ASU currently has an undetermined impact on the consolidated financial statements.

In May 2017, the FASB issued ASU No. 2017-09, *Scope of Modification Accounting*, to provide guidance on which changes to the terms or conditions of a share-based payment award require an entity to apply modification accounting. The ASU is effective for interim and annual periods beginning after December 15, 2017. Adoption of the ASU is prospective. We will adopt the ASU on January 1, 2018, which will have no impact on the consolidated financial statements upon adoption.

In August 2017, the FASB issued ASU No. 2017-12, *Targeted Improvements to Accounting for Hedging Activities*, to simplify the application of current hedge accounting guidance. The ASU expands and refines hedge accounting for both non-financial and financial risk components and aligns the recognition and presentation of the effects of the hedging instrument and the hedged item in the financial statements. The ASU is effective for interim and annual periods beginning after December 15, 2018, with early adoption permitted. Adoption of the ASU is generally modified retrospective. We are currently obtaining an understanding of the ASU and plan to adopt the ASU on January 1, 2019.

### **Note 3 – Business Combinations**

#### ***Grohmann Acquisition***

On January 3, 2017, we completed our acquisition of Grohmann Engineering GmbH (now Tesla Grohmann Automation GmbH or “Grohmann”), which specializes in the design, development and sale of automated manufacturing systems, for \$109.5 million in cash. We acquired Grohmann to improve the speed and efficiency of our manufacturing processes.

At the time of acquisition, we entered into an incentive compensation arrangement for up to a maximum of \$25.8 million of payments contingent upon continued service with us for 36 months after the acquisition date. Such payments would have been accounted for as compensation expense in the periods earned. However, during the three months ended March 31, 2017, we terminated the incentive compensation arrangement and accelerated the payments thereunder. As a result, we recorded the entire \$25.8 million as compensation expense in the three months ended March 31, 2017, which was included within selling, general and administrative expense in the consolidated statements of operations.

#### ***Fair Value of Assets Acquired and Liabilities Assumed***

Fair value estimates are based on a complex series of judgments about future events and uncertainties and rely heavily on estimates and assumptions. The judgments used to determine the estimated fair value assigned to each class of assets acquired and liabilities assumed, as well as asset lives and the expected future cash flows and related discount rates, can materiality impact our results of operations. Significant inputs used included the amount of cash flows, the expected period of the cash flows and the discount rates. During the fourth quarter of 2017, we finalized our estimate of the acquisition date fair values of the assets acquired and the liabilities assumed. Prior to finalization, there were no changes to the fair values of the assets acquired and the liabilities assumed.

The allocation of the purchase consideration was based on management's estimate of the acquisition date fair values of the assets acquired and the liabilities assumed, as follows (in thousands):

**Assets acquired:**

Cash and cash equivalents	\$	334
Accounts receivable		42,947
Inventory		10,031
Property, plant and equipment		44,030
Intangible assets		21,723
Prepaid expenses and other assets, current and non-current		1,998
Total assets acquired		121,063

**Liabilities assumed:**

Accounts payable	(19,975)
Accrued liabilities	(12,403)
Debt and capital leases, current and non-current	(9,220)
Other long-term liabilities	(10,049)
Total liabilities assumed	(51,647)
Net assets acquired	69,416
Goodwill	40,065
Total purchase price	\$ 109,481

Goodwill represented the excess of the purchase price over the fair value of the net assets acquired and was primarily attributable to the expected synergies from potential monetization opportunities and from integrating Grohmann's technology into our automotive business as well as the acquired talent. Goodwill is not deductible for U.S. income tax purposes and is not amortized. Rather, we assess goodwill for impairment annually in the fourth quarter, or more frequently if events or changes in circumstances indicate that it might be impaired, by comparing its carrying value to the reporting unit's fair value.

*Identifiable Intangible Assets Acquired*

The determination of the fair values of the identified intangible assets and their respective useful lives as of the acquisition date was as follows (in thousands, except for useful lives):

	Fair Value	Useful Life (in years)
Developed technology	\$ 12,528	10
Software	3,341	3
Customer relations	3,236	6
Trade name	1,775	7
Other	843	2
Total intangible assets	\$ 21,723	

Grohmann's results of operations since the acquisition date have been included within the automotive segment in the consolidated statements of operations. Standalone and pro forma results of operations have not been presented because they were not material to the consolidated financial statements.

***SolarCity Acquisition***

On November 21, 2016 (the "Acquisition Date"), we completed our acquisition of SolarCity. Pursuant to the Agreement and Plan of Merger (the "Merger Agreement"), each issued and outstanding share of SolarCity common stock was converted into 0.110 (the "Exchange Ratio") shares of our common stock. In addition, SolarCity's stock option awards and restricted stock unit awards were assumed by us and converted into corresponding equity awards in respect of our common stock based on the Exchange Ratio, with the awards retaining the same vesting and other terms and conditions as in effect immediately prior to the acquisition.

#### *Fair Value of Purchase Consideration*

The Acquisition Date fair value of the purchase consideration was as follows (in thousands, except for share and per share amounts):

Total fair value of Tesla common stock issued (11,124,497 shares issued at \$185.04 per share)	\$ 2,058,477
Fair value of replacement Tesla stock options and restricted stock units for vested SolarCity awards	87,500
Total purchase price	<u>\$ 2,145,977</u>

Furthermore, the assumed unvested SolarCity awards of \$95.9 million are recognized as stock-based compensation expense over the remaining requisite service period. Per ASC 805, the replacement of stock options or other share-based payment awards in conjunction with a business combination represents a modification of share-based payment awards that must be accounted for in accordance with ASC 718, *Stock Compensation*. As a result of our issuance of replacement awards, a portion of the fair-value-based measure of the replacement awards is included in the purchase consideration. To determine the portion of the replacement awards that is part of the purchase consideration, we measured the fair value of both the replacement awards and the historical awards as of the Acquisition Date. The fair value of the replacement awards, whether vested or unvested, was included in the purchase consideration to the extent that pre-acquisition services were rendered.

Transaction costs of \$21.7 million were expensed as incurred to selling, general and administrative expense on the consolidated statements of operations.

#### *Fair Value of Assets Acquired and Liabilities Assumed*

Fair value estimates are based on a complex series of judgments about future events and uncertainties and rely heavily on estimates and assumptions. The judgments used to determine the estimated fair value assigned to each class of assets acquired and liabilities assumed, as well as asset lives and the expected future cash flows and related discount rates, can materially impact our results of operations. Specifically, we utilized a discounted cash flow model to value the acquired solar energy systems, leased and to be leased, as well as the noncontrolling interests in subsidiaries. Significant inputs used included the amount of cash flows, the expected period of the cash flows and the discount rates.

The allocation of the purchase consideration was based on management's estimate of the Acquisition Date fair values of the assets acquired and the liabilities assumed, as follows (in thousands):

**Assets acquired:**

Cash and cash equivalents	\$ 213,523
Accounts receivable	74,619
Inventory	191,878
Solar energy systems, leased and to be leased	5,781,496
Property, plant and equipment	1,056,312
MyPower customer notes receivable, net of current portion	498,141
Restricted cash	129,196
Intangible assets	356,510
Prepaid expenses and other assets, current and non-current	199,864
Total assets acquired	8,501,539

**Liabilities assumed:**

Accounts payable	(230,078)
Accrued liabilities	(284,765)
Debt and capital leases, current and non-current	(3,403,840)
Financing obligations	(121,290)
Deferred revenue, current and non-current	(271,128)
Other liabilities	(950,423)
Total liabilities assumed	(5,261,524)
Net assets acquired	3,240,015
Noncontrolling interests redeemable and non-redeemable	(1,066,517)
Capped call options associated with 2014 convertible notes	3,460
Total net assets acquired	2,176,958
Gain on acquisition	(30,981)
Total purchase price	\$ 2,145,977

*Gain on Acquisition*

Since the fair value of the net assets acquired was greater than the purchase price, we recognized a gain on acquisition of \$88.7 million in the fourth quarter of 2016, which was recorded within other income (expense), net, on the consolidated statements of operations.

During the fourth quarter of 2017, we finalized our estimate of the Acquisition Date fair values of the assets acquired and the liabilities assumed. Prior to finalization, during the year ended December 31, 2017, we recorded an \$11.6 million measurement period adjustment to MyPower customer notes receivable, net of current portion, and a \$46.2 million measurement period adjustment to accrued liabilities. The measurement period adjustments were recorded as losses to other income (expense), net, in the consolidated statement of operations and reduced the gain on acquisition initially recognized in the fourth quarter of 2016.

*Identifiable Intangible Assets Acquired*

The determination of the fair values of the identified intangible assets and their respective useful lives as of the Acquisition Date was as follows (in thousands, except for useful lives):

	Fair Value	Useful Life (in years)
Developed technology	\$ 113,361	7
Trade name	43,500	3
Favorable contracts and leases, net	112,817	15
IPR&D	86,832	Not applicable
Total intangible assets	\$ 356,510	

### Unaudited Pro Forma Financial Information

The consolidated financial statements for the year ended December 31, 2016 include SolarCity's results of operations from the Acquisition Date through December 31, 2016. Net revenues and operating loss attributable to SolarCity during this period and included in the consolidated statement of operations were \$84.1 million and \$68.2 million, respectively.

The following unaudited pro forma financial information gives effect to our acquisition of SolarCity as if the acquisition had occurred on January 1, 2015 (in thousands, except per share data):

	Year Ended December 31	
	2016	2015
Revenue	\$ 7,536,876	\$ 4,354,324
Net loss attributable to common stockholders	\$ (702,868)	\$ (1,017,223)
Net loss per share of common stock, basic and diluted	\$ (4.56)	\$ (7.30)
Weighted-average shares used in computing net loss per share of common stock, basic and diluted	154,090	139,327

The unaudited pro forma financial information includes adjustments for the depreciation of solar energy systems, leased and to be leased, the intangible assets acquired, the effect of the acquisition on deferred revenue and noncontrolling interests and the transaction costs related to the acquisition. The unaudited pro forma financial information is presented for illustrative purposes only and is not necessarily indicative of the results of operations of future periods. The unaudited pro forma financial information does not give effect to the potential impact of current financial conditions, regulatory matters, synergies, operating efficiencies or cost savings that might be associated with the acquisition. Consequently, actual results could differ from the unaudited pro forma financial information presented.

### Note 4 – Goodwill and Intangible Assets

Goodwill increased to \$60.2 million as of December 31, 2017 due to our acquisitions and the impact of foreign currency translation adjustments.

Information regarding our acquired intangible assets was as follows (in thousands):

	December 31, 2017				December 31, 2016			
	Gross Carrying Amount	Accumulated Amortization	Other	Net Carrying Amount	Gross Carrying Amount	Accumulated Amortization	Net Carrying Amount	
<b>Finite-lived intangible assets:</b>								
Developed technology	\$125,889	\$(19,317)	\$ 1,847	\$108,419	\$113,361	\$(1,740)	\$111,621	
Trade name	45,275	(10,924)	261	34,612	43,500	(967)	42,533	
Favorable contracts and leases, net	112,817	(8,639)	—	104,178	112,817	(864)	111,953	
Other	34,099	(7,775)	1,137	27,461	26,679	(3,473)	23,206	
Total finite-lived intangible assets	318,080	(46,655)	3,245	274,670	296,357	(7,044)	289,313	
<b>Indefinite-lived intangible assets:</b>								
IPR&D	86,832	—	—	86,832	86,832	—	86,832	
Total indefinite-lived intangible assets	86,832	—	—	86,832	86,832	—	86,832	
Total intangible assets	\$404,912	\$(46,655)	\$ 3,245	\$361,502	\$383,189	\$(7,044)	\$376,145	



The in-process research and development (“IPR&D”), which we acquired from SolarCity, is accounted for as an indefinite-lived asset until the completion or abandonment of the associated research and development efforts. If the research and development efforts are successfully completed and commercial feasibility is reached, the IPR&D would be amortized over its then estimated useful life. If the research and development efforts are not completed or are abandoned, the IPR&D might be impaired. The fair value of the IPR&D was estimated using the replacement cost method under the cost approach, based on the historical acquisition costs and expenses of the technology adjusted for estimated developer’s profit, opportunity cost and obsolescence factor. We expect to complete the research and development efforts in the first half of 2018, but there can be no assurance that the commercial feasibility will be achieved. The nature of the research and development efforts consists principally of planning, designing and testing the technology for viability in manufacturing solar cells and modules. If commercial feasibility is not achieved, we would likely look to other alternative technologies.

Total future amortization expense for intangible assets was estimated as follows (in thousands):

	December 31, 2017	
2018	\$	46,897
2019		44,706
2020		27,284
2021		27,284
2022		27,282
Thereafter		101,217
Total	\$	<u>274,670</u>

#### Note 5 – Fair Value of Financial Instruments

ASC 820, *Fair Value Measurements*, states that fair value is an exit price, representing the amount that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants. As such, fair value is a market-based measurement that should be determined based on assumptions that market participants would use in pricing an asset or a liability. The three-tiered fair value hierarchy, which prioritizes which inputs should be used in measuring fair value, is comprised of: (Level I) observable inputs such as quoted prices in active markets; (Level II) inputs other than quoted prices in active markets that are observable either directly or indirectly and (Level III) unobservable inputs for which there is little or no market data. The fair value hierarchy requires the use of observable market data when available in determining fair value. Our assets and liabilities that were measured at fair value on a recurring basis were as follows (in thousands):

	December 31, 2017				December 31, 2016			
	Fair Value	Level I	Level II	Level III	Fair Value	Level I	Level II	Level III
Money market funds	\$2,163,459	\$2,163,459	\$ —	\$ —	\$2,226,322	\$2,226,322	\$ —	\$ —
Interest rate swaps, net	59	—	59	—	1,490	—	1,490	—
Total	<u>\$2,163,518</u>	<u>\$2,163,459</u>	<u>\$ 59</u>	<u>\$ —</u>	<u>\$2,227,812</u>	<u>\$2,226,322</u>	<u>\$ 1,490</u>	<u>\$ —</u>

All of our cash equivalents were classified within Level I of the fair value hierarchy because they were valued using quoted prices in active markets. Our interest rate swaps were classified within Level II of the fair value hierarchy because they were valued using alternative pricing sources or models that utilized market observable inputs, including current and forward interest rates. During the years ended December 31, 2017 and 2016, there were no transfers between the levels of the fair value hierarchy.

#### Cash Flow Hedges

In November 2015, we implemented a program to hedge the foreign currency exposure risk related to certain forecasted inventory purchases denominated in Japanese yen. The derivative instruments that we used were foreign currency forward contracts, which were designated as cash flow hedges with maturity dates of 12 months or less. We did not enter into any derivative contracts for trading or speculative purposes.

We documented each hedging relationship and assessed its initial effectiveness on each inception date. We measured its subsequent effectiveness on a quarterly basis using regression analysis. During the term of each effective hedge contract, we recorded gains and losses to accumulated other comprehensive income (loss). We reclassified these gains and losses to cost of automotive sales revenue when the related finished goods inventory was sold or to cost of automotive leasing revenue over the depreciation period when the related finished goods inventory was leased. All of our hedge contracts were effective, and we recorded no amounts related to hedge ineffectiveness during the years ended December 31, 2017, 2016 and 2015.

No hedge contracts were outstanding as of December 31, 2016 or thereafter. The net gain of \$5.6 million in accumulated other comprehensive income (loss) as of December 31, 2016 was fully reclassified to the consolidated statement of operations during the year ended December 31, 2017. During the year ended December 31, 2016, we reclassified \$44.9 million of net gains from accumulated other comprehensive income (loss) to the consolidated statement of operations. No amounts were reclassified from accumulated other comprehensive income (loss) to the consolidated statement of operations during the year ended December 31, 2015.

#### *Interest Rate Swaps*

We enter into fixed-for-floating interest rate swap agreements to swap variable interest payments on certain debt for fixed interest payments, as required by certain of our lenders. We do not designate our interest rate swaps as hedging instruments. Accordingly, our interest rate swaps are recorded at fair value on the consolidated balance sheets within other assets or other long-term liabilities, with any changes in their fair values recognized as other income (expense), net, in the consolidated statements of operations and with any cash flows recognized as investing activities in the consolidated statements of cash flows. As of December 31, 2016, the aggregate notional amount of our interest rate swaps, their gross asset at fair value and their gross liability at fair value were \$789.6 million, \$10.6 million and \$12.1 million, respectively. During the year ended December 31, 2016, we recognized \$7.0 million of gains related to our interest rate swaps. Our interest rate swaps outstanding were as follows as of December 31, 2017 (in thousands):

	<u>Aggregate Notional Amount</u>	<u>Gross Asset at Fair Value</u>	<u>Gross Liability at Fair Value</u>	<u>Gross Gains</u>	<u>Gross Losses</u>
Interest rate swaps	\$ 496,544	\$ 5,304	\$ 5,245	\$ 7,192	\$ 13,082

#### *Disclosure of Fair Values*

Our financial instruments that are not re-measured at fair value include accounts receivable, MyPower customer notes receivable, rebates receivable, accounts payable, accrued liabilities, customer deposits, convertible senior notes, the 5.30% Senior Notes due in 2025, the participation interest, solar asset-backed notes, solar loan-backed notes, Solar Bonds and long-term debt. The carrying values of these financial instruments other than the convertible senior notes, the 5.30% Senior Notes due in 2025, the participation interest, the solar asset-backed notes and the solar loan-backed notes approximate their fair values.

We estimate the fair value of the convertible senior notes and the 5.30% Senior Notes due in 2025 using commonly accepted valuation methodologies and market-based risk measurements that are indirectly observable, such as credit risk (Level II). In addition, we estimate the fair value of the participation interest, the solar asset-backed notes and the solar loan-backed notes based on rates currently offered for instruments with similar maturities and terms (Level III). The following table presents the estimated fair values and the carrying values (in thousands):

	<u>December 31, 2017</u>		<u>December 31, 2016</u>	
	<u>Carrying Value</u>	<u>Fair Value</u>	<u>Carrying Value</u>	<u>Fair Value</u>
Convertible senior notes	\$3,722,673	\$4,488,651	\$2,957,288	\$3,205,641
Senior notes	\$1,775,550	\$1,732,500	\$ —	\$ —
Participation interest	\$ 17,545	\$ 17,042	\$ 16,713	\$ 15,025
Solar asset-backed notes	\$ 880,415	\$ 898,145	\$ 442,764	\$ 428,551
Solar loan-backed notes	\$ 236,844	\$ 248,149	\$ 137,024	\$ 132,129

**Note 6 – Inventory**

Our inventory consisted of the following (in thousands):

	December 31, 2017	December 31, 2016
Raw materials	\$ 821,396	\$ 680,339
Work in process	243,181	233,746
Finished goods	1,013,909	1,016,731
Service parts	185,051	136,638
Total	<u>\$ 2,263,537</u>	<u>\$ 2,067,454</u>

Finished goods inventory included vehicles in transit to fulfill customer orders, new vehicles available for immediate sale at our retail and service center locations, used Tesla vehicles and energy storage products.

For solar energy systems, leased and to be leased, we commence transferring component parts from inventory to construction in progress, a component of solar energy systems, leased and to be leased, once a lease contract with a customer has been executed and installation has been initiated. Additional costs incurred on the leased systems, including labor and overhead, are recorded within construction in progress.

We write-down inventory for any excess or obsolete inventories or when we believe that the net realizable value of inventories is less than the carrying value. During the years ended December 31, 2017, 2016 and 2015, we recorded write-downs of \$124.1 million, \$52.8 million and \$44.9 million, respectively, in cost of revenues.

**Note 7 – Solar Energy Systems, Leased and To Be Leased, Net**

Solar energy systems, leased and to be leased, net, consisted of the following (in thousands):

	December 31, 2017	December 31, 2016
Solar energy systems leased to customers	\$ 6,009,977	\$ 5,052,976
Initial direct costs related to customer solar energy system lease acquisition costs	74,709	12,774
	<u>6,084,686</u>	<u>5,065,750</u>
Less: accumulated depreciation and amortization	<u>(220,110)</u>	<u>(20,157)</u>
	5,864,576	5,045,593
Solar energy systems under construction	243,847	460,913
Solar energy systems to be leased to customers	239,067	413,374
Solar energy systems, leased and to be leased – net (1)	<u>\$ 6,347,490</u>	<u>\$ 5,919,880</u>

- (1) Included in solar energy systems, leased and to be leased, as of December 31, 2017 and December 31, 2016 was \$36.0 million and \$36.0 million, respectively, related to capital leased assets with an accumulated depreciation and amortization of \$1.9 million and \$0.2 million, respectively.

**Note 8 – Property, Plant and Equipment**

Our property, plant and equipment, net, consisted of the following (in thousands):

	December 31, 2017	December 31, 2016
Machinery, equipment, vehicles and office furniture	\$ 4,251,711	\$ 2,154,367
Tooling	1,255,952	794,793
Leasehold improvements	789,751	505,295
Land and buildings	2,517,247	1,079,452
Computer equipment, hardware and software	395,067	275,655
Construction in progress	2,541,588	2,147,332
Other	—	23,548
	<u>11,751,316</u>	<u>6,980,442</u>
Less: Accumulated depreciation and amortization	(1,723,794)	(997,485)
Total	<u>\$ 10,027,522</u>	<u>\$ 5,982,957</u>

Construction in progress is primarily comprised of tooling and equipment related to the manufacturing of our vehicles and a portion of Gigafactory 1 construction. In addition, construction in progress also included certain build-to-suit lease costs incurred at our Buffalo manufacturing facility, referred to as Gigafactory 2. Completed assets are transferred to their respective asset classes, and depreciation begins when an asset is ready for its intended use. Interest on outstanding debt is capitalized during periods of significant capital asset construction and amortized over the useful lives of the related assets. During the years ended December 31, 2017 and 2016, we capitalized \$124.9 million and \$46.7 million, respectively, of interest.

As of December 31, 2017 and December 31, 2016, the table above included \$1.63 billion and \$1.32 billion, respectively, of build-to-suit lease assets. As of December 31, 2017 and December 31, 2016, the corresponding financing liabilities of \$14.9 million and \$3.8 million, respectively, were recorded in accrued liabilities and \$1.67 billion and \$1.32 billion, respectively, were recorded in other long-term liabilities.

Depreciation and amortization expense during the years ended December 31, 2017, 2016 and 2015 was \$769.3 million, \$477.3 million and \$278.7 million, respectively. Gross property and equipment under capital leases as of December 31, 2017 and December 31, 2016 was \$688.3 million and \$112.6 million, respectively. Accumulated depreciation on property and equipment under capital leases as of these dates was \$100.6 million and \$40.2 million, respectively.

We had cumulatively capitalized costs of \$3.15 billion and \$1.04 billion, respectively, for Gigafactory 1 as of December 31, 2017 and December 31, 2016.

**Note 9 – Non-cancellable Operating Lease Payments Receivable**

As of December 31, 2017, future minimum lease payments to be received from customers under non-cancellable operating leases for each of the next five years and thereafter were as follows (in thousands):

2018	\$ 387,343
2019	328,490
2020	242,683
2021	177,123
2022	176,752
Thereafter	<u>2,492,490</u>
Total	<u>\$ 3,804,881</u>

The above table does not include vehicle sales to customers or leasing partners with a resale value guarantee as the cash payments were received upfront. In addition, we assumed through our acquisition of SolarCity and will continue to enter into power purchase agreements with our customers that are accounted for as leases. These customers are charged solely based on actual power produced by the installed solar energy system at a predefined rate per kilowatt-hour of power produced. The future payments from such arrangements are not included in the above table as they are a function of the power generated by the related solar energy systems in the future. Furthermore, the above table does not include performance-based incentives receivable from various utility companies. The amount of contingent rentals recognized as revenue for the years presented were not material.

#### Note 10 - Accrued Liabilities and Other

As of December 31, 2017 and 2016, accrued liabilities and other current liabilities consisted of the following (in thousands):

	December 31, 2017	December 31, 2016
Accrued purchases	\$ 753,408	\$ 585,019
Payroll and related costs	378,284	218,792
Taxes payable	185,807	152,897
Financing obligation, current portion	67,313	52,031
Accrued warranty	125,502	116,797
Other current liabilities	221,052	84,492
Total	<u>\$ 1,731,366</u>	<u>\$ 1,210,028</u>

Taxes payable included value added tax, sales tax, property tax, use tax and income tax payables.

Accrued purchases reflected primarily liabilities related to the construction of Gigafactory 1, along with engineering design and testing accruals. As these services are invoiced, this balance will reduce and accounts payable will increase.

#### Note 11 – Other Long-Term Liabilities

Other long-term liabilities consisted of the following (in thousands):

	December 31, 2017	December 31, 2016
Accrued warranty reserve, net of current portion	\$ 276,289	\$ 149,858
Build-to-suit lease liability, net of current portion	1,665,768	1,323,293
Deferred rent expense	46,820	36,966
Financing obligation, net of	67,929	84,360

current portion Liability for receipts from an investor	29,713	76,828
Other noncurrent liabilities	356,451	220,144
Total long- term liabilities	<u>\$ 2,442,970</u>	<u>\$ 1,891,449</u>

The liability for receipts from an investor represents the amounts received from the investor under a lease pass-through fund arrangement for the monetization of ITCs for solar energy systems not yet placed in service.

#### **Note 12 – Customer Deposits**

Customer deposits primarily consisted of cash payments from customers at the time they place an order or reservation for a vehicle or an energy product and any additional payments up to the point of delivery or the completion of installation, including the fair values of any customer trade-in vehicles that are applicable toward a new vehicle purchase. Customer deposit amounts and timing vary depending on the vehicle model, the energy product and the country of delivery. Customer deposits are fully refundable; in the case of a vehicle, up to the point the vehicle is placed into the production cycle, and in the case of an energy generation or storage product, prior to the entry into a purchase agreement or in certain cases for a limited time thereafter (in accordance with applicable

laws). Customer deposits are included in current liabilities until refunded or until they are applied towards the customer's purchase balance. As of December 31, 2017 and December 31, 2016, we held \$853.9 million and \$663.9 million, respectively, in customer deposits.

### Note 13 – Convertible and Long-Term Debt Obligations

The following is a summary of our debt as of December 31, 2017 (in thousands):

	Unpaid Principal Balance	Net Carrying Value		Unused Committed Amount	Contractual Interest Rates	Maturity Date
		Current	Long-Term			
<b>Recourse debt:</b>						
1.50% Convertible Senior Notes due in 2018 ("2018 Notes")	\$ 5,512	\$ 5,442	\$ —	\$ —	1.50%	June 2018
0.25% Convertible Senior Notes due in 2019 ("2019 Notes")	920,000	—	869,092	—	0.25%	March 2019
1.25% Convertible Senior Notes due in 2021 ("2021 Notes")	1,380,000	—	1,186,131	—	1.25%	March 2021
2.375% Convertible Senior Notes due in 2022 ("2022 Notes")	977,500	—	841,973	—	2.375%	March 2022
5.30% Senior Notes due in 2025 ("2025 Notes")	1,800,000	—	1,775,550	—	5.30%	August 2025
Credit Agreement	1,109,000	—	1,109,000	729,929	1% plus LIBOR	June 2020
Vehicle and other Loans	16,205	15,944	261	—	1.8%-7.6%	January 2018-September 2019
2.75% Convertible Senior Notes due in 2018	230,000	222,171	—	—	2.75%	November 2018
1.625% Convertible Senior Notes due in 2019	566,000	—	511,389	—	1.625%	November 2019
Zero-Coupon Convertible Senior Notes due in 2020	103,000	—	86,475	—	0.0%	December 2020
Related Party Promissory Notes due in February 2018	100,000	100,000	—	—	6.5%	February 2018
Solar Bonds	32,016	7,008	24,940	—	2.6%-5.8%	March 2018-January 2031
Total recourse debt	7,239,233	350,565	6,404,811	729,929		
<b>Non-recourse debt:</b>						
Warehouse Agreements	673,811	195,382	477,867	426,189	3.1%	September 2019
Canada Credit Facility	86,708	31,106	55,603	—	3.6%-5.1%	November 2021
Term Loan due in December 2018	157,095	156,884	—	19,534	4.8%	December 2018
Term Loan due in January 2021	176,290	5,885	169,352	—	4.9%	January 2021
Revolving Aggregation Credit Facility	161,796	—	158,733	438,204	4.1%-4.5%	December 2019
Solar Renewable Energy Credit Loan Facility	38,575	15,858	22,774	—	7.3%	July 2021
Cash equity debt	482,133	12,334	454,421	—	5.3%-5.8%	July 2033-January 2035
Solar asset-backed notes	907,241	23,829	856,586	—	4.0%-7.7%	November 2038-February 2048
Solar loan-backed notes	244,498	8,006	228,838	—	4.8%-7.5%	September 2048-September 2049
Total non-recourse debt	2,928,147	449,284	2,424,174	883,927		
Total debt	<u>\$ 10,167,380</u>	<u>\$ 799,849</u>	<u>\$ 8,828,985</u>	<u>\$ 1,613,856</u>		

The following is a summary of our debt as of December 31, 2016 (in thousands):

	Unpaid Principal Balance	Net Carrying Value		Unused Committed Amount	Contractual Interest Rates	Maturity Date
		Current	Long-Term			
<b>Recourse debt:</b>						
2018 Notes	\$ 205,013	\$ 196,229	\$ —	\$ —	1.50%	June 2018
2019 Notes	920,000	—	827,620	—	0.25%	March 2019
2021 Notes	1,380,000	—	1,132,029	—	1.25%	March 2021
Credit Agreement	969,000	—	969,000	181,000	1% plus LIBOR	June 2020
Secured Revolving Credit Facility	364,000	366,247	—	24,305	4.0%-6.0%	January 2017- December 2017
Vehicle and other Loans	23,771	17,235	6,536	—	2.9%-7.6%	March 2017- June 2019
2.75% Convertible Senior Notes due in 2018	230,000	—	212,223	—	2.75%	November 2018
1.625% Convertible Senior Notes due in 2019	566,000	—	483,820	—	1.625%	November 2019
Zero-Coupon Convertible Senior Notes due in 2020	113,000	—	89,418	—	0.0%	December 2020
Solar Bonds	332,060	181,582	148,948	#	1.1%-6.5%	January 2017- January 2031
Total recourse debt	5,102,844	761,293	3,869,594	205,305		
<b>Non-recourse debt:</b>						
2016 Warehouse Agreement	390,000	73,708	316,292	210,000	Various	September 2018
Canada Credit Facility	67,342	18,489	48,853	—	3.6%-4.5%	December 2020
Term Loan due in December 2017	75,467	75,715	—	52,173	4.2%	December 2017
Term Loan due in January 2021	183,388	5,860	176,169	—	4.5%	January 2021
MyPower Revolving Credit Facility	133,762	133,827	—	56,238	4.1%-6.6%	January 2017
Revolving Aggregation Credit Facility	424,757	—	427,944	335,243	4.0%-4.8%	December 2018
Solar Renewable Energy Credit Term Loan	38,124	12,491	26,262	—	6.6%-9.9%	April 2017- July 2021
Cash equity debt	496,654	13,642	466,741	—	5.3%-5.8%	July 2033- January 2035
Solar asset-backed notes	458,836	16,113	426,651	—	4.0%-7.5%	November 2038- September 2046
Solar loan-backed notes	140,586	3,514	133,510	—	4.8%-6.9%	September 2048
Total non-recourse debt	2,408,916	353,359	2,022,422	653,654		
Total debt	\$ 7,511,760	\$ 1,114,652	\$ 5,892,016	\$ 858,959		

# Out of the \$350.0 million authorized to be issued, \$17.9 million remained available to be issued.

Recourse debt refers to debt that is recourse to our general assets. Non-recourse debt refers to debt that is recourse to only specified assets of our subsidiaries. The differences between the unpaid principal balances and the net carrying values are due to convertible senior note conversion features, debt discounts or deferred financing costs. As of December 31, 2017, we were in compliance with all financial debt covenants, which include minimum liquidity and expense-coverage balances and ratios.

### 2018 Notes, Bond Hedges and Warrant Transactions

In May 2013, we issued \$660.0 million in aggregate principal amount of 1.50% Convertible Senior Notes due in June 2018 in a public offering. The net proceeds from the issuance, after deducting transaction costs, were \$648.0 million.

Each \$1,000 of principal of the 2018 Notes is initially convertible into 8.0306 shares of our common stock, which is equivalent to an initial conversion price of \$124.52 per share, subject to adjustment upon the occurrence of specified events. Holders of the 2018 Notes may convert, at their option, on or after March 1, 2018. Further, holders of the 2018 Notes may convert, at their option, prior to March 1, 2018 only under the following circumstances: (1) during any quarter beginning after September 30, 2013, if the closing price of our common stock for at least 20 trading days (whether or not consecutive) during the last 30 consecutive trading days immediately preceding the quarter is greater than or equal to 130% of the conversion price; (2) during the five-business day period following any five-consecutive trading day period in which the trading price of the 2018 Notes is less than 98% of the product of the closing price of our common stock for each day during such five-consecutive trading day period or (3) if we make specified distributions to holders of our common stock or if specified corporate transactions occur. Upon conversion, we would pay cash for the principal amount and, if applicable, deliver shares of our common stock (subject to our right to deliver cash in lieu of all or a portion of such shares of our common stock) based on a daily conversion value. If a fundamental change occurs prior to the maturity date, holders of the 2018 Notes may require



us to repurchase all or a portion of their 2018 Notes for cash at a repurchase price equal to 100% of the principal amount plus any accrued and unpaid interest. In addition, if specific corporate events occur prior to the maturity date, we would increase the conversion rate for a holder who elects to convert its 2018 Notes in connection with such an event in certain circumstances. As of December 31, 2017, at least one of the conditions permitting the holders of the 2018 Notes to early convert had been met. Therefore, the 2018 Notes were classified as current.

In accordance with GAAP relating to embedded conversion features, we initially valued and bifurcated the conversion feature associated with the 2018 Notes. We recorded to stockholders' equity \$82.8 million for the conversion feature. The resulting debt discount is being amortized to interest expense at an effective interest rate of 4.29%.

In connection with the offering of the 2018 Notes, we entered into convertible note hedge transactions whereby we have the option to purchase initially (subject to adjustment for certain specified events) 5.3 million shares of our common stock at a price of \$124.52 per share. The cost of the convertible note hedge transactions was \$177.5 million. In addition, we sold warrants whereby the holders of the warrants have the option to purchase initially (subject to adjustment for certain specified events) 5.3 million shares of our common stock at a price of \$184.48 per share. We received \$120.3 million in cash proceeds from the sale of these warrants. Taken together, the purchase of the convertible note hedges and the sale of the warrants are intended to reduce potential dilution from the conversion of the 2018 Notes and to effectively increase the overall conversion price from \$124.52 to \$184.48 per share. As these transactions meet certain accounting criteria, the convertible note hedges and warrants are recorded in stockholders' equity and are not accounted for as derivatives. The net cost incurred in connection with the convertible note hedge and warrant transactions was recorded as a reduction to additional paid-in capital on the consolidated balance sheet.

In the second quarter of 2017, \$144.8 million in aggregate principal amount of the 2018 Notes were exchanged for 1,163,442 shares of our common stock (see Note 14, *Common Stock*). As a result, we recognized a loss on debt extinguishment of \$1.1 million.

In the third quarter of 2017, \$42.7 million in aggregate principal amount of the 2018 Notes were exchanged or converted for 250,198 shares of our common stock (see Note 14, *Common Stock*) and \$32.7 million in cash. As a result, we recognized a loss on debt extinguishment of \$0.3 million.

In the fourth quarter of 2017, \$12.0 million in aggregate principal amount of the 2018 Notes were exchanged or converted for 96,634 shares of our common stock (see Note 14, *Common Stock*). As a result, we recognized a loss on debt extinguishment of \$0.1 million.

#### **2019 Notes, 2021 Notes, Bond Hedges and Warrant Transactions**

In March 2014, we issued \$800.0 million in aggregate principal amount of 0.25% Convertible Senior Notes due in March 2019 and \$1.20 billion in aggregate principal amount of 1.25% Convertible Senior Notes due in March 2021 in a public offering. In April 2014, we issued an additional \$120.0 million in aggregate principal amount of the 2019 Notes and \$180.0 million in aggregate principal amount of the 2021 Notes, pursuant to the exercise in full of the overallotment options by the underwriters. The total net proceeds from the issuances, after deducting transaction costs, were \$905.8 million for the 2019 Notes and \$1.36 billion for the 2021 Notes.

Each \$1,000 of principal of these notes is initially convertible into 2.7788 shares of our common stock, which is equivalent to an initial conversion price of \$359.87 per share, subject to adjustment upon the occurrence of specified events. Holders of these notes may elect to convert on or after December 1, 2018 for the 2019 Notes and December 1, 2020 for the 2021 Notes. The settlement of such an election to convert the 2019 Notes would be in cash and/or shares of our common stock, with the split at our discretion, on the maturity date. The settlement of such an election to convert the 2021 Notes would be in cash for the principal amount and, if applicable, shares of our common stock (subject to our right to deliver cash in lieu of all or a portion of such shares of our common stock), on the maturity date. Further, holders of these notes may convert, at their option, prior to the respective dates above only under the following circumstances: (1) during a quarter in which the closing price of our common stock for at least 20 trading days (whether or not consecutive) during the last 30 consecutive trading days immediately preceding the quarter is greater than or equal to 130% of the conversion price; (2) during the five-business day period following any five-consecutive trading day period in which the trading price of these notes is less than 98% of the product of the closing price of our common stock for each day during such five-consecutive trading day period or

(3) if we make specified distributions to holders of our common stock or if specified corporate transactions occur. Upon such a conversion of the 2019 Notes, we would pay or deliver (as applicable) cash, shares of our common stock or a combination thereof, at our election. Upon such a conversion of the 2021 Notes, we would pay cash for the principal amount and, if applicable, deliver shares of our common stock (subject to our right to deliver cash in lieu of all or a portion of such shares of our common stock) based on a daily conversion value. If a fundamental change occurs prior to the applicable maturity date, holders of these notes may require us to repurchase all or a portion of their notes for cash at a repurchase price equal to 100% of the principal amount plus any accrued and unpaid interest. In addition, if specific corporate events occur prior to the applicable maturity date, we would increase the conversion rate for a holder who elects to convert their notes in connection with such an event in certain circumstances. As of December 31, 2017, none of the conditions permitting the holders of these notes to early convert had been met. Therefore, these notes were classified as long-term.

In accordance with GAAP relating to embedded conversion features, we initially valued and bifurcated the conversion features associated with these notes. We recorded to stockholders' equity \$188.1 million for the 2019 Notes' conversion feature and \$369.4 million for the 2021 Notes' conversion feature. The resulting debt discounts are being amortized to interest expense at an effective interest rate of 4.89% and 5.96%, respectively.

In connection with the offering of these notes in March 2014, we entered into convertible note hedge transactions whereby we have the option to purchase initially (subject to adjustment for certain specified events) a total of 5.6 million shares of our common stock at a price of \$359.87 per share. The total cost of the convertible note hedge transactions was \$524.7 million. In addition, we sold warrants whereby the holders of the warrants have the option to purchase initially (subject to adjustment for certain specified events) 2.2 million shares of our common stock at a price of \$512.66 per share for the 2019 Notes and 3.3 million shares of our common stock at a price of \$560.64 per share for 2021 Notes. We received \$338.4 million in total cash proceeds from the sales of these warrants. Similarly, in connection with the issuance of the additional notes in April 2014, we entered into convertible note hedge transactions and paid a total of \$78.7 million. In addition, we sold warrants to purchase initially (subject to adjustment for certain specified events) 0.3 million shares of our common stock at a price of \$512.66 per share for the 2019 Notes and 0.5 million shares of our common stock at a price of \$560.64 per share for the 2021 Notes. We received \$50.8 million in total cash proceeds from the sales of these warrants. Taken together, the purchases of the convertible note hedges and the sales of the warrants are intended to reduce potential dilution and/or cash payments from the conversion of these notes and to effectively increase the overall conversion price from \$359.87 to \$512.66 per share for the 2019 Notes and from \$359.87 to \$560.64 per share for the 2021 Notes. As these transactions meet certain accounting criteria, the convertible note hedges and warrants are recorded in stockholders' equity and are not accounted for as derivatives. The net cost incurred in connection with the convertible note hedge and warrant transactions was recorded as a reduction to additional paid-in capital on the consolidated balance sheet.

#### ***2022 Notes, Bond Hedges and Warrant Transactions***

In March 2017, we issued \$977.5 million in aggregate principal amount of 2.375% Convertible Senior Notes due in March 2022 in a public offering. The net proceeds from the issuance, after deducting transaction costs, were \$965.9 million.

Each \$1,000 of principal of the 2022 Notes is initially convertible into 3.0534 shares of our common stock, which is equivalent to an initial conversion price of \$327.50 per share, subject to adjustment upon the occurrence of specified events. Holders of the 2022 Notes may convert, at their option, on or after December 15, 2021. Further, holders of the 2022 Notes may convert, at their option, prior to December 15, 2021 only under the following circumstances: (1) during any quarter beginning after June 30, 2017, if the closing price of our common stock for at least 20 trading days (whether or not consecutive) during the last 30 consecutive trading days immediately preceding the quarter is greater than or equal to 130% of the conversion price; (2) during the five-business day period following any five-consecutive trading day period in which the trading price of the 2022 Notes is less than 98% of the product of the closing price of our common stock for each day during such five-consecutive trading day period or (3) if we make specified distributions to holders of our common stock or if specified corporate transactions occur. Upon a conversion, we would pay cash for the principal amount and, if applicable, deliver shares of our common stock (subject to our right to deliver cash in lieu of all or a portion of such shares of our common stock) based on a daily conversion value. If a fundamental change occurs prior to the maturity date, holders of the 2022 Notes may require us to repurchase all or a portion of their 2022 Notes for cash at a repurchase price equal to 100% of the

principal amount plus any accrued and unpaid interest. In addition, if specific corporate events occur prior to the maturity date, we would increase the conversion rate for a holder who elects to convert its 2022 Notes in connection with such an event in certain circumstances. As of December 31, 2017, none of the conditions permitting the holders of the 2022 Notes to early convert had been met. Therefore, the 2022 Notes are classified as long-term.

In accordance with GAAP relating to embedded conversion features, we initially valued and bifurcated the conversion feature associated with the 2022 Notes. We recorded to stockholders' equity \$145.6 million for the conversion feature. The resulting debt discount is being amortized to interest expense at an effective interest rate of 6.00%.

In connection with the offering of the 2022 Notes, we entered into convertible note hedge transactions whereby we have the option to purchase initially (subject to adjustment for certain specified events) 3.0 million shares of our common stock at a price of \$327.50 per share. The cost of the convertible note hedge transactions was \$204.1 million. In addition, we sold warrants whereby the holders of the warrants have the option to purchase initially (subject to adjustment for certain specified events) 3.0 million shares of our common stock at a price of \$655.00 per share. We received \$52.9 million in cash proceeds from the sale of these warrants. Taken together, the purchase of the convertible note hedges and the sale of the warrants are intended to reduce potential dilution from the conversion of the 2022 Notes and to effectively increase the overall conversion price from \$327.50 to \$655.00 per share. As these transactions meet certain accounting criteria, the convertible note hedges and warrants are recorded in stockholders' equity and are not accounted for as derivatives. The net cost incurred in connection with the convertible note hedge and warrant transactions was recorded as a reduction to additional paid-in capital on the consolidated balance sheet.

### ***2025 Notes***

In August 2017, we issued \$1.80 billion in aggregate principal amount of unsecured 5.30% Senior Notes due in August 2025 pursuant to Rule 144A and Regulation S under the Securities Act. The net proceeds from the issuance, after deducting transaction costs, were \$1.77 billion.

### ***Credit Agreement***

In June 2015, we entered into a senior asset-based revolving credit agreement (the "Credit Agreement") with a syndicate of banks. Borrowed funds bear interest, at our option, at an annual rate of (a) 1% plus LIBOR or (b) the highest of (i) the federal funds rate plus 0.50%, (ii) the lenders' "prime rate" or (iii) 1% plus LIBOR. The fee for undrawn amounts is 0.25% per annum. The Credit Agreement is secured by certain of our accounts receivable, inventory and equipment. Availability under the Credit Agreement is based on the value of such assets, as reduced by certain reserves. During 2017, the committed amount under the Credit Agreement was upsized three times.

### ***Secured Revolving Credit Facility***

SolarCity entered into a revolving credit agreement with a syndicate of banks (the "Secured Revolving Credit Facility") to fund working capital, letters of credit and general corporate needs. Borrowed funds bore interest, at our option, at an annual rate of (a) 3.25% plus LIBOR or (b) 2.25% plus the highest of (i) the federal funds rate plus 0.50%, (ii) Bank of America's published "prime rate" or (iii) LIBOR plus 1.00%. The fee for undrawn commitments was 0.375% per annum. The Secured Revolving Credit Facility was secured by certain of SolarCity's accounts receivable, inventory, machinery, equipment and other assets. In August 2017, the Secured Revolving Credit Facility was terminated, and the aggregate outstanding principal amount of \$324.0 million was fully repaid.

### ***Vehicle and Other Loans***

We have entered into various vehicle and other loan agreements with various financial institutions. The vehicle loans are secured by the vehicles financed.

### ***2.75% Convertible Senior Notes due in 2018***

In October 2013, SolarCity issued \$230.0 million in aggregate principal amount of 2.75% Convertible Senior Notes due on November 1, 2018 in a public offering.

Each \$1,000 of principal of the convertible senior notes is now convertible into 1.7838 shares of our common stock, which is equivalent to a conversion price of \$560.64 per share (subject to adjustment upon the occurrence of specified events related to dividends, tender offers or exchange offers). Holders of the convertible senior notes may convert, at their option, at any time up to and including the second trading day prior to the maturity date. If certain events that would constitute a make-whole fundamental change (such as significant changes in ownership, corporate structure or tradability of our common stock) occur prior to the maturity date, we would increase the conversion rate for a holder who elects to convert its convertible senior notes in connection with such an event in certain circumstances. The maximum conversion rate is capped at 2.3635 shares for each \$1,000 of principal of the convertible senior notes, which is equivalent to a minimum conversion price of \$423.10 per share. The convertible senior notes do not have a cash conversion option. The convertible senior note holders may require us to repurchase their convertible senior notes for cash only under certain defined fundamental changes.

#### ***1.625% Convertible Senior Notes due in 2019***

In September 2014, SolarCity issued \$500.0 million and in October 2014, SolarCity issued an additional \$66.0 million in aggregate principal amount of 1.625% Convertible Senior Notes due on November 1, 2019 in a private placement.

Each \$1,000 of principal of the convertible senior notes is now convertible into 1.3169 shares of our common stock, which is equivalent to a conversion price of \$759.36 per share (subject to adjustment upon the occurrence of specified events related to dividends, tender offers or exchange offers). The maximum conversion rate is capped at 1.7449 shares for each \$1,000 of principal of the convertible senior notes, which is equivalent to a minimum conversion price of \$573.10 per share. The convertible senior notes do not have a cash conversion option. The convertible senior note holders may require us to repurchase their convertible senior notes for cash only under certain defined fundamental changes.

In connection with the issuance of the convertible senior notes in September and October 2014, SolarCity entered into capped call option agreements to reduce the potential dilution upon the conversion of the convertible senior notes. Specifically, upon the exercise of the capped call options, we would now receive shares of our common stock equal to 745,377 shares multiplied by (a) (i) the lower of \$1,146.18 or the then market price of our common stock less (ii) \$759.36 and divided by (b) the then market price of our common stock. The results of this formula are that we would receive more shares as the market price of our common stock exceeds \$759.36 and approaches \$1,146.18, but we would receive less shares as the market price of our common stock exceeds \$1,146.18. Consequently, if the convertible senior notes are converted, then the number of shares to be issued by us would be effectively partially offset by the shares received by us under the capped call options. We can also elect to receive the equivalent value of cash in lieu of shares. The capped call options expire on various dates ranging from September 4, 2019 to October 29, 2019, and the formula above would be adjusted in the event of a merger; a tender offer; nationalization; insolvency; delisting of our common stock; changes in law; failure to deliver; insolvency filing; stock splits, combinations, dividends, repurchases or similar events or an announcement of certain of the preceding actions. Although intended to reduce the net number of shares issued after a conversion of the convertible senior notes, the capped call options were separately negotiated transactions, are not a part of the terms of the convertible senior notes, do not affect the rights of the convertible senior note holders and take effect regardless of whether the convertible senior notes are actually converted. The capped call options meet the criteria for equity classification because they are indexed to our common stock and we always control whether settlement will be in shares or cash.

#### ***Zero-Coupon Convertible Senior Notes due in 2020***

In December 2015, SolarCity issued \$113.0 million in aggregate principal amount of Zero-Coupon Convertible Senior Notes due on December 1, 2020 in a private placement. \$13.0 million of the convertible senior notes were issued to related parties and are separately presented on the consolidated balance sheets (see Note 21, *Related Party Transactions*).

Each \$1,000 of principal of the convertible senior notes is now convertible into 3.3333 shares of our common stock, which is equivalent to a conversion price of \$300.00 per share (subject to adjustment upon the occurrence of specified events related to dividends, tender offers or exchange offers). The maximum conversion rate is capped at 4.2308 shares for each \$1,000 of principal of the convertible senior notes, which is equivalent to a minimum

conversion price of \$236.36 per share. The convertible senior notes do not have a cash conversion option. The convertible senior note holders may require us to repurchase their convertible senior notes for cash only under certain defined fundamental changes. On or after June 30, 2017, the convertible senior notes are redeemable by us in the event that the closing price of our common stock exceeds 200% of the conversion price for 45 consecutive trading days ending within three trading days of such redemption notice at a redemption price equal to 100% of the principal amount plus any accrued and unpaid interest.

On April 26, 2017, our CEO converted all of his Zero-Coupon Convertible Senior Notes due in 2020, which had an aggregate principal amount of \$10.0 million (see Note 14, *Common Stock*). As a result, we recognized a loss on debt extinguishment of \$2.2 million.

#### ***Related Party Promissory Notes due in February 2018***

On April 11, 2017, our CEO, SolarCity's former CEO and SolarCity's former Chief Technology Officer exchanged their \$100.0 million (collectively) in aggregate principal amount of 6.50% Solar Bonds due in February 2018 for promissory notes in the same amounts and with substantially the same terms.

#### ***Solar Bonds***

Solar Bonds are senior unsecured obligations that are structurally subordinate to the indebtedness and other liabilities of our subsidiaries. Solar Bonds were issued under multiple series with various terms and interest rates. In April 2017, we extinguished certain series of Solar Bonds by prepaying \$20.9 million of principal and interest. See Note 21, *Related Party Transactions*, for Solar Bonds issued to related parties.

#### ***Warehouse Agreements***

On August 31, 2016, our subsidiaries entered into the a loan and security agreement (the "2016 Warehouse Agreement") for borrowings secured by the future cash flows arising from certain leases and the associated leased vehicles. On August 17, 2017, the 2016 Warehouse Agreement was amended to modify the interest rates and extend the availability period and the maturity date, and our subsidiaries entered into another loan and security agreement with substantially the same terms as and that shares the same committed amount with the 2016 Warehouse Agreement. We refer to these agreements together as the "Warehouse Agreements." Amounts drawn under the Warehouse Agreements generally bear interest at (i) LIBOR plus a fixed margin or (ii) the commercial paper rate. The Warehouse Agreements are non-recourse to our other assets.

Pursuant to the Warehouse Agreements, an undivided beneficial interest in the future cash flows arising from certain leases and the related leased vehicles has been sold for legal purposes but continues to be reported in the consolidated financial statements. The interest in the future cash flows arising from these leases and the related vehicles is not available to pay the claims of our creditors other than pursuant to obligations to the lenders under the Warehouse Agreements. We retain the right to receive the excess cash flows not needed to pay obligations under the Warehouse Agreements.

#### ***Canada Credit Facility***

In December 2016, one of our subsidiaries entered into a credit agreement (the "Canada Credit Facility") with a bank for borrowings secured by our interests in certain vehicle leases, and in December 2017, the Canada Credit Facility was amended to add our interests in additional vehicle leases as collateral, allowing us to draw additional funds. Amounts drawn under the Canada Credit Facility bear interest at fixed rates. The Canada Credit Facility is non-recourse to our other assets.

#### ***Term Loan due in December 2018***

On March 31, 2016, a subsidiary of SolarCity entered into an agreement for a term loan. The term loan bears interest at an annual rate of the lender's cost of funds plus 3.25%. The fee for undrawn commitments is 0.85% per annum. On March 31, 2017, the agreement was amended to upsize the committed amount, extend the availability period and extend the maturity date. The term loan is secured by substantially all of the assets of the subsidiary and is non-recourse to our other assets.

### ***Term Loan due in January 2021***

In January 2016, a subsidiary of SolarCity entered into an agreement with a syndicate of banks for a term loan. The term loan bears interest at an annual rate of three-month LIBOR plus 3.50%. The term loan is secured by substantially all of the assets of the subsidiary, including its interests in certain financing funds, and is non-recourse to our other assets.

### ***MyPower Revolving Credit Facility***

On January 9, 2015, a subsidiary of SolarCity entered into a revolving credit agreement with a syndicate of banks to obtain funding for the MyPower customer loan program. The Class A notes bore interest at an annual rate of 2.50% plus (a) the commercial paper rate or (b) 1.50% plus adjusted LIBOR. The Class B notes bore interest at an annual rate of 5.00% plus LIBOR. The fee for undrawn commitments under the Class A notes was 0.50% per annum. The fee for undrawn commitments under the Class B notes was 0.50% per annum. The MyPower revolving credit facility was secured by the payments owed to us under MyPower customer loans and was non-recourse to our other assets. On January 27, 2017, the MyPower revolving credit facility matured, and the aggregate outstanding principal amount of \$133.8 million was fully repaid.

### ***Revolving Aggregation Credit Facility***

On May 4, 2015, a subsidiary of SolarCity entered into an agreement with a syndicate of banks for a revolving aggregation credit facility. On March 23, 2016 and June 23, 2017, the agreement was amended to modify the interest rates and extend the availability period and the maturity date. The revolving aggregation credit facility bears interest at an annual rate of 2.75% plus (i) for commercial paper loans, the commercial paper rate and (ii) for LIBOR loans, at our option, three-month LIBOR or daily LIBOR. The revolving aggregation credit facility is secured by certain assets of certain of our subsidiaries and is non-recourse to our other assets.

### ***Solar Renewable Energy Credit Loan Facilities***

On March 31, 2016, a subsidiary of SolarCity entered into an agreement for a term loan. The term loan bore interest at an annual rate of one-month LIBOR plus 9.00% or, at our option, 8.00% plus the highest of (i) the federal funds rate plus 0.50%, (ii) the prime rate or (iii) one-month LIBOR plus 1.00%. The term loan was secured by substantially all of the assets of the subsidiary, including its rights under forward contracts to sell solar renewable energy credits, and was non-recourse to our other assets. On March 1, 2017, we fully repaid the principal outstanding under the term loan.

On July 14, 2016, the same subsidiary entered into an agreement for another loan facility. The loan facility bears interest at an annual rate of one-month LIBOR plus 5.75% or, at our option, 4.75% plus the highest of (i) the federal funds rate plus 0.50%, (ii) the prime rate or (iii) one-month LIBOR plus 1.00%. The loan facility is secured by substantially all of the assets of the subsidiary, including its rights under forward contracts to sell solar renewable energy credits, and is non-recourse to our other assets.

### ***Cash Equity Debt I***

In connection with the cash equity financing on May 2, 2016, SolarCity issued \$121.7 million in aggregate principal amount of debt that bears interest at a fixed rate. This debt is secured by, among other things, our interests in certain financing funds and is non-recourse to our other assets.

### ***Cash Equity Debt II***

In connection with the cash equity financing on September 8, 2016, SolarCity issued \$210.0 million in aggregate principal amount of debt that bears interest at a fixed rate. This debt is secured by, among other things, our interests in certain financing funds and is non-recourse to our other assets.

### ***Cash Equity Debt III***

In connection with the cash equity financing on December 16, 2016, we issued \$170.0 million in aggregate principal amount of debt that bears interest at a fixed rate. This debt is secured by, among other things, our interests in certain financing funds and is non-recourse to our other assets.

### ***Solar Asset-backed Notes, Series 2013-1***

In November 2013, SolarCity pooled and transferred qualifying solar energy systems and the associated customer contracts into a Special Purpose Entity (“SPE”) and issued \$54.4 million in aggregate principal amount of Solar Asset-backed Notes, Series 2013-1, backed by these solar assets to investors. The SPE is wholly owned by us and is consolidated in the financial statements. As of December 31, 2017, these solar assets had a carrying value of \$89.0 million and are included within solar energy systems, leased and to be leased, net, on the consolidated balance sheets. The Solar Asset-backed Notes were issued at a discount of 0.05%. The cash flows generated by these solar assets are used to service the monthly principal and interest payments on the Solar Asset-backed Notes and satisfy the SPE’s expenses, and any remaining cash is distributed to one of our wholly owned subsidiaries. We recognize revenue earned from the associated customer contracts in accordance with our revenue recognition policy. The SPE’s assets and cash flows are not available to our other creditors, and the creditors of the SPE, including the Solar Asset-backed Note holders, have no recourse to our other assets. SolarCity contracted with the SPE to provide operations & maintenance and administrative services for the solar energy systems.

In connection with the pooling of the solar assets that were transferred to the SPE in November 2013, SolarCity terminated a lease pass-through arrangement with an investor. The lease pass-through arrangement had been accounted for as a borrowing, and the amount outstanding under the lease pass-through arrangement was recorded as a lease pass-through financing obligation. The balance that was then outstanding under the lease pass-through arrangement was \$56.4 million. SolarCity paid the investor an aggregate of \$40.2 million, and the remaining balance is paid over time using the net cash flows generated by the assets previously leased under the lease pass-through arrangement, after payment of the principal and interest on the Solar Asset-backed Notes and expenses related to the assets and the Solar Asset-backed Notes; this was contractually documented as a right to participate in the future cash flows of the SPE (“participation interest”). The participation interest was recorded as a component of other long-term liabilities for the non-current portion and accrued liabilities for the current portion. We account for the participation interest as a liability because the investor has no voting or management rights in the SPE, the participation interest would terminate upon the investor achieving a specified return and the investor has the option to put the participation interest to us on August 3, 2021 for the amount necessary for the investor to achieve the specified return, which would require us to settle the participation interest in cash. In addition, under the terms of the participation interest, we have the option to purchase the participation interest from the investor for the amount necessary for the investor to achieve the specified return.

### ***Solar Asset-backed Notes, 2014-1***

In April 2014, SolarCity pooled and transferred qualifying solar energy systems and the associated customer contracts into a SPE and issued \$70.2 million in aggregate principal amount of Solar Asset-backed Notes, Series 2014-1, backed by these solar assets to investors. The SPE is wholly owned by us and is consolidated in the financial statements. As of December 31, 2017, these solar assets had a carrying value of \$109.3 million and are included within solar energy systems, leased and to be leased, net, in the consolidated balance sheets. The Solar Asset-backed Notes were issued at a discount of 0.01%. The cash flows generated by these solar assets are used to service the monthly principal and interest payments on the Solar Asset-backed Notes and satisfy the SPE’s expenses, and any remaining cash is distributed to one of our wholly owned subsidiaries. We recognize revenue earned from the associated customer contracts in accordance with our revenue recognition policy. The SPE’s assets and cash flows are not available to our other creditors, and the creditors of the SPE, including the Solar Asset-backed Note holders, have no recourse to our other assets. SolarCity contracted with the SPE to provide operations & maintenance and administrative services for the solar energy systems.

### ***Solar Asset-backed Notes, Series 2014-2***

In July 2014, SolarCity pooled and transferred qualifying solar energy systems and the associated customer contracts into a SPE and issued \$160.0 million in aggregate principal amount of Solar Asset-backed Notes, Series 2014-2, Class A, and \$41.5 million in aggregate principal amount of Solar Asset-backed Notes, Series 2014-2, Class B, backed by these solar assets to investors. The SPE is wholly owned by us and is consolidated in the financial statements. As of December 31, 2017, these solar assets had a carrying value of \$255.7 million and are included within solar energy systems, leased and to be leased, net, in the consolidated balance sheets. The Solar Asset-backed Notes were issued at a discount of 0.01%. These solar assets and the associated customer contracts are leased to an investor under a lease pass-through arrangement that we have accounted for as a borrowing. The rent paid by the investor under the lease pass-through arrangement is used (and following the expiration of the lease

pass-through arrangement, the cash generated by these solar assets will be used) to service the semi-annual principal and interest payments on the Solar Asset-backed Notes and satisfy the SPE's expenses, and any remaining cash is distributed to one of our wholly owned subsidiaries. We recognize revenue earned from the associated customer contracts in accordance with our revenue recognition policy. The SPE's assets and cash flows are not available to our other creditors, and the creditors of the SPE, including the Solar Asset-backed Note holders, have no recourse to our other assets. SolarCity contracted with the SPE to provide operations & maintenance and administrative services for certain of the solar energy systems.

#### ***Solar Asset-backed Notes, Series 2015-1***

In August 2015, SolarCity pooled and transferred its interests in certain financing funds into a SPE and issued \$103.5 million in aggregate principal amount of Solar Asset-backed Notes, Series 2015-1, Class A, and \$20.0 million in aggregate principal amount of Solar Asset-backed Notes, Series 2015-1, Class B, backed by these solar assets to investors. The SPE is wholly owned by us and is consolidated in the financial statements. The Solar Asset-backed Notes were issued at a discount of 0.05% for Class A and 1.46% for Class B. The cash distributed by the underlying financing funds to the SPE are used to service the semi-annual principal and interest payments on the Solar Asset-backed Notes and satisfy the SPE's expenses, and any remaining cash is distributed to one of our wholly owned subsidiaries. The SPE's assets and cash flows are not available to our other creditors, and the creditors of the SPE, including the Solar Asset-backed Note holders, have no recourse to our other assets.

#### ***Solar Asset-backed Notes, Series 2016-1***

In February 2016, SolarCity transferred qualifying solar energy systems and the associated customer contracts into a SPE and issued \$52.2 million in aggregate principal amount of Solar Asset-backed Notes, Series 2016-1, backed by these solar assets to investors. The SPE is wholly owned by us and is consolidated in the financial statements. As of December 31, 2017, these solar assets had a carrying value of \$84.3 million and are included within solar energy systems, leased and to be leased, net, on the consolidated balance sheets. The Solar Asset-backed Notes were issued at a discount of 6.71%. These solar assets and the associated customer contracts are leased to an investor under a lease pass-through arrangement that we have accounted for as a borrowing. The rent paid by the investor under the lease pass-through arrangement is used (and following the expiration of the lease pass-through arrangement, the cash generated by these solar assets will be used) to service the semi-annual principal and interest payments on the Solar Asset-backed Notes and satisfy the SPE's expenses, and any remaining cash is distributed to one of our wholly owned subsidiaries. We recognize revenue earned from the associated customer contracts in accordance with our revenue recognition policy. The SPE's assets and cash flows are not available to our other creditors, and the creditors of the SPE, including the Solar Asset-backed Note holders, have no recourse to our other assets. SolarCity contracted with the SPE to provide operations & maintenance and administrative services for certain of the solar energy systems.

#### ***Solar Asset-backed Notes, Series 2017-1***

In November 2017, we pooled and transferred our interests in certain financing funds into a SPE and issued \$265.0 million in aggregate principal amount of Solar Asset-backed Notes, Series 2017-1, Class A, and \$75.0 million in aggregate principal amount of Solar Asset-backed Notes, Series 2017-1, Class B, backed by these solar assets to investors. The SPE is wholly owned by us and is consolidated in the financial statements. The Solar Asset-backed Notes were issued at a discount of 0.01% for Class A and 0.04% for Class B. The cash distributed by the underlying financing funds to the SPE are used to service the semi-annual principal and interest payments on the Solar Asset-backed Notes and satisfy the SPE's expenses, and any remaining cash is distributed to one of our wholly owned subsidiaries. The SPE's assets and cash flows are not available to our other creditors, and the creditors of the SPE, including the Solar Asset-backed Note holders, have no recourse to our other assets.

#### ***Solar Asset-backed Notes, Series 2017-2***

In December 2017, we transferred qualifying solar energy systems and the associated customer contracts into a SPE and issued \$99.0 million in aggregate principal amount of Solar Asset-backed Notes, Series 2017-2, Class A, and \$31.9 million in aggregate principal amount of Solar Asset-backed Notes, Series 2017-2, Class B, backed by these solar assets to investors. The SPE is wholly owned by us and is consolidated in the financial statements. As of December 31, 2017, these solar assets had a carrying value of \$217.2 million and are included within solar energy systems, leased and to be leased, net, on the consolidated balance sheets. The Solar Asset-backed Notes were issued



at a discount of 0.01% for Class A and 0.04% for Class B. Most of these solar assets and the associated customer contracts are leased to investors under lease pass-through arrangements that we have accounted for as borrowings. The rent paid by the investors under the lease pass-through arrangements is used (and following the expiration of the lease pass-through arrangements, the cash generated by these solar assets will be used) to service the semi-annual principal and interest payments on the Solar Asset-backed Notes and satisfy the SPE's expenses, and any remaining cash is distributed to one of our wholly owned subsidiaries. We recognize revenue earned from the associated customer contracts in accordance with our revenue recognition policy. The SPE's assets and cash flows are not available to our other creditors, and the creditors of the SPE, including the Solar Asset-backed Note holders, have no recourse to our other assets. We contracted with the SPE to provide operations & maintenance and administrative services for certain of the solar energy systems.

#### ***Solar Loan-backed Notes, Series 2016-A***

On January 21, 2016, SolarCity pooled and transferred certain MyPower customer notes receivable into a SPE and issued \$151.6 million in aggregate principal amount of Solar Loan-backed Notes, Series 2016-A, Class A, and \$33.4 million in aggregate principal amount of Solar Loan-backed Notes, Series 2016-A, Class B, backed by these notes receivable to investors. The SPE is wholly owned by us and is consolidated in the financial statements. The Solar Loan-backed Notes were issued at a discount of 3.22% for Class A and 15.90% for Class B. The payments received by the SPE from these notes receivable are used to service the semi-annual principal and interest payments on the Solar Loan-backed Notes and satisfy the SPE's expenses, and any remaining cash is distributed to one of our wholly owned subsidiaries. The SPE's assets and cash flows are not available to our other creditors, and the creditors of the SPE, including the Solar Loan-backed Note holders, have no recourse to our other assets.

#### ***Solar Loan-backed Notes, Series 2017-A***

On January 27, 2017, we pooled and transferred certain MyPower customer notes receivable into a SPE and issued \$123.0 million in aggregate principal amount of Solar Loan-backed Notes, Series 2017-A, Class A; \$8.8 million in aggregate principal amount of Solar Loan-backed Notes, Series 2017-A, Class B, and \$13.2 million in aggregate principal amount of Solar Loan-backed Notes, Series 2017-A, Class C, backed by these notes receivable to investors. The SPE is wholly owned by us and is consolidated in the financial statements. Accordingly, we did not recognize a gain or loss on the transfer of these notes receivable. The Solar Loan-backed Notes were issued at a discount of 1.87% for Class A, 1.86% for Class B and 8.13% for Class C. The payments received by the SPE from these notes receivable are used to service the semi-annual principal and interest payments on the Solar Loan-backed Notes and satisfy the SPE's expenses, and any remaining cash is distributed to one of our wholly owned subsidiaries. The SPE's assets and cash flows are not available to our other creditors, and the creditors of the SPE, including the Solar Loan-backed Note holders, have no recourse to our other assets.

#### ***Interest Expense***

The following table presents the interest expense related to the contractual interest coupon, the amortization of debt issuance costs and the amortization of debt discounts on our convertible senior notes with cash conversion features, which include the 2018 Notes, the 2019 Notes, the 2021 Notes and the 2022 Notes (in thousands):

	<b>Year Ended December 31,</b>		
	<b>2017</b>	<b>2016</b>	<b>2015</b>
Contractual interest coupon	\$ 39,129	\$ 27,060	\$ 32,061
Amortization of debt issuance costs	6,932	8,567	8,102
Amortization of debt discounts	114,023	99,811	97,786
Total	<u>\$ 160,084</u>	<u>\$ 135,438</u>	<u>\$ 137,949</u>

#### ***Pledged Assets***

As of December 31, 2017 and 2016, we had pledged or restricted \$4.05 billion and \$2.30 billion of our assets (consisted principally of restricted cash, receivables, inventory, SRECs, solar energy systems, property and equipment) as collateral for our outstanding debt.

#### **Note 14 – Common Stock**

In August 2015, we completed a public offering of common stock and sold a total of 3,099,173 shares of our common stock for total cash proceeds of \$738.3 million (which includes 82,645 shares or \$20.0 million sold to our CEO, net of underwriting discounts and offering costs).

In May 2016, we completed a public offering of common stock and sold a total of 7,915,004 shares of our common stock for total cash proceeds of approximately \$1.7 billion, net of underwriting discounts and offering costs.

On November 21, 2016, we completed the acquisition of SolarCity (see Note 3, *Business Combinations*) and exchanged 11,124,497 shares of our common stock for 101,131,791 shares of SolarCity common stock in accordance with the terms of the Merger Agreement.

In March 2017, we completed a public offering of our common stock and issued a total of 1,536,259 shares for total cash proceeds of \$399.6 million (including 95,420 shares purchased by our CEO for \$25.0 million), net of underwriting discounts and offering costs.

In April 2017, our CEO exercised his right under the indenture to convert all of his Zero-Coupon Convertible Senior Notes due in 2020, which had an aggregate principal amount of \$10.0 million. As a result, on April 26, 2017, we issued 33,333 shares of our common stock to our CEO in accordance with the specified conversion rate, and we recorded an increase to additional paid-in capital of \$10.3 million (see Note 13, *Convertible and Long-Term Debt Obligations*).

During 2017, we issued 1,510,274 shares of our common stock and paid \$32.7 million in cash pursuant to conversions by or exchange agreements entered into with holders of \$199.5 million in aggregate principal amount of the 2018 Notes (see Note 13, *Convertible and Long-Term Debt Obligations*). As a result, we recorded an increase to additional paid-in capital of \$163.0 million. In addition, we settled portions of the bond hedges and warrants entered into in connection with the 2018 Notes, resulting in a net cash inflow of \$56.8 million (which was recorded as an increase to additional paid-in capital), the issuance of 34,393 shares of our common stock and the receipt of 169,890 shares of our common stock.

During the fourth quarter of 2017, we issued 34,772 shares of our common stock as part of the purchase consideration for an acquisition.

#### **Note 15 – Equity Incentive Plans**

In 2010, we adopted the 2010 Equity Incentive Plan (the “2010 Plan”). The 2010 Plan provides for the granting of stock options, RSUs and stock purchase rights to our employees, directors and consultants. Stock options granted under the 2010 Plan may be either incentive stock options or nonqualified stock options. Incentive stock options may only be granted to our employees. Nonqualified stock options may be granted to our employees, directors and consultants. Generally, our stock options and RSUs vest over up to four years and are exercisable over a maximum period of 10 years from their grant dates. Vesting typically terminates when the employment or consulting relationship ends. In addition, as a result of our acquisition of SolarCity, we assumed its equity award plans and its outstanding equity awards as of the Acquisition Date. SolarCity’s outstanding equity awards were converted into equity awards to acquire our common stock in share amounts and prices based on the Exchange Ratio, with the equity awards retaining the same vesting and other terms and conditions as in effect immediately prior to the acquisition. The vesting and other terms and conditions of the assumed equity awards are substantially the same as those of the 2010 Plan.

As of December 31, 2017, 7,045,637 shares were reserved and available for issuance under the 2010 Plan.

The following table summarizes our stock option and RSU activity:

	Stock Options				RSUs	
	Number of	Weighted-Average	Weighted-Average Remaining	Aggregate Intrinsic	Number	Weighted-Average Grant Date Fair Value
	Options	Exercise Price	Contractual Life (Years)	Value (Billions)	of RSUs	
Balance, December 31, 2016	12,875,422	\$ 96.50			4,082,089	\$ 207.11
Granted	1,163,678	\$ 310.13			3,073,404	\$ 308.71
Exercised or released	(2,324,871)	\$ 81.04		\$ 0.54	(1,561,889)	\$ 216.46
Cancelled	(833,204)	\$ 327.33			(904,294)	\$ 233.59
Balance, December 31, 2017	10,881,025	\$ 105.56	5.3	\$ 2.30	4,689,310	\$ 265.43
Vested and expected to vest, December 31, 2017	10,881,025	\$ 105.56	5.3	\$ 2.30	4,689,310	\$ 265.43
Exercisable and vested, December 31, 2017	8,029,228	\$ 77.56	4.7	\$ 1.91		

The aggregate release date fair value of RSUs in the years ended December 31, 2017, 2016 and 2015 was \$491.0 million, \$203.9 million and \$94.5 million, respectively.

#### Fair Value Assumptions

We use the fair value method in recognizing stock-based compensation expense. Under the fair value method, we estimate the fair value of each stock option award and the ESPP on the grant date generally using the Black-Scholes option pricing model and the weighted-average assumptions in the following table:

	Year Ended December 31,		
	2017	2016	2015
Risk-free interest rate:			
Stock options	1.8%	1.5%	1.6%
ESPP	1.1%	0.6%	0.3%
Expected term (in years):			
Stock options	5.1	6.2	5.4
ESPP	0.5	0.5	0.5
Expected volatility:			
Stock options	42%	47%	48%
ESPP	35%	41%	42%
Dividend yield:			
Stock options	0.0%	0.0%	0.0%
ESPP	0.0%	0.0%	0.0%
Grant date fair value per share:			
Stock options	\$ 122.25	\$ 98.70	\$ 108.28
ESPP	\$ 75.05	\$ 51.31	\$ 58.77

The fair value of RSUs is measured on the grant date based on the closing fair market value of our common stock. The risk-free interest rate is based on the U.S. Treasury yield for zero-coupon U.S. Treasury notes with maturities approximating each grant's expected life. Prior to the fourth quarter of 2017, given our then limited history with employee grants, we used the "simplified" method in estimating the expected term of our employee grants; the simplified method utilizes the average of the time-to-vesting and the contractual life of the employee grant. Beginning with the fourth quarter of 2017, we use our historical data in estimating the expected term of our employee grants. The expected volatility is based on the average of the implied volatility of publicly traded options for our common stock and the historical volatility of our common stock.

## 2014 Performance-Based Stock Option Awards

In 2014, to create incentives for continued long-term success beyond the Model S program and to closely align executive pay with our stockholders' interests in the achievement of significant milestones by us, the Compensation Committee of our Board of Directors granted stock option awards to certain employees (excluding our CEO) to purchase an aggregate of 1,073,000 shares of our common stock. Each award consisted of the following four vesting tranches with the vesting schedule based entirely on the attainment of the future performance milestones, assuming continued employment and service through each vesting date:

- 1/4th of each award vests upon completion of the first Model X production vehicle;
- 1/4th of each award vests upon achieving aggregate production of 100,000 vehicles in a trailing 12-month period;
- 1/4th of each award vests upon completion of the first Model 3 production vehicle; and
- 1/4th of each award vests upon achieving an annualized gross margin of greater than 30% for any three-year period.

As of December 31, 2017, the following performance milestones had been achieved:

- Completion of the first Model X production vehicle;
- Completion of the first Model 3 production vehicle; and
- Aggregate production of 100,000 vehicles in a trailing 12-month period.

We begin recognizing stock-based compensation expense as each performance milestone becomes probable of achievement. As of December 31, 2017, we had unrecognized stock-based compensation expense of \$13.1 million for the performance milestone that was considered not probable of achievement. For the years ended December 31, 2017, 2016 and 2015, we recorded stock-based compensation expense of \$6.8 million, \$25.3 million and \$10.4 million, respectively, related to these awards.

## 2012 CEO Award

In August 2012, our Board of Directors granted 5,274,901 stock option awards to our CEO (the "2012 CEO Grant"). The 2012 CEO Grant consists of 10 vesting tranches with a vesting schedule based entirely on the attainment of both performance conditions and market conditions, assuming continued employment and service through each vesting date. Each vesting tranche requires a combination of a pre-determined performance milestone and an incremental increase in our market capitalization of \$4.00 billion, as compared to our initial market capitalization of \$3.20 billion at the time of grant. As of December 31, 2017, the market capitalization conditions for all of the vesting tranches and the following performance milestones had been achieved:

- Successful completion of the Model X alpha prototype;
- Successful completion of the Model X beta prototype;
- Completion of the first Model X production vehicle;
- Aggregate production of 100,000 vehicles;
- Successful completion of the Model 3 alpha prototype;
- Successful completion of the Model 3 beta prototype;
- Completion of the first Model 3 production vehicle; and
- Aggregate production of 200,000 vehicles.

As of December 31, 2017, the following performance milestone was considered probable of achievement:

- Aggregate production of 300,000 vehicles.

We begin recognizing stock-based compensation expense as each milestone becomes probable of achievement. As of December 31, 2017, the unrecognized stock-based compensation expense for the performance milestone that was considered probable of achievement was immaterial. As of December 31, 2017, we had unrecognized stock-based compensation expense of \$5.7 million for the performance milestone that was considered

not probable of achievement. For the years ended December 31, 2017, 2016 and 2015, we recorded stock-based compensation expense of \$5.1 million, \$15.8 million and \$10.6 million, respectively, related to the 2012 CEO Grant.

Our CEO earns a base salary that reflects the currently applicable minimum wage requirements under California law, and he is subject to income taxes based on such base salary. However, he has never accepted and currently does not accept his salary.

### Summary Stock-Based Compensation Information

The following table summarizes our stock-based compensation expense by line item in the consolidated statements of operations (in thousands):

	Year Ended December 31,		
	2017	2016	2015
Cost of sales	\$ 43,845	\$ 30,400	\$ 19,244
Research and development	217,616	154,632	89,309
Selling, general and administrative	205,299	149,193	89,446
Total	<u>\$ 466,760</u>	<u>\$ 334,225</u>	<u>\$ 197,999</u>

We realized no income tax benefit from stock option exercises in each of the periods presented due to recurring losses and valuation allowances. As of December 31, 2017, we had \$1.34 billion of total unrecognized stock-based compensation expense related to non-performance awards, which will be recognized over a weighted-average period of 3.0 years.

### ESPP

Our employees are eligible to purchase our common stock through payroll deductions of up to 15% of their eligible compensation, subject to any plan limitations. The purchase price would be 85% of the lower of the fair market value on the first and last trading days of each six-month offering period. During the years ended December 31, 2017, 2016 and 2015, we issued 370,173, 321,788 and 220,571 shares under the ESPP for \$71.0 million, \$51.7 million and \$37.5 million, respectively. There were 1,423,978 shares available for issuance under the ESPP as of December 31, 2017.

### Note 16 – Income Taxes

A provision for income taxes of \$31.5 million, \$26.7 million and \$13.0 million has been recognized for the years ended December 31, 2017, 2016 and 2015, respectively, related primarily to our subsidiaries located outside of the U.S. Our loss before provision for income taxes for the years ended December 31, 2017, 2016 and 2015 was as follows (in thousands):

	Year Ended December 31,		
	2017	2016	2015
Domestic	\$ 993,113	\$ 130,718	\$ 415,694
Noncontrolling interest and redeemable noncontrolling interest	279,178	98,132	—
Foreign	936,741	517,498	459,930
Loss before income taxes	<u>\$2,209,032</u>	<u>\$ 746,348</u>	<u>\$ 875,624</u>

The components of the provision for income taxes for the years ended December 31, 2017, 2016 and 2015 consisted of the following (in thousands):

	Year Ended December 31,		
	2017	2016	2015
Current:			
Federal	\$ (9,552)	\$ —	\$ —
State	2,029	568	525
Foreign	42,715	53,962	10,342
Total current	<u>35,192</u>	<u>54,530</u>	<u>10,867</u>
Deferred:			
Federal	—	—	—
State	—	—	—
Foreign	(3,646)	(27,832)	2,172
Total deferred	<u>(3,646)</u>	<u>(27,832)</u>	<u>2,172</u>
Total provision for income taxes	<u>\$ 31,546</u>	<u>\$ 26,698</u>	<u>\$ 13,039</u>

On December 22, 2017, the 2017 Tax Cuts and Jobs Act (“Tax Act”) was enacted into law making significant changes to the Internal Revenue Code. Changes include, but are not limited to, a federal corporate tax rate decrease from 35% to 21% for tax years beginning after December 31, 2017, the transition of U.S. international taxation from a worldwide tax system to a territorial system and a one-time transition tax on the mandatory deemed repatriation of foreign earnings. We are required to recognize the effect of the tax law changes in the period of enactment, such as re-measuring our U.S. deferred tax assets and liabilities as well as reassessing the net realizability of our deferred tax assets and liabilities. The Tax Act did not give rise to any material impact on the consolidated balance sheets and consolidated statements of operations due to our historical worldwide loss position and the full valuation allowance on our net U.S. deferred tax assets.

In December 2017, the Securities and Exchange Commission staff issued Staff Accounting Bulletin No. 118, *Income Tax Accounting Implications of the Tax Cuts and Jobs Act* (“SAB 118”), which allows us to record provisional amounts during a measurement period not to extend beyond one year from the enactment date. Since the Tax Act was enacted late in the fourth quarter of 2017 (and ongoing guidance and accounting interpretations are expected over the next 12 months), we consider the accounting of deferred tax re-measurements and other items, such as state tax considerations, to be incomplete due to the forthcoming guidance and our ongoing analysis of final year-end data and tax positions. We expect to complete our analysis within the measurement period in accordance with SAB 118. We do not expect any subsequent adjustments to have any material impact on the consolidated balance sheets or statements of operations due to our historical worldwide loss position and the full valuation allowance on our net U.S. deferred tax assets.

Deferred tax assets (liabilities) as of December 31, 2017 and 2016 consisted of the following (in thousands):

	December 31, 2017	December 31, 2016
<b>Deferred tax assets:</b>		
Net operating loss carry-forwards	\$ 1,575,952	\$ 648,652
Research and development credits	306,808	208,499
Other tax credits	117,997	106,530
Deferred revenue	200,531	268,434
Inventory and warranty reserves	74,578	95,570
Stock-based compensation	96,916	120,955
Financial Instruments	3,080	—
Investment in certain financing funds	24,471	237,759
Accruals and others	23,336	67,769
Total deferred tax assets	2,423,669	1,754,168
Valuation allowance	(1,843,713)	(1,022,705)
Deferred tax assets, net of valuation allowance	579,956	731,463
<b>Deferred tax liabilities:</b>		
Depreciation and amortization	(537,613)	(679,969)
Other	(18,734)	(3,779)
Financial Instruments	—	(22,033)
Total deferred tax liabilities	(556,347)	(705,781)
Deferred tax assets, net of valuation allowance and deferred tax liabilities	\$ 23,609	\$ 25,682

As of December 31, 2017, we recorded a valuation allowance of \$1.84 billion for the portion of the deferred tax asset that we do not expect to be realized. The valuation on our net deferred taxes increased by \$821.0 million during the year ended December 31, 2017. The valuation allowance increase is primarily due to additional U.S. deferred tax assets incurred in the current year, as well as an increase relating to adoption of ASU 2016-09, and offset by the re-measurement of the federal portion of our deferred tax assets as of December 31, 2017 from 35% to the new 21% tax rate. Management believes that based on the available information, it is more likely than not that the U.S. deferred tax assets will not be realized, such that a full valuation allowance is required against all U.S. deferred tax assets. We have net \$46.5 million of deferred tax assets in foreign jurisdictions, which management believes are more-likely-than-not to be fully realized given the expectation of future earnings in these jurisdictions.

The reconciliation of taxes at the federal statutory rate to our provision for income taxes for the years ended December 31, 2017, 2016 and 2015 was as follows (in thousands):

	Year Ended December 31,		
	2017	2016	2015
Tax at statutory federal rate	\$ (773,162)	\$ (261,222)	\$ (306,470)
State tax, net of federal benefit	2,029	568	525
Nondeductible expenses	30,138	26,547	16,711
Excess tax benefits related to stock based compensation (1)	(1,013,196)	—	—
Foreign income rate differential	364,699	206,470	172,259
U.S. tax credits	(109,501)	(162,865)	(43,911)
Noncontrolling interests and redeemable noncontrolling interests adjustment	65,920	21,964	—
Effect of U.S. tax law change (2)	722,646	—	—
Bargain in purchase gain	20,211	(31,055)	—
Other reconciling items	3,178	785	1,232
Change in valuation allowance	718,584	225,506	172,693
Provision for income taxes	<u>\$ 31,546</u>	<u>\$ 26,698</u>	<u>\$ 13,039</u>

- As of January 1, 2017, upon the adoption of ASU No. 2016-09, Improvements to Employee Share-based Payment Accounting, excess tax benefits from share-based award activity incurred from the prior and
- (1) current years are reflected as a reduction of the provision for income taxes. The excess tax benefits result in an increase to our gross U.S. deferred tax assets that is offset by a corresponding increase to our valuation allowance.
  - (2) Due to the Tax Act, our U.S. deferred tax assets and liabilities as of December 31, 2017 were re-measured from 35% to 21%. The change in tax rate resulted in a decrease to our gross U.S. deferred tax assets which is offset by a corresponding decrease to our valuation allowance.

As of December 31, 2017, we had \$6.42 billion of federal and \$5.26 billion of state net operating loss carry-forwards available to offset future taxable income, which will not begin to significantly expire until 2024 for federal and 2028 for state purposes. A portion of these losses were generated by SolarCity prior to our acquisition in 2016 and, therefore, are subject to change of control provisions, which limit the amount of acquired tax attributes that can be utilized in a given tax year. We do not expect these change of control limitations to significantly impact our ability to utilize these attributes. Upon the adoption of ASU 2016-09, our gross U.S. deferred tax assets increased by \$583.4 million, inclusive of the effect for the U.S. statutory corporate tax rate reduction from 35% to 21%, and is fully offset by a corresponding increase to our valuation allowance.

As of December 31, 2017, we had research and development tax credits of \$209.0 million and \$223.2 million for federal and state income tax purposes, respectively. If not utilized, the federal research and development tax credits will expire in various amounts beginning in 2024. However, the state research and development tax credits can be carried-forward indefinitely. In addition, we had other general business tax credits of \$116.9 million for federal income tax purposes, which will not begin to significantly expire until 2033.

Collectively, we had no foreign earnings as of December 31, 2017 and therefore was not subject to the mandatory repatriation tax provisions of the Tax Act. However, some of our foreign subsidiaries do have accumulated earnings. No deferred tax liabilities for foreign withholding taxes have been recorded relating to the earnings of our foreign subsidiaries since all such earnings are intended to be indefinitely reinvested. The amount of the unrecognized deferred tax liability associated with these earnings is immaterial.

Federal and state laws can impose substantial restrictions on the utilization of net operating loss and tax credit carry-forwards in the event of an “ownership change”, as defined in Section 382 of the Internal Revenue Code. We determined that no significant limitation would be placed on the utilization of our net operating loss and tax credit carry-forwards due to prior ownership changes.



## Uncertain Tax Positions

The changes to our gross unrecognized tax benefits were as follows (in thousands):

December 31, 2014	\$ 41,377
Increases in balances related to prior year tax positions	6,626
Increases in balances related to current year tax positions	51,124
December 31, 2015	99,127
Increase in balances related to prior year tax positions	28,677
Increases in balances related to current year tax positions	62,805
Assumed uncertain tax positions through acquisition	13,327
December 31, 2016	203,936
Decrease in balances related to prior year tax positions	(31,493)
Increases in balances related to current year tax positions	84,352
Change in balances related to effect of U.S. tax law change	(58,050)
December 31, 2017	<u>\$ 198,745</u>

As of December 31, 2017, accrued interest and penalties related to unrecognized tax benefits are classified as income tax expense and were immaterial. Unrecognized tax benefits of \$191.0 million, if recognized, would not affect our effective tax rate since the tax benefits would increase a deferred tax asset that is currently fully offset by a full valuation allowance. We do not anticipate that the amount of existing unrecognized tax benefits will significantly increase or decrease within the next 12 months.

We file income tax returns in the U.S., California and various state and foreign jurisdictions. Tax years 2004 to 2016 remain subject to examination for federal income tax purposes, and tax years 2004 to 2016 remain subject to examination for California income tax purposes. All net operating losses and tax credits generated to date are subject to adjustment for U.S. federal and California income tax purposes. Tax years 2008 to 2016 remain subject to examination in other U.S. state and foreign jurisdictions.

The U.S. Tax Court issued a decision in *Altera Corp v. Commissioner* related to the treatment of stock-based compensation expense in a cost-sharing arrangement. As this decision can be overturned upon appeal, we have not recorded any impact as of December 31, 2017. In addition, any potential tax benefits would increase our U.S. deferred tax asset, which is currently offset with a full valuation allowance.

## Note 17 – Commitments and Contingencies

### Leases

We have entered into various non-cancellable operating lease agreements for certain of our offices, manufacturing and warehouse facilities, retail and service locations, equipment, vehicles, solar energy systems and Supercharger sites, throughout the world. Included within the lease commitment table below are payments due under operating leases that have been accounted for as build-to-suit lease arrangements, which are included in property, plant and equipment on the consolidated balance sheets. Rent expense for the years ended December 31, 2017, 2016 and 2015 was \$177.7 million, \$116.8 million and \$68.2 million, respectively.

We have entered into various agreements to lease equipment under capital leases up to 60 months. The equipment under the leases are collateral for the lease obligations and are included within property, plant and equipment on the consolidated balance sheets.

Future minimum commitments for leases as of December 31, 2017 were as follows (in thousands):

	Operating Leases	Capital Leases
2018	\$ 224,630	\$ 127,180
2019	204,335	137,313
2020	175,612	167,281
2021	156,552	138,042
2022	130,802	133,772
Thereafter	425,295	81,627
Total minimum lease payments	\$ 1,317,226	785,215
Less: Amounts representing interest not yet incurred		99,181
Present value of capital lease obligations		686,034
Less: Current portion		96,700
Long-term portion of capital lease obligations		<u>\$ 589,334</u>

#### ***Build-to-Suit Lease Arrangement in Buffalo, New York***

We have a build-to-suit lease arrangement with the Research Foundation for the State University of New York (the “SUNY Foundation”) where the SUNY Foundation will construct a solar cell and panel manufacturing facility, referred to as Gigafactory 2, with our participation in the design and construction, install certain utilities and other improvements and acquire certain manufacturing equipment designated by us to be used in the manufacturing facility. The SUNY Foundation covers (i) construction costs related to the manufacturing facility up to \$350.0 million, (ii) the acquisition and commissioning of the manufacturing equipment in an amount up to \$274.7 million and (iii) \$125.3 million for additional specified scope costs, in cases (i) and (ii) only, subject to the maximum funding allocation from the State of New York; and we are responsible for any construction or equipment costs in excess of such amounts. The SUNY Foundation will own the manufacturing facility and the manufacturing equipment purchased by the SUNY Foundation. Following completion of the manufacturing facility, we will lease the manufacturing facility and the manufacturing equipment owned by the SUNY Foundation for an initial period of 10 years, with an option to renew, for \$2.00 per year plus utilities.

Under the terms of the build-to-suit lease arrangement, we are required to achieve specific operational milestones during the initial lease term; which include employing a certain number of employees at the manufacturing facility, within western New York and within the State of New York within specified periods following the completion of the manufacturing facility. We are also required to spend or incur \$5.00 billion in combined capital, operational expenses and other costs in the State of New York within 10 years following the achievement of full production. On an annual basis during the initial lease term, as measured on each anniversary of the commissioning of the manufacturing facility, if we fail to meet these specified investment and job creation requirements, then we would be obligated to pay a \$41.2 million “program payment” to the SUNY Foundation for each year that we fail to meet these requirements. Furthermore, if the arrangement is terminated due to a material breach by us, then additional amounts might become payable by us.

The non-cash investing and financing activities related to the arrangement during the year ended December 31, 2017 amounted to \$86.1 million. The non-cash investing and financing activities related to the arrangement from the Acquisition Date through December 31, 2016 amounted to \$5.6 million.

#### ***Environmental Liabilities***

In connection with our factory located in Fremont, California, we are obligated to pay for the remediation of certain environmental conditions existing at the time we purchased the property from New United Motor Manufacturing, Inc. (“NUMMI”). In particular, we are responsible for the first \$15.0 million of remediation costs, any remediation costs in excess of \$30.0 million and any remediation costs incurred after 10 years from the purchase date. NUMMI is responsible for any remediation costs between \$15.0 million and \$30.0 million for up to 10 years after the purchase date.

## ***Legal Proceedings***

### *Proceedings Related to U.S. Treasury*

In July 2012, SolarCity, along with other companies in the solar energy industry, received a subpoena from the U.S. Treasury Department's Office of the Inspector General to deliver certain documents in SolarCity's possession that relate to SolarCity's applications for U.S. Treasury grants. In February 2013, two financing funds affiliated with SolarCity filed a lawsuit in the U.S. Court of Federal Claims against the U.S. government, seeking to recover \$14.0 million that the U.S. Treasury was obligated to pay, but failed to pay, under Section 1603 of the American Recovery and Reinvestment Act of 2009. In February 2016, the U.S. government filed a motion seeking leave to assert a counterclaim against the two plaintiff funds on the grounds that the U.S. government, in fact, paid them more, not less, than they were entitled to as a matter of law. In September 2017, SolarCity and the U.S. government reached a global settlement of both the investigation and SolarCity's lawsuit. In that settlement, SolarCity admitted no wrongdoing and agreed to return approximately 5% of the U.S. Treasury cash grants it had received between 2009 and 2013, amounting to \$29.5 million. The investigation is now closed and SolarCity's lawsuit has been dismissed.

### *Securities Litigation Relating to SolarCity's Financial Statements and Guidance*

On March 28, 2014, a purported stockholder class action lawsuit was filed in the U.S. District Court for the Northern District of California against SolarCity and two of its officers. The complaint alleges violations of federal securities laws and seeks unspecified compensatory damages and other relief on behalf of a purported class of purchasers of SolarCity's securities from March 6, 2013 to March 18, 2014. After a series of amendments to the original complaint, the District Court dismissed the amended complaint and entered a judgment in our favor on August 9, 2016. The plaintiffs have filed a notice of appeal. On December 4, 2017, the District Court heard oral arguments on the plaintiffs' notice of appeal from the dismissal. We believe that the claims are without merit and intend to defend against this lawsuit and appeal vigorously. We are unable to estimate the possible loss or range of loss, if any, associated with this lawsuit.

On August 15, 2016, a purported stockholder class action lawsuit was filed in the U.S. District Court for the Northern District of California against SolarCity, two of its officers and a former officer. On March 20, 2017, the purported stockholder class filed a consolidated complaint that includes the original matter in the same court against SolarCity, one of its officers and three former officers. As consolidated, the complaint alleges that SolarCity made projections of future sales and installations that it failed to achieve and that these projections were fraudulent when made. The suit claimed violations of federal securities laws and sought unspecified compensatory damages and other relief on behalf of a purported class of purchasers of SolarCity's securities from May 6, 2015 to May 9, 2016. On July 25, 2017, the court took SolarCity's fully-briefed motion to dismiss under submission. On August 11, 2017, the court granted the motion to dismiss with leave to amend. On September 11, 2017, after lead plaintiff determined he would not amend, the Court dismissed the action with prejudice and entered judgment in favor of SolarCity and the individual defendants.

### *Securities Litigation Relating to the SolarCity Acquisition*

Between September 1, 2016 and October 5, 2016, seven lawsuits were filed in the Court of Chancery of the State of Delaware by purported stockholders of Tesla challenging the SolarCity acquisition. Following consolidation, the lawsuit names as defendants our board of directors and alleges, among other things, that they breached their fiduciary duties in connection with the acquisition. The complaint asserts both derivative claims and direct claims on behalf of a purported class and seeks, among other relief, unspecified monetary damages, attorneys' fees and costs. On January 27, 2017, the defendants filed a motion to dismiss the operative complaint. Rather than respond to the defendants' motion, the plaintiffs filed an amended complaint. On March 17, 2017, the defendants filed a motion to dismiss the amended complaint. On December 13, 2017, the Court heard oral arguments on the motion and reserved decision. The plaintiffs filed a parallel action in the U.S. District Court for the District of Delaware on April 21, 2017, adding claims for violations of federal securities laws.

On February 6, 2017, a purported stockholder made a demand to inspect our books and records, purportedly to investigate potential breaches of fiduciary duties in connection with the SolarCity acquisition. On April 17, 2017, the purported stockholder filed a petition for a writ of mandate in the California Superior Court, seeking to compel us to provide the documents requested in the demand. We filed a demurrer to the writ petition or, in the alternative, a

motion to stay the action. On November 9, 2017, the Superior Court granted our motion and dismissed the action without prejudice.

On March 24, 2017, another lawsuit was filed in the U.S. District Court for the District of Delaware by a purported Tesla stockholder challenging the SolarCity acquisition. The complaint alleges, among other things, that our board of directors breached their fiduciary duties in connection with the acquisition and alleges violations of federal securities laws.

We believe that the claims challenging the SolarCity acquisition are without merit. We are unable to estimate the possible loss or range of loss, if any, associated with these lawsuits.

#### *Securities Litigation Relating to Production of Model 3 Vehicles*

On October 10, 2017, a purported stockholder class action lawsuit was filed in the U.S. District Court for the Northern District of California against us, two of our current officers and a former officer. The complaint alleges violations of federal securities laws and seeks unspecified compensatory damages and other relief on behalf of a purported class of purchasers of Tesla securities from May 4, 2016 to October 6, 2017. The lawsuit claims that we supposedly made materially false and misleading statements regarding our preparedness to produce Model 3 vehicles. We believe that the claims are without merit and intend to defend against this lawsuit vigorously. We are unable to estimate the possible loss or range of loss, if any, associated with this lawsuit.

#### *Other Matters*

From time to time, we have received requests for information from regulators and governmental authorities, such as the National Highway Traffic Safety Administration, the National Transportation Safety Board and the Securities and Exchange Commission. We are also subject to various other legal proceedings and claims that arise from the normal course of business activities. If an unfavorable ruling were to occur, there exists the possibility of a material adverse impact on our results of operations, prospects, cash flows, financial position and brand.

#### ***Indemnification and Guaranteed Returns***

We are contractually obligated to compensate certain fund investors for any losses that they may suffer in certain limited circumstances resulting from reductions in U.S. Treasury grants or ITCs. Generally, such obligations would arise as a result of reductions to the value of the underlying solar energy systems as assessed by the U.S. Treasury Department for purposes of claiming U.S. Treasury grants or as assessed by the IRS for purposes of claiming ITCs or U.S. Treasury grants. For each balance sheet date, we assess and recognize, when applicable, a distribution payable for the potential exposure from this obligation based on all the information available at that time, including any guidelines issued by the U.S. Treasury Department on solar energy system valuations for purposes of claiming U.S. Treasury grants and any audits undertaken by the IRS. We believe that any payments to the fund investors in excess of the amounts already recognized by us, which were immaterial, for this obligation are not probable based on the facts known at the filing date.

The maximum potential future payments that we could have to make under this obligation would depend on the difference between the fair values of the solar energy systems sold or transferred to the funds as determined by us and the values that the U.S. Treasury Department would determine as fair value for the systems for purposes of claiming U.S. Treasury grants or the values the IRS would determine as the fair value for the systems for purposes of claiming ITCs or U.S. Treasury grants. We claim U.S. Treasury grants based on guidelines provided by the U.S. Treasury department and the statutory regulations from the IRS. We use fair values determined with the assistance of independent third-party appraisals commissioned by us as the basis for determining the ITCs that are passed-through to and claimed by the fund investors. Since we cannot determine future revisions to U.S. Treasury Department guidelines governing solar energy system values or how the IRS will evaluate system values used in claiming ITCs or U.S. Treasury grants, we are unable to reliably estimate the maximum potential future payments that it could have to make under this obligation as of each balance sheet date.

We are eligible to receive certain state and local incentives that are associated with renewable energy generation. The amount of incentives that can be claimed is based on the projected or actual solar energy system size and/or the amount of solar energy produced. We also currently participate in one state's incentive program that is based on either the fair market value or the tax basis of solar energy systems placed in service. State and local

incentives received are allocated between us and fund investors in accordance with the contractual provisions of each fund. We are not contractually obligated to indemnify any fund investor for any losses they may incur due to a shortfall in the amount of state or local incentives actually received.

We are contractually obligated to make payments to one fund investor if the fund investor does not achieve a specified minimum internal rate of return. The fund investor has already received a significant portion of the projected economic benefits from U.S. Treasury grant distributions and tax depreciation benefits. The contractual provisions of the fund state that the fund has an indefinite term unless the members agree to dissolve the fund. Based on our current financial projections regarding the amounts and timing of future distributions to the fund investor, we do not expect to make any payments as a result of this guarantee and have not accrued any liabilities for this guarantee. The amounts of any potential future payments under this guarantee are dependent on the amounts and timing of future distributions to the fund investor, future tax benefits that accrue to the fund investor, our purchase of the fund investor's interest in the fund and future distributions to the fund investor upon the liquidation of the fund. Due to the uncertainties surrounding estimating the amounts and timing of these factors, we are unable to estimate the maximum potential payments under this guarantee. To date, the fund investor has achieved the specified minimum internal rate of return.

Our lease pass-through financing funds have a one-time lease payment reset mechanism that occurs after the installation of all solar energy systems in a fund. As a result of this mechanism, we may be required to refund master lease prepayments previously received from investors. Any refunds of master lease prepayments would reduce the lease pass-through financing obligation.

### ***Letters of Credit***

As of December 31, 2017, we had \$138.2 million of unused letters of credit outstanding.

### **Note 18 – VIE Arrangements**

We have entered into various arrangements with investors to facilitate the funding and monetization of our solar energy systems and vehicles. In particular, our wholly owned subsidiaries and fund investors have formed and contributed cash and assets into various financing funds and entered into related agreements. We have determined that the funds are VIEs and we are the primary beneficiary of these VIEs by reference to the power and benefits criterion under ASC 810, *Consolidation*. We have considered the provisions within the agreements, which grant us the power to manage and make decisions that affect the operation of these VIEs, including determining the solar energy systems or vehicles and the associated customer contracts to be sold or contributed to these VIEs, redeploying solar energy systems or vehicles and managing customer receivables. We consider that the rights granted to the fund investors under the agreements are more protective in nature rather than participating.

As the primary beneficiary of these VIEs, we consolidate in the financial statements the financial position, results of operations and cash flows of these VIEs, and all intercompany balances and transactions between us and these VIEs are eliminated in the consolidated financial statements. Cash distributions of income and other receipts by a fund, net of agreed upon expenses, estimated expenses, tax benefits and detriments of income and loss and tax credits, are allocated to the fund investor and our subsidiary as specified in the agreements.

Generally, our subsidiary has the option to acquire the fund investor's interest in the fund for an amount based on the market value of the fund or the formula specified in the agreements.

Upon the sale or liquidation of a fund, distributions would occur in the order and priority specified in the agreements.

Pursuant to management services, maintenance and warranty arrangements, we have been contracted to provide services to the funds, such as operations and maintenance support, accounting, lease servicing and performance reporting. In some instances, we have guaranteed payments to the fund investors as specified in the agreements. A fund's creditors have no recourse to our general credit or to that of other funds. None of the assets of the funds had been pledged as collateral for their obligations.

The aggregate carrying values of the VIEs' assets and liabilities, after elimination of any intercompany transactions and balances, in the consolidated balance sheets were as follows (in thousands):

	<u>December 31, 2017</u>	<u>December 31, 2016</u>
<b>Assets</b>		
Current assets		
Cash and cash equivalents	\$ 55,425	\$ 44,091
Restricted cash	33,656	20,916
Accounts receivable, net	18,204	16,023
Prepaid expenses and other current assets	9,018	14,178
Total current assets	<u>116,303</u>	<u>95,208</u>
Operating lease vehicles, net	337,089	—
Solar energy systems, leased and to be leased, net	5,075,321	4,618,443
Restricted cash, net of current portion	36,999	30,697
Other assets	29,555	5,129
Total assets	<u>\$ 5,595,267</u>	<u>\$ 4,749,477</u>
<b>Liabilities</b>		
Current liabilities		
Accounts payable	\$ 32	\$ 20
Accrued liabilities and other	51,652	32,242
Deferred revenue	59,412	17,114
Customer deposits	726	1,169
Current portion of long-term debt	196,531	89,356

and capital leases		
Total current liabilities	308,353	139,901
Deferred revenue, net of current portion	323,919	178,783
Long-term debt and capital leases, net of current portion	625,934	466,741
Other long-term liabilities	30,536	82,917
Total liabilities	\$ 1,288,742	\$ 868,342

#### Note 19 – Lease Pass-Through Financing Obligation

Through December 31, 2017, we had entered into eight transactions referred to as “lease pass-through fund arrangements”. Under these arrangements, our wholly owned subsidiaries finance the cost of solar energy systems with investors through arrangements contractually structured as master leases for an initial term ranging between 10 and 25 years. These solar energy systems are subject to lease or power purchase agreements with customers with an initial term not exceeding 25 years. These solar energy systems are included within solar energy systems, leased and to be leased, net on the consolidated balance sheet.

The cost of the solar energy systems under lease pass-through fund arrangements as of December 31, 2017 and 2016 was \$1.09 billion and \$785.3 million, respectively. The accumulated depreciation on these assets as of December 31, 2017 and 2016 was \$30.9 million and \$2.1 million, respectively. The total lease pass-through financing obligation as of December 31, 2017 was \$134.8 million, of which \$67.3 million was classified as a current liability. The total lease pass-through financing obligation as of December 31, 2016 was \$122.3 million, of which \$51.5 million was classified as a current liability.

Under a lease pass-through fund arrangement, the investor makes a large upfront payment to the lessor, which is one of our subsidiaries, and in some cases, subsequent periodic payments. We allocate a portion of the aggregate investor payments to the fair value of the assigned ITCs, which is estimated by discounting the projected cash flow impact of the ITCs using a market interest rate and is accounted for separately (see Note 2, *Summary of Significant Accounting Policies*). We account for the remainder of the investor payments as a borrowing by recording the proceeds received as a lease pass-through financing obligation, which is repaid from the future customer lease payments and any incentive rebates. A portion of the amounts received by the investor is allocated to interest expense using the effective interest rate method.

The lease pass-through financing obligation is non-recourse once the associated solar energy systems have been placed in-service and the associated customer arrangements have been assigned to the investors. However, we are required to comply with certain financial covenants specified in the contractual agreements, which we had met as of December 31, 2017. In addition, we are responsible for any warranties, performance guarantees, accounting and performance reporting. Furthermore, we continue to account for the customer arrangements and any incentive rebates in the consolidated financial statements, regardless of whether the cash is received by us or directly by the investors.

As of December 31, 2017, the future minimum master lease payments to be received from investors, for each of the next five years and thereafter, were as follows (in thousands):

2018	\$ 44,771
2019	44,973
2020	43,930
2021	42,731
2022	34,631
Thereafter	543,512
Total	<u>\$ 754,548</u>

For two of the lease pass-through fund arrangements, our subsidiaries have pledged its assets to the investors as security for its obligations under the contractual agreements.

Each lease pass-through fund arrangement has a one-time master lease prepayment adjustment mechanism that occurs when the capacity and the placed-in-service dates of the associated solar energy systems are finalized or on an agreed-upon date. As part of this mechanism, the master lease prepayment amount is updated, and we may be obligated to refund a portion of a master lease prepayment or entitled to receive an additional master lease prepayment. Any additional master lease prepayments are recorded as an additional lease pass-through financing obligation while any master lease prepayment refunds would reduce the lease pass-through financing obligation.

#### **Note 20 – Defined Contribution Plan**

We have a 401(k) savings plan that qualifies as a deferred salary arrangement under Section 401(k) of the Internal Revenue Code. Under the 401(k) savings plan, participating employees may elect to contribute up to 100% of their eligible compensation, subject to certain limitations. Participants are fully vested in their contributions. We did not make any contributions to the 401(k) savings plan during the years ended December 31, 2017, 2016 and 2015.

#### **Note 21 – Related Party Transactions**

Related party balances were comprised of the following (in thousands):

	2017	2016
Solar Bonds issued to related parties	\$ 100	\$ 265,100
Convertible senior notes due to related parties	\$ 3,000	\$ 13,000
Promissory notes due to related parties	\$ 100,000	\$ —
Due to related parties (primarily accrued interest, included in accrued and other current liabilities)	\$ 2,509	\$ 5,136

The related party transactions were primarily issuances, maturities and exchanges of debt held by Space Exploration Technologies Corporation (“SpaceX”), our CEO, SolarCity’s former CEO, SolarCity’s former Chief Technology Officer and an entity affiliated with our CEO. SpaceX is considered a related party because our CEO is also the CEO, Chief Technology Officer, Chairman and a significant stockholder of SpaceX.

On March 21, 2017, \$90.0 million in aggregate principal amount of 4.40% Solar Bonds held by SpaceX matured and were fully repaid by us. On June 10, 2017, \$75.0 million in aggregate principal amount of 4.40% Solar Bonds held by SpaceX matured and were fully repaid by us.



On April 11, 2017, our CEO, SolarCity's former CEO and SolarCity's former Chief Technology Officer exchanged their \$100.0 million (collectively) in aggregate principal amount of 6.50% Solar Bonds due in February 2018 for promissory notes in the same amounts and with substantially the same terms.

On April 18, 2017, our CEO converted all of his Zero-Coupon Convertible Senior Notes due in 2020, which had an aggregate principal amount of \$10.0 million (see Note 14, *Common Stock*).

## Note 22 – Quarterly Results of Operations (Unaudited)

The following table presents selected quarterly results of operations data for the years ended December 31, 2017 and 2016 (in thousands, except per share amounts):

	Three Months Ended			
	March 31	June 30	September 30	December 31
<b>2017</b>				
Total revenues	\$2,696,270	\$2,789,557	\$2,984,675	\$3,288,249
Gross profit	\$ 667,946	\$ 666,615	\$ 449,140	\$ 438,786
Net loss attributable to common stockholders	\$ (330,277)	\$ (336,397)	\$ (619,376)	\$ (675,350)
Net loss per share of common stock attributable to common stockholders, basic	\$ (2.04)	\$ (2.04)	\$ (3.70)	\$ (4.01)
Net loss per share of common stock attributable to common stockholders, diluted	\$ (2.04)	\$ (2.04)	\$ (3.70)	\$ (4.01)
<b>2016</b>				
Total revenues	\$1,147,048	\$1,270,017	\$2,298,436	\$2,284,631
Gross profit	\$ 252,468	\$ 274,776	\$ 636,735	\$ 435,278
Net (loss) income attributable to common stockholders	\$ (282,267)	\$ (293,188)	\$ 21,878	\$ (121,337)
Net (loss) income per share of common stock attributable to common stockholders, basic	\$ (2.13)	\$ (2.09)	\$ 0.15	\$ (0.78)
Net (loss) income per share of common stock attributable to common stockholders, diluted	\$ (2.13)	\$ (2.09)	\$ 0.14	\$ (0.78)

## Note 23 – Segment Reporting and Information about Geographic Areas

We have two operating and reportable segments: (i) automotive and (ii) energy generation and storage. The automotive segment includes the design, development, manufacturing and sales of electric vehicles. Additionally, the automotive segment is also comprised of services and other, which includes after-sales vehicle services, used vehicle sales, powertrain sales and services by Grohmann. The energy generation and storage segment includes the design, manufacture, installation and sales of solar energy generation and energy storage products. Our CODM does not evaluate operating segments using asset or liability information. The following table presents revenues and gross margins by reportable segment (in thousands):

	Year Ended December 31,		
	2017	2016	2015
Automotive segment			
Revenues	\$10,642,485	\$ 6,818,738	\$ 4,031,458
Gross profit	\$ 1,980,759	\$ 1,596,195	\$ 921,313
Energy generation and storage segment			
Revenues	\$ 1,116,266	\$ 181,394	\$ 14,477
Gross profit	\$ 241,728	\$ 3,062	\$ 2,190

The following table presents revenues by geographic area based on where our products are delivered (in thousands):

	Year Ended December 31,	
	2017	2016
United States	\$ 6,221,439	\$ 4,200,706
China	2,027,062	1,065,255
Norway	823,081	335,572
Other	2,687,169	1,398,599
Total	<u>\$ 11,758,751</u>	<u>\$ 7,000,132</u>

The following table presents long-lived assets by geographic area (in thousands):

	2017	2016
United States	\$15,587,979	\$11,399,545
International	787,033	503,294
Total	<u>\$16,375,012</u>	<u>\$11,902,839</u>

#### Note 24 – Subsequent Events

In January 2018, the performance milestone for the aggregate production of 300,000 vehicles under the 2012 CEO Grant was achieved, resulting in the vesting of the ninth of 10 tranches under the grant.

Subject to stockholder approval, on January 21, 2018, our Board of Directors granted a new 10-year CEO performance award with vesting contingent upon achieving certain specified market capitalization and operational milestones. On February 8, 2018, we filed a proxy statement to seek stockholder approval of the award.

On February 6, 2018, we issued \$546.1 million in aggregate principal amount of automobile lease-backed notes with interest rates ranging from 2.3% to 4.9% and maturities ranging from December 2019 to March 2021. The proceeds from the issuance, net of discounts and fees, were \$543.1 million. Contemporaneously, we repaid \$453.6 million of the principal outstanding under the Warehouse Agreements.

On February 14, 2018, our CEO and SolarCity's former Chief Technology Officer exchanged their \$82.5 million (collectively) in aggregate principal amount of 6.50% promissory notes due in February 2018 for 6.50% promissory notes due in August 2018 in the same amounts.

**ITEM 9. CHANGES IN AND DISAGREEMENTS WITH ACCOUNTANTS ON ACCOUNTING AND FINANCIAL DISCLOSURE**

None

**ITEM 9A. CONTROLS AND PROCEDURES**

*Evaluation of Disclosure Controls and Procedures*

We conducted an evaluation as of December 31, 2017, under the supervision and with the participation of our management, including our Chief Executive Officer and Chief Financial Officer, of the effectiveness of the design and operation of our disclosure controls and procedures. Based upon that evaluation, our Chief Executive Officer and Chief Financial Officer concluded that, as of December 31, 2017, our disclosure controls and procedures were effective to provide reasonable assurance.

*Management's Report on Internal Control over Financial Reporting*

Our management is responsible for establishing and maintaining adequate internal control over financial reporting. Internal control over financial reporting is a process designed by, or under the supervision of, our Chief Executive Officer and Chief Financial Officer to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles and includes those policies and procedures that (1) pertain to the maintenance of records that in reasonable detail accurately and fairly reflect the transactions and dispositions of our assets; (2) provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with generally accepted accounting principles, and that our receipts and expenditures are being made only in accordance with authorizations of our management and directors and (3) provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use or disposition of our assets that could have a material effect on the financial statements.

Under the supervision and with the participation of our management, including our Chief Executive Officer and Chief Financial Officer, we conducted an evaluation of the effectiveness of our internal control over financial reporting based on criteria established in *Internal Control – Integrated Framework (2013)* issued by the Committee of Sponsoring Organizations of the Treadway Commission (“COSO”). Our management concluded that our internal control over financial reporting was effective as of December 31, 2017.

Our independent registered public accounting firm, PricewaterhouseCoopers LLP, has audited the effectiveness of our internal control over financial reporting as of December 31, 2017, as stated in their report which is included herein.

*Limitations on the Effectiveness of Controls*

Because of inherent limitations, internal control over financial reporting may not prevent or detect misstatements and projections of any evaluation of effectiveness to future periods are subject to the risk that controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate.

*Changes in Internal Control over Financial Reporting*

There was no change in our internal control over financial reporting that occurred during the fourth fiscal quarter of the year ended December 31, 2017, which has materially affected, or is reasonably likely to materially affect, our internal control over financial reporting.

**ITEM 9B. OTHER INFORMATION**

None

## **PART III**

### **ITEM 10. DIRECTORS, EXECUTIVE OFFICERS AND CORPORATE GOVERNANCE**

The information required by this Item 10 of Form 10-K will be included in our 2018 Proxy Statement to be filed with the Securities and Exchange Commission in connection with the solicitation of proxies for our 2018 Annual Meeting of Stockholders and is incorporated herein by reference. The 2018 Proxy Statement will be filed with the Securities and Exchange Commission within 120 days after the end of the fiscal year to which this report relates.

### **ITEM 11. EXECUTIVE COMPENSATION**

The information required by this Item 11 of Form 10-K will be included in our 2018 Proxy Statement and is incorporated herein by reference.

### **ITEM 12. SECURITY OWNERSHIP OF CERTAIN BENEFICIAL OWNERS AND MANAGEMENT AND RELATED STOCKHOLDER MATTERS**

The information required by this Item 12 of Form 10-K will be included in our 2018 Proxy Statement and is incorporated herein by reference.

### **ITEM 13. CERTAIN RELATIONSHIPS AND RELATED TRANSACTIONS AND DIRECTOR INDEPENDENCE**

The information required by this Item 13 of Form 10-K will be included in our 2018 Proxy Statement and is incorporated herein by reference.

### **ITEM 14. PRINCIPAL ACCOUNTANT FEES AND SERVICES**

The information required by this Item 14 of Form 10-K will be included in our 2018 Proxy Statement and is incorporated herein by reference.

### **ITEM 15. EXHIBITS AND FINANCIAL STATEMENT SCHEDULES**

1. Financial statements (see *Index to Consolidated Financial Statements* in Part II, Item 8 of this report)
2. All financial statement schedules have been omitted since the required information was not applicable or was not present in amounts sufficient to require submission of the schedules, or because the information required is included in the consolidated financial statements or the accompanying notes
3. The exhibits listed in the following *Index to Exhibits* are filed or incorporated by reference as part of this report

## INDEX TO EXHIBITS

Exhibit Number	Exhibit Description	Incorporated by Reference				Filed Herewith
		Form	File No.	Exhibit	Filing Date	
3.1	<a href="#"><u>Amended and Restated Certificate of Incorporation of the Registrant.</u></a>	10-K	001-34756	3.1	March 1, 2017	
3.2	<a href="#"><u>Certificate of Amendment to the Amended and Restated Certificate of Incorporation of the Registrant.</u></a>	10-K	001-34756	3.2	March 1, 2017	
3.3	<a href="#"><u>Amended and Restated Bylaws of the Registrant.</u></a>	8-K	001-34756	3.2	February 1, 2017	
4.1	<a href="#"><u>Specimen common stock certificate of the Registrant.</u></a>	10-K	001-34756	4.1	March 1, 2017	
4.2	<a href="#"><u>Fifth Amended and Restated Investors' Rights Agreement, dated as of August 31, 2009, between Registrant and certain holders of the Registrant's capital stock named therein.</u></a>	S-1	333-164593	4.2	January 29, 2010	
4.3	<a href="#"><u>Amendment to Fifth Amended and Restated Investors' Rights Agreement, dated as of May 20, 2010, between Registrant and certain holders of the Registrant's capital stock named therein.</u></a>	S-1/A	333-164593	4.2A	May 27, 2010	
4.4	<a href="#"><u>Amendment to Fifth Amended and Restated Investors' Rights Agreement between Registrant, Toyota Motor Corporation and certain holders of the Registrant's capital stock named therein.</u></a>	S-1/A	333-164593	4.2B	May 27, 2010	
4.5	<a href="#"><u>Amendment to Fifth Amended and Restated Investor's Rights Agreement, dated as of June 14, 2010, between Registrant and certain holders of the Registrant's capital stock named therein.</u></a>	S-1/A	333-164593	4.2C	June 15, 2010	
4.6	<a href="#"><u>Amendment to Fifth Amended and Restated Investor's Rights Agreement, dated as of November 2, 2010, between Registrant and certain holders of the Registrant's capital stock named therein.</u></a>	8-K	001-34756	4.1	November 4, 2010	
4.7	<a href="#"><u>Waiver to Fifth Amended and Restated Investor's Rights Agreement, dated as of May 22, 2011, between Registrant and certain holders of the Registrant's capital stock named therein.</u></a>	S-1/A	333-174466	4.2E	June 2, 2011	

Exhibit Number	Exhibit Description	Incorporated by Reference				Filed Herewith
		Form	File No.	Exhibit	Filing Date	
4.8	<a href="#"><u>Amendment to Fifth Amended and Restated Investor's Rights Agreement, dated as of May 30, 2011, between Registrant and certain holders of the Registrant's capital stock named therein.</u></a>	8-K	001-34756	4.1	June 1, 2011	
4.9	<a href="#"><u>Sixth Amendment to Fifth Amended and Restated Investors' Rights Agreement, dated as of May 15, 2013 among the Registrant, the Elon Musk Revocable Trust dated July 22, 2003 and certain other holders of the capital stock of the Registrant named therein.</u></a>	8-K	001-34756	4.1	May 20, 2013	
4.10	<a href="#"><u>Waiver to Fifth Amended and Restated Investor's Rights Agreement, dated as of May 14, 2013, between the Registrant and certain holders of the capital stock of the Registrant named therein.</u></a>	8-K	001-34756	4.2	May 20, 2013	
4.11	<a href="#"><u>Waiver to Fifth Amended and Restated Investor's Rights Agreement, dated as of August 13, 2015, between the Registrant and certain holders of the capital stock of the Registrant named therein.</u></a>	8-K	001-34756	4.1	August 19, 2015	
4.12	<a href="#"><u>Waiver to Fifth Amended and Restated Investors' Rights Agreement, dated as of May 18, 2016, between the Registrant and certain holders of the capital stock of the Registrant named therein.</u></a>	8-K	001-34756	4.1	May 24, 2016	
4.13	<a href="#"><u>Waiver to Fifth Amended and Restated Investors' Rights Agreement, dated as of March 15, 2017, between the Registrant and certain holders of the capital stock of the Registrant named therein.</u></a>	8-K	001-34756	4.1	March 17, 2017	
4.14	<a href="#"><u>Indenture, dated as of May 22, 2013, by and between the Registrant and U.S. Bank National Association.</u></a>	8-K	001-34756	4.1	May 22, 2013	
4.15	<a href="#"><u>First Supplemental Indenture, dated as of May 22, 2013, by and between the Registrant and U.S. Bank National Association.</u></a>	8-K	001-34756	4.2	May 22, 2013	
4.16	<a href="#"><u>Form of 1.50% Convertible Senior Note Due June 1, 2018 (included in Exhibit 4.15).</u></a>	8-K	001-34756	4.2	May 22, 2013	

Exhibit Number	Exhibit Description	Incorporated by Reference				Filed Herewith
		Form	File No.	Exhibit	Filing Date	
4.17	<a href="#"><u>Second Supplemental Indenture, dated as of March 5, 2014, by and between the Registrant and U.S. Bank National Association.</u></a>	8-K	001-34756	4.2	March 5, 2014	
4.18	<a href="#"><u>Form of 0.25% Convertible Senior Note Due March 1, 2019 (included in Exhibit 4.17).</u></a>	8-K	001-34756	4.2	March 5, 2014	
4.19	<a href="#"><u>Third Supplemental Indenture, dated as of March 5, 2014, by and between the Registrant and U.S. Bank National Association.</u></a>	8-K	001-34756	4.4	March 5, 2014	
4.20	<a href="#"><u>Form of 1.25% Convertible Senior Note Due March 1, 2021 (included in Exhibit 4.19).</u></a>	8-K	001-34756	4.4	March 5, 2014	
4.21	<a href="#"><u>Fourth Supplemental Indenture, dated as of March 22, 2017, by and between the Registrant and U.S. Bank National Association.</u></a>	8-K	001-34756	4.2	March 22, 2017	
4.22	<a href="#"><u>Form of 2.375% Convertible Senior Note Due March 15, 2022 (included in Exhibit 4.21).</u></a>	8-K	001-34756	4.2	March 22, 2017	
4.23	<a href="#"><u>Indenture, dated as of August 18, 2017, by and among the Registrant, SolarCity, and U.S. Bank National Association, as trustee.</u></a>	8-K	001-34756	4.1	August 23, 2017	
4.24	<a href="#"><u>Form of 5.30% Senior Note due August 15, 2025.</u></a>	8-K	001-34756	4.2	August 23, 2017	
4.25	<a href="#"><u>Indenture, dated as of October 21, 2013, by and between SolarCity and Wells Fargo Bank National Association, including the form of convertible senior notes contained therein.</u></a>	8-K(1)	001-35758	4.1	October 21, 2013	
4.26	<a href="#"><u>First Supplemental Indenture, dated as of November 21, 2016, between SolarCity and Wells Fargo Bank, National Association, as trustee to the Indenture, dated as of October 21, 2013, between SolarCity and Wells Fargo Bank, National Association, as trustee.</u></a>	8-K	001-34756	4.1	November 21, 2016	
4.27	<a href="#"><u>Indenture, dated as of September 30, 2014, between SolarCity and Wells Fargo Bank, National Association</u></a>	8-K(1)	001-35758	4.1	October 6, 2014	



Exhibit Number	Exhibit Description	Incorporated by Reference				Filed Herewith
		Form	File No.	Exhibit	Filing Date	
4.28	<a href="#"><u>First Supplemental Indenture, dated as of November 21, 2016, between SolarCity and Wells Fargo Bank, National Association, as trustee to the Indenture, dated as of September 30, 2014, between SolarCity and Wells Fargo Bank, National Association, as trustee.</u></a>	8-K	001-34756	4.2	November 21, 2016	
4.29	<a href="#"><u>Indenture, dated as of December 7, 2015, between SolarCity and Wells Fargo Bank, National Association</u></a>	8-K(1)	001-35758	4.1	December 7, 2015	
4.30	<a href="#"><u>First Supplemental Indenture, dated as of November 21, 2016, between SolarCity and Wells Fargo Bank, National Association, as trustee to the Indenture, dated as of December 7, 2015, between SolarCity and Wells Fargo Bank, National Association, as trustee.</u></a>	8-K	001-34756	4.3	November 21, 2016	
4.31	<a href="#"><u>Indenture, dated as of October 15, 2014, between SolarCity and U.S. Bank National Association, as trustee.</u></a>	S-3ASR(1)	333-199321	4.1	October 15, 2014	
4.32	<a href="#"><u>Third Supplemental Indenture, dated as of October 15, 2014, by and between SolarCity and the Trustee, related to SolarCity's 3.00% Solar Bonds, Series 2014/3-3.</u></a>	8-K(1)	001-35758	4.4	October 15, 2014	
4.33	<a href="#"><u>Fourth Supplemental Indenture, dated as of October 15, 2014, by and between SolarCity and the Trustee, related to SolarCity's 4.00% Solar Bonds, Series 2014/4-7</u></a>	8-K(1)	001-35758	4.5	October 15, 2014	
4.34	<a href="#"><u>Seventh Supplemental Indenture, dated as of January 29, 2015, by and between SolarCity and the Trustee, related to SolarCity's 3.00% Solar Bonds, Series 2015/3-3.</u></a>	8-K(1)	001-35758	4.4	January 29, 2015	
4.35	<a href="#"><u>Eighth Supplemental Indenture, dated as of January 29, 2015, by and between SolarCity and the Trustee, related to SolarCity's 4.00% Solar Bonds, Series 2015/4-7.</u></a>	8-K(1)	001-35758	4.5	January 29, 2015	
4.36	<a href="#"><u>Ninth Supplemental Indenture, dated as of March 9, 2015, by and between SolarCity and the Trustee, related to SolarCity's 4.00% Solar Bonds, Series 2015/5-5.</u></a>	8-K(1)	001-35758	4.2	March 9, 2015	

Exhibit Number	Exhibit Description	Incorporated by Reference				Filed Herewith
		Form	File No.	Exhibit	Filing Date	
4.37	<a href="#"><u>Tenth Supplemental Indenture, dated as of March 9, 2015, by and between SolarCity and the Trustee, related to SolarCity's 5.00% Solar Bonds, Series 2015/6-10.</u></a>	8-K(1)	001-35758	4.3	March 9, 2015	
4.38	<a href="#"><u>Eleventh Supplemental Indenture, dated as of March 9, 2015, by and between SolarCity and the Trustee, related to SolarCity's 5.75% Solar Bonds, Series 2015/7-15.</u></a>	8-K(1)	001-35758	4.4	March 9, 2015	
4.39	<a href="#"><u>Thirteenth Supplemental Indenture, dated as of March 19, 2015, by and between SolarCity and the Trustee, related to SolarCity's 2.60% Solar Bonds, Series 2015/C2-3.</u></a>	8-K(1)	001-35758	4.3	March 19, 2015	
4.40	<a href="#"><u>Fourteenth Supplemental Indenture, dated as of March 19, 2015, by and between SolarCity and the Trustee, related to SolarCity's 3.60% Solar Bonds, Series 2015/C3-5.</u></a>	8-K(1)	001-35758	4.4	March 19, 2015	
4.41	<a href="#"><u>Fifteenth Supplemental Indenture, dated as of March 19, 2015, by and between SolarCity and the Trustee, related to SolarCity's 4.70% Solar Bonds, Series 2015/C4-10.</u></a>	8-K(1)	001-35758	4.5	March 19, 2015	
4.42	<a href="#"><u>Sixteenth Supplemental Indenture, dated as of March 19, 2015, by and between SolarCity and the Trustee, related to SolarCity's 5.45% Solar Bonds, Series 2015/C5-15.</u></a>	8-K(1)	001-35758	4.6	March 19, 2015	
4.43	<a href="#"><u>Eighteenth Supplemental Indenture, dated as of March 26, 2015, by and between SolarCity and the Trustee, related to SolarCity's 2.65% Solar Bonds, Series 2015/C7-3.</u></a>	8-K(1)	001-35758	4.3	March 26, 2015	
4.44	<a href="#"><u>Nineteenth Supplemental Indenture, dated as of March 26, 2015, by and between SolarCity and the Trustee, related to SolarCity's 3.60% Solar Bonds, Series 2015/C8-5.</u></a>	8-K(1)	001-35758	4.4	March 26, 2015	
4.45	<a href="#"><u>Twentieth Supplemental Indenture, dated as of March 26, 2015, by and between SolarCity and the Trustee, related to SolarCity's 4.70% Solar Bonds, Series 2015/C9-10.</u></a>	8-K(1)	001-35758	4.5	March 26, 2015	

Exhibit Number	Exhibit Description	Incorporated by Reference				Filed Herewith
		Form	File No.	Exhibit	Filing Date	
4.46	<a href="#"><u>Twenty-First Supplemental Indenture, dated as of March 26, 2015, by and between SolarCity and the Trustee, related to SolarCity's 5.45% Solar Bonds, Series 2015/C10-15.</u></a>	8-K(1)	001-35758	4.6	March 26, 2015	
4.47	<a href="#"><u>Twenty-Fourth Supplemental Indenture, dated as of April 2, 2015, by and between SolarCity and the Trustee, related to SolarCity's 2.65% Solar Bonds, Series 2015/C12-3.</u></a>	8-K(1)	001-35758	4.3	April 2, 2015	
4.48	<a href="#"><u>Twenty-Fifth Supplemental Indenture, dated as of April 2, 2015, by and between SolarCity and the Trustee, related to SolarCity's 3.60% Solar Bonds, Series 2015/C13-5.</u></a>	8-K(1)	001-35758	4.4	April 2, 2015	
4.49	<a href="#"><u>Twenty-Sixth Supplemental Indenture, dated as of April 2, 2015, by and between SolarCity and the Trustee, related to SolarCity's 4.70% Solar Bonds, Series 2015/C14-10.</u></a>	8-K(1)	001-35758	4.5	April 2, 2015	
4.50	<a href="#"><u>Twenty-Eighth Supplemental Indenture, dated as of April 9, 2015, by and between SolarCity and the Trustee, related to SolarCity's 2.65% Solar Bonds, Series 2015/C17-3.</u></a>	8-K(1)	001-35758	4.3	April 9, 2015	
4.51	<a href="#"><u>Twenty-Ninth Supplemental Indenture, dated as of April 9, 2015, by and between SolarCity and the Trustee, related to SolarCity's 3.60% Solar Bonds, Series 2015/C18-5.</u></a>	8-K(1)	001-35758	4.4	April 9, 2015	
4.52	<a href="#"><u>Thirtieth Supplemental Indenture, dated as of April 9, 2015, by and between SolarCity and the Trustee, related to SolarCity's 4.70% Solar Bonds, Series 2015/C19-10.</u></a>	8-K(1)	001-35758	4.5	April 9, 2015	
4.53	<a href="#"><u>Thirty-First Supplemental Indenture, dated as of April 9, 2015, by and between SolarCity and the Trustee, related to SolarCity's 5.45% Solar Bonds, Series 2015/C20-15.</u></a>	8-K(1)	001-35758	4.6	April 9, 2015	
4.54	<a href="#"><u>Thirty-Third Supplemental Indenture, dated as of April 14, 2015, by and between SolarCity and the Trustee, related to SolarCity's 2.65% Solar Bonds, Series 2015/C22-3.</u></a>	8-K(1)	001-35758	4.3	April 14, 2015	

Exhibit Number	Exhibit Description	Incorporated by Reference				Filed Herewith
		Form	File No.	Exhibit	Filing Date	
4.55	<a href="#"><u>Thirty-Fourth Supplemental Indenture, dated as of April 14, 2015, by and between SolarCity and the Trustee, related to SolarCity's 3.60% Solar Bonds, Series 2015/C23-5.</u></a>	8-K(1)	001-35758	4.4	April 14, 2015	
4.56	<a href="#"><u>Thirty-Fifth Supplemental Indenture, dated as of April 14, 2015, by and between SolarCity and the Trustee, related to SolarCity's 4.70% Solar Bonds, Series 2015/C24-10.</u></a>	8-K(1)	001-35758	4.5	April 14, 2015	
4.57	<a href="#"><u>Thirty-Sixth Supplemental Indenture, dated as of April 14, 2015, by and between SolarCity and the Trustee, related to SolarCity's 5.45% Solar Bonds, Series 2015/C25-15.</u></a>	8-K(1)	001-35758	4.6	April 14, 2015	
4.58	<a href="#"><u>Thirty-Eighth Supplemental Indenture, dated as of April 21, 2015, by and between SolarCity and the Trustee, related to SolarCity's 4.70% Solar Bonds, Series 2015/C27-10.</u></a>	8-K(1)	001-35758	4.3	April 21, 2015	
4.59	<a href="#"><u>Thirty-Ninth Supplemental Indenture, dated as of April 21, 2015, by and between SolarCity and the Trustee, related to SolarCity's 5.45% Solar Bonds, Series 2015/C28-15.</u></a>	8-K(1)	001-35758	4.4	April 21, 2015	
4.60	<a href="#"><u>Forty-First Supplemental Indenture, dated as of April 27, 2015, by and between SolarCity and the Trustee, related to SolarCity's 2.65% Solar Bonds, Series 2015/C30-3.</u></a>	8-K(1)	001-35758	4.3	April 27, 2015	
4.61	<a href="#"><u>Forty-Second Supplemental Indenture, dated as of April 27, 2015, by and between SolarCity and the Trustee, related to SolarCity's 3.60% Solar Bonds, Series 2015/C31-5.</u></a>	8-K(1)	001-35758	4.4	April 27, 2015	
4.62	<a href="#"><u>Forty-Third Supplemental Indenture, dated as of April 27, 2015, by and between SolarCity and the Trustee, related to SolarCity's 4.70% Solar Bonds, Series 2015/C32-10.</u></a>	8-K(1)	001-35758	4.5	April 27, 2015	
4.63	<a href="#"><u>Forty-Fourth Supplemental Indenture, dated as of April 27, 2015, by and between SolarCity and the Trustee, related to SolarCity's 5.45% Solar Bonds, Series 2015/C33-15.</u></a>	8-K(1)	001-35758	4.6	April 27, 2015	

Exhibit Number	Exhibit Description	Incorporated by Reference				Filed Herewith
		Form	File No.	Exhibit	Filing Date	
4.64	<a href="#"><u>Forty-Sixth Supplemental Indenture, dated as of May 1, 2015, by and between SolarCity and the Trustee, related to SolarCity's 3.00% Solar Bonds, Series 2015/10-3.</u></a>	8-K(1)	001-35758	4.3	May 1, 2015	
4.65	<a href="#"><u>Forty-Seventh Supplemental Indenture, dated as of May 1, 2015, by and between SolarCity and the Trustee, related to SolarCity's 4.00% Solar Bonds, Series 2015/11-5.</u></a>	8-K(1)	001-35758	4.4	May 1, 2015	
4.66	<a href="#"><u>Forty-Eighth Supplemental Indenture, dated as of May 1, 2015, by and between SolarCity and the Trustee, related to SolarCity's 5.00% Solar Bonds, Series 2015/12-10.</u></a>	8-K(1)	001-35758	4.5	May 1, 2015	
4.67	<a href="#"><u>Forty-Ninth Supplemental Indenture, dated as of May 1, 2015, by and between SolarCity and the Trustee, related to SolarCity's 5.75% Solar Bonds, Series 2015/13-15.</u></a>	8-K(1)	001-35758	4.6	May 1, 2015	
4.68	<a href="#"><u>Fiftieth Supplemental Indenture, dated as of May 11, 2015, by and between SolarCity and the Trustee, related to SolarCity's 2.65% Solar Bonds, Series 2015/C34-3.</u></a>	8-K(1)	001-35758	4.2	May 11, 2015	
4.69	<a href="#"><u>Fifty-First Supplemental Indenture, dated as of May 11, 2015, by and between SolarCity and the Trustee, related to SolarCity's 3.60% Solar Bonds, Series 2015/C35-5.</u></a>	8-K(1)	001-35758	4.3	May 11, 2015	
4.70	<a href="#"><u>Fifty-Second Supplemental Indenture, dated as of May 11, 2015, by and between SolarCity and the Trustee, related to SolarCity's 4.70% Solar Bonds, Series 2015/C36-10.</u></a>	8-K(1)	001-35758	4.4	May 11, 2015	
4.71	<a href="#"><u>Fifty-Third Supplemental Indenture, dated as of May 11, 2015, by and between SolarCity and the Trustee, related to SolarCity's 5.45% Solar Bonds, Series 2015/C37-15.</u></a>	8-K(1)	001-35758	4.5	May 11, 2015	
4.72	<a href="#"><u>Fifty-Fourth Supplemental Indenture, dated as of May 14, 2015, by and between SolarCity and the Trustee, related to SolarCity's 2.50% Solar Bonds, Series 2015/14-2.</u></a>	8-K(1)	001-35758	4.2	May 14, 2015	

Exhibit Number	Exhibit Description	Incorporated by Reference				Filed Herewith
		Form	File No.	Exhibit	Filing Date	
4.73	<a href="#"><u>Fifty-Fifth Supplemental Indenture, dated as of May 18, 2015, by and between SolarCity and the Trustee, related to SolarCity's 2.65% Solar Bonds, Series 2015/C38-3.</u></a>	8-K(1)	001-35758	4.2	May 18, 2015	
4.74	<a href="#"><u>Fifty-Sixth Supplemental Indenture, dated as of May 18, 2015, by and between SolarCity and the Trustee, related to SolarCity's 3.60% Solar Bonds, Series 2015/C39-5.</u></a>	8-K(1)	001-35758	4.3	May 18, 2015	
4.75	<a href="#"><u>Fifty-Seventh Supplemental Indenture, dated as of May 18, 2015, by and between SolarCity and the Trustee, related to SolarCity's 4.70% Solar Bonds, Series 2015/C40-10.</u></a>	8-K(1)	001-35758	4.4	May 18, 2015	
4.76	<a href="#"><u>Fifty-Eighth Supplemental Indenture, dated as of May 18, 2015, by and between SolarCity and the Trustee, related to SolarCity's 5.45% Solar Bonds, Series 2015/C41-15.</u></a>	8-K(1)	001-35758	4.5	May 18, 2015	
4.77	<a href="#"><u>Fifty-Ninth Supplemental Indenture, dated as of May 26, 2015, by and between SolarCity and the Trustee, related to SolarCity's 2.65% Solar Bonds, Series 2015/C42-3.</u></a>	8-K(1)	001-35758	4.2	May 26, 2015	
4.78	<a href="#"><u>Sixtieth Supplemental Indenture, dated as of May 26, 2015, by and between SolarCity and the Trustee, related to SolarCity's 3.60% Solar Bonds, Series 2015/C43-5.</u></a>	8-K(1)	001-35758	4.3	May 26, 2015	
4.79	<a href="#"><u>Sixty-First Supplemental Indenture, dated as of May 26, 2015, by and between SolarCity and the Trustee, related to SolarCity's 4.70% Solar Bonds, Series 2015/C44-10.</u></a>	8-K(1)	001-35758	4.4	May 26, 2015	
4.80	<a href="#"><u>Sixty-Second Supplemental Indenture, dated as of May 26, 2015, by and between SolarCity and the Trustee, related to SolarCity's 5.45% Solar Bonds, Series 2015/C45-15.</u></a>	8-K(1)	001-35758	4.5	May 26, 2015	
4.81	<a href="#"><u>Sixty-Fourth Supplemental Indenture, dated as of June 8, 2015, by and between SolarCity and the Trustee, related to SolarCity's 2.65% Solar Bonds, Series 2015/C46-3.</u></a>	8-K(1)	001-35758	4.2	June 10, 2015	

Exhibit Number	Exhibit Description	Incorporated by Reference				Filed Herewith
		Form	File No.	Exhibit	Filing Date	
4.82	<a href="#"><u>Sixty-Fifth Supplemental Indenture, dated as of June 8, 2015, by and between SolarCity and the Trustee, related to SolarCity's 3.60% Solar Bonds, Series 2015/C47-5.</u></a>	8-K(1)	001-35758	4.3	June 10, 2015	
4.83	<a href="#"><u>Sixty-Sixth Supplemental Indenture, dated as of June 8, 2015, by and between SolarCity and the Trustee, related to SolarCity's 4.70% Solar Bonds, Series 2015/C48-10.</u></a>	8-K(1)	001-35758	4.4	June 10, 2015	
4.84	<a href="#"><u>Sixty-Seventh Supplemental Indenture, dated as of June 8, 2015, by and between SolarCity and the Trustee, related to SolarCity's 5.45% Solar Bonds, Series 2015/C49-15.</u></a>	8-K(1)	001-35758	4.5	June 10, 2015	
4.85	<a href="#"><u>Sixty-Eighth Supplemental Indenture, dated as of June 16, 2015, by and between SolarCity and the Trustee, related to SolarCity's 2.65% Solar Bonds, Series 2015/C50-3.</u></a>	8-K(1)	001-35758	4.2	June 16, 2015	
4.86	<a href="#"><u>Sixty-Ninth Supplemental Indenture, dated as of June 16, 2015, by and between SolarCity and the Trustee, related to SolarCity's 3.60% Solar Bonds, Series 2015/C51-5.</u></a>	8-K(1)	001-35758	4.3	June 16, 2015	
4.87	<a href="#"><u>Seventieth Supplemental Indenture, dated as of June 16, 2015, by and between SolarCity and the Trustee, related to SolarCity's 4.70% Solar Bonds, Series 2015/C52-10.</u></a>	8-K(1)	001-35758	4.4	June 16, 2015	
4.88	<a href="#"><u>Seventy-First Supplemental Indenture, dated as of June 16, 2015, by and between SolarCity and the Trustee, related to SolarCity's 5.45% Solar Bonds, Series 2015/C53-15.</u></a>	8-K(1)	001-35758	4.5	June 16, 2015	
4.89	<a href="#"><u>Seventy-Second Supplemental Indenture, dated as of June 22, 2015, by and between SolarCity and the Trustee, related to SolarCity's 2.65% Solar Bonds, Series 2015/C54-3.</u></a>	8-K(1)	001-35758	4.2	June 23, 2015	
4.90	<a href="#"><u>Seventy-Third Supplemental Indenture, dated as of June 22, 2015, by and between SolarCity and the Trustee, related to SolarCity's 3.60% Solar Bonds, Series 2015/C55-5.</u></a>	8-K(1)	001-35758	4.3	June 23, 2015	

Exhibit Number	Exhibit Description	Incorporated by Reference				Filed Herewith
		Form	File No.	Exhibit	Filing Date	
4.91	<a href="#"><u>Seventy-Fourth Supplemental Indenture, dated as of June 22, 2015, by and between SolarCity and the Trustee, related to SolarCity's 4.70% Solar Bonds, Series 2015/C56-10.</u></a>	8-K(1)	001-35758	4.4	June 23, 2015	
4.92	<a href="#"><u>Seventy-Fifth Supplemental Indenture, dated as of June 22, 2015, by and between SolarCity and the Trustee, related to SolarCity's 5.45% Solar Bonds, Series 2015/C57-15.</u></a>	8-K(1)	001-35758	4.5	June 23, 2015	
4.93	<a href="#"><u>Seventy-Eighth Supplemental Indenture, dated as of June 29, 2015, by and between SolarCity and the Trustee, related to SolarCity's 2.65% Solar Bonds, Series 2015/C59-3.</u></a>	8-K(1)	001-35758	4.3	June 29, 2015	
4.94	<a href="#"><u>Seventy-Ninth Supplemental Indenture, dated as of June 29, 2015, by and between SolarCity and the Trustee, related to SolarCity's 3.60% Solar Bonds, Series 2015/C60-5.</u></a>	8-K(1)	001-35758	4.4	June 29, 2015	
4.95	<a href="#"><u>Eightieth Supplemental Indenture, dated as of June 29, 2015, by and between SolarCity and the Trustee, related to SolarCity's 4.70% Solar Bonds, Series 2015/C61-10.</u></a>	8-K(1)	001-35758	4.5	June 29, 2015	
4.96	<a href="#"><u>Eighty-First Supplemental Indenture, dated as of June 29, 2015, by and between SolarCity and the Trustee, related to SolarCity's 5.45% Solar Bonds, Series 2015/C62-15.</u></a>	8-K(1)	001-35758	4.6	June 29, 2015	
4.97	<a href="#"><u>Eighty-Third Supplemental Indenture, dated as of July 14, 2015, by and between SolarCity and the Trustee, related to SolarCity's 2.65% Solar Bonds, Series 2015/C64-3.</u></a>	8-K(1)	001-35758	4.3	July 14, 2015	
4.98	<a href="#"><u>Eighty-Fourth Supplemental Indenture, dated as of July 14, 2015, by and between SolarCity and the Trustee, related to SolarCity's 3.60% Solar Bonds, Series 2015/C65-5.</u></a>	8-K(1)	001-35758	4.4	July 14, 2015	
4.99	<a href="#"><u>Eighty-Fifth Supplemental Indenture, dated as of July 14, 2015, by and between SolarCity and the Trustee, related to SolarCity's 4.70% Solar Bonds, Series 2015/C66-10.</u></a>	8-K(1)	001-35758	4.5	July 14, 2015	



Exhibit Number	Exhibit Description	Incorporated by Reference				Filed Herewith
		Form	File No.	Exhibit	Filing Date	
4.100	<a href="#"><u>Eighty-Sixth Supplemental Indenture, dated as of July 14, 2015, by and between SolarCity and the Trustee, related to SolarCity's 5.45% Solar Bonds, Series 2015/C67-15.</u></a>	8-K(1)	001-35758	4.6	July 14, 2015	
4.101	<a href="#"><u>Eighty-Eighth Supplemental Indenture, dated as of July 20, 2015, by and between SolarCity and the Trustee, related to SolarCity's 2.65% Solar Bonds, Series 2015/C69-3.</u></a>	8-K(1)	001-35758	4.3	July 21, 2015	
4.102	<a href="#"><u>Eighty-Ninth Supplemental Indenture, dated as of July 20, 2015, by and between SolarCity and the Trustee, related to SolarCity's 3.60% Solar Bonds, Series 2015/C70-5.</u></a>	8-K(1)	001-35758	4.4	July 21, 2015	
4.103	<a href="#"><u>Ninetieth Supplemental Indenture, dated as of July 20, 2015, by and between SolarCity and the Trustee, related to SolarCity's 4.70% Solar Bonds, Series 2015/C71-10.</u></a>	8-K(1)	001-35758	4.5	July 21, 2015	
4.104	<a href="#"><u>Ninety-First Supplemental Indenture, dated as of July 20, 2015, by and between SolarCity and the Trustee, related to SolarCity's 5.45% Solar Bonds, Series 2015/C72-15.</u></a>	8-K(1)	001-35758	4.6	July 21, 2015	
4.105	<a href="#"><u>Ninety-Third Supplemental Indenture, dated as of July 31, 2015, by and between SolarCity and the Trustee, related to SolarCity's 3.00% Solar Bonds, Series 2015/18-3.</u></a>	8-K(1)	001-35758	4.3	July 31, 2015	
4.106	<a href="#"><u>Ninety-Fourth Supplemental Indenture, dated as of July 31, 2015, by and between SolarCity and the Trustee, related to SolarCity's 4.00% Solar Bonds, Series 2015/19-5.</u></a>	8-K(1)	001-35758	4.4	July 31, 2015	
4.107	<a href="#"><u>Ninety-Fifth Supplemental Indenture, dated as of July 31, 2015, by and between SolarCity and the Trustee, related to SolarCity's 5.00% Solar Bonds, Series 2015/20-10.</u></a>	8-K(1)	001-35758	4.5	July 31, 2015	
4.108	<a href="#"><u>Ninety-Sixth Supplemental Indenture, dated as of July 31, 2015, by and between SolarCity and the Trustee, related to SolarCity's 5.75% Solar Bonds, Series 2015/21-15.</u></a>	8-K(1)	001-35758	4.6	July 31, 2015	

Exhibit Number	Exhibit Description	Incorporated by Reference				Filed Herewith
		Form	File No.	Exhibit	Filing Date	
4.109	<a href="#"><u>Ninety-Eighth Supplemental Indenture, dated as of August 3, 2015, by and between SolarCity and the Trustee, related to SolarCity's 2.65% Solar Bonds, Series 2015/C74-3.</u></a>	8-K(1)	001-35758	4.3	August 3, 2015	
4.110	<a href="#"><u>Ninety-Ninth Supplemental Indenture, dated as of August 3, 2015, by and between SolarCity and the Trustee, related to SolarCity's 3.60% Solar Bonds, Series 2015/C75-5.</u></a>	8-K(1)	001-35758	4.4	August 3, 2015	
4.111	<a href="#"><u>One Hundredth Supplemental Indenture, dated as of August 3, 2015, by and between SolarCity and the Trustee, related to SolarCity's 4.70% Solar Bonds, Series 2015/C76-10.</u></a>	8-K(1)	001-35758	4.5	August 3, 2015	
4.112	<a href="#"><u>One Hundred-and-First Supplemental Indenture, dated as of August 3, 2015, by and between SolarCity and the Trustee, related to SolarCity's 5.45% Solar Bonds, Series 2015/C77-15.</u></a>	8-K(1)	001-35758	4.6	August 3, 2015	
4.113	<a href="#"><u>One Hundred-and-Third Supplemental Indenture, dated as of August 10, 2015, by and between SolarCity and the Trustee, related to SolarCity's 2.65% Solar Bonds, Series 2015/C79-3.</u></a>	8-K(1)	001-35758	4.3	August 10, 2015	
4.114	<a href="#"><u>One Hundred-and-Fourth Supplemental Indenture, dated as of August 10, 2015, by and between SolarCity and the Trustee, related to SolarCity's 3.60% Solar Bonds, Series 2015/C80-5.</u></a>	8-K(1)	001-35758	4.4	August 10, 2015	
4.115	<a href="#"><u>One Hundred-and-Fifth Supplemental Indenture, dated as of August 10, 2015, by and between SolarCity and the Trustee, related to SolarCity's 4.70% Solar Bonds, Series 2015/C81-10.</u></a>	8-K(1)	001-35758	4.5	August 10, 2015	
4.116	<a href="#"><u>One Hundred-and-Sixth Supplemental Indenture, dated as of August 10, 2015, by and between SolarCity and the Trustee, related to SolarCity's 5.45% Solar Bonds, Series 2015/C82-15.</u></a>	8-K(1)	001-35758	4.6	August 10, 2015	

Exhibit Number	Exhibit Description	Incorporated by Reference				Filed Herewith
		Form	File No.	Exhibit	Filing Date	
4.117	<a href="#"><u>One Hundred-and-Eighth Supplemental Indenture, dated as of August 17, 2015, by and between SolarCity and the Trustee, related to SolarCity's 2.65% Solar Bonds, Series 2015/C84-3.</u></a>	8-K(1)	001-35758	4.3	August 17, 2015	
4.118	<a href="#"><u>One Hundred-and-Ninth Supplemental Indenture, dated as of August 17, 2015, by and between SolarCity and the Trustee, related to SolarCity's 3.60% Solar Bonds, Series 2015/C85-5.</u></a>	8-K(1)	001-35758	4.4	August 17, 2015	
4.119	<a href="#"><u>One Hundred-and-Tenth Supplemental Indenture, dated as of August 17, 2015, by and between SolarCity and the Trustee, related to SolarCity's 4.70% Solar Bonds, Series 2015/C86-10.</u></a>	8-K(1)	001-35758	4.5	August 17, 2015	
4.120	<a href="#"><u>One Hundred-and-Eleventh Supplemental Indenture, dated as of August 17, 2015, by and between SolarCity and the Trustee, related to SolarCity's 5.45% Solar Bonds, Series 2015/C87-15.</u></a>	8-K(1)	001-35758	4.6	August 17, 2015	
4.121	<a href="#"><u>One Hundred-and-Thirteenth Supplemental Indenture, dated as of August 24, 2015, by and between SolarCity and the Trustee, related to SolarCity's 2.65% Solar Bonds, Series 2015/C89-3.</u></a>	8-K(1)	001-35758	4.3	August 24, 2015	
4.122	<a href="#"><u>One Hundred-and-Fourteenth Supplemental Indenture, dated as of August 24, 2015, by and between SolarCity and the Trustee, related to SolarCity's 3.60% Solar Bonds, Series 2015/C90-5.</u></a>	8-K(1)	001-35758	4.4	August 24, 2015	
4.123	<a href="#"><u>One Hundred-and-Fifteenth Supplemental Indenture, dated as of August 24, 2015, by and between SolarCity and the Trustee, related to SolarCity's 4.70% Solar Bonds, Series 2015/C91-10.</u></a>	8-K(1)	001-35758	4.5	August 24, 2015	
4.124	<a href="#"><u>One Hundred-and-Sixteenth Supplemental Indenture, dated as of August 24, 2015, by and between SolarCity and the Trustee, related to SolarCity's 5.45% Solar Bonds, Series 2015/C92-15.</u></a>	8-K(1)	001-35758	4.6	August 24, 2015	

Exhibit Number	Exhibit Description	Incorporated by Reference				Filed Herewith
		Form	File No.	Exhibit	Filing Date	
4.125	<a href="#"><u>One Hundred-and-Eighteenth Supplemental Indenture, dated as of August 31, 2015, by and between SolarCity and the Trustee, related to SolarCity's 2.65% Solar Bonds, Series 2015/C94-3.</u></a>	8-K(1)	001-35758	4.3	August 31, 2015	
4.126	<a href="#"><u>One Hundred-and-Nineteenth Supplemental Indenture, dated as of August 31, 2015, by and between SolarCity and the Trustee, related to SolarCity's 3.60% Solar Bonds, Series 2015/C95-5.</u></a>	8-K(1)	001-35758	4.4	August 31, 2015	
4.127	<a href="#"><u>One Hundred-and-Twentieth Supplemental Indenture, dated as of August 31, 2015, by and between SolarCity and the Trustee, related to SolarCity's 4.70% Solar Bonds, Series 2015/C96-10.</u></a>	8-K(1)	001-35758	4.5	August 31, 2015	
4.128	<a href="#"><u>One Hundred-and-Twenty-First Supplemental Indenture, dated as of August 31, 2015, by and between SolarCity and the Trustee, related to SolarCity's 5.45% Solar Bonds, Series 2015/C97-15.</u></a>	8-K(1)	001-35758	4.6	August 31, 2015	
4.129	<a href="#"><u>One Hundred-and-Twenty-Second Supplemental Indenture, dated as of September 11, 2015, by and between SolarCity and the Trustee, related to SolarCity's Solar Bonds, Series 2015/R1.</u></a>	8-K(1)	001-35758	4.2	September 11, 2015	
4.130	<a href="#"><u>One Hundred-and-Twenty-Third Supplemental Indenture, dated as of September 11, 2015, by and between SolarCity and the Trustee, related to SolarCity's Solar Bonds, Series 2015/R2.</u></a>	8-K(1)	001-35758	4.3	September 11, 2015	
4.131	<a href="#"><u>One Hundred-and-Twenty-Fourth Supplemental Indenture, dated as of September 11, 2015, by and between SolarCity and the Trustee, related to SolarCity's Solar Bonds, Series 2015/R3.</u></a>	8-K(1)	001-35758	4.4	September 11, 2015	
4.132	<a href="#"><u>One Hundred-and-Twenty-Sixth Supplemental Indenture, dated as of September 14, 2015, by and between SolarCity and the Trustee, related to SolarCity's 2.65% Solar Bonds, Series 2015/C99-3.</u></a>	8-K(1)	001-35758	4.3	September 15, 2015	

Exhibit Number	Exhibit Description	Incorporated by Reference				Filed Herewith
		Form	File No.	Exhibit	Filing Date	
4.133	<a href="#"><u>One Hundred-and-Twenty-Seventh Supplemental Indenture, dated as of September 14, 2015, by and between SolarCity and the Trustee, related to SolarCity's 3.60% Solar Bonds, Series 2015/C100-5.</u></a>	8-K(1)	001-35758	4.4	September 15, 2015	
4.134	<a href="#"><u>One Hundred-and-Twenty-Eighth Supplemental Indenture, dated as of September 14, 2015, by and between SolarCity and the Trustee, related to SolarCity's 4.70% Solar Bonds, Series 2015/C101-10.</u></a>	8-K(1)	001-35758	4.5	September 15, 2015	
4.135	<a href="#"><u>One Hundred-and-Twenty-Ninth Supplemental Indenture, dated as of September 14, 2015, by and between SolarCity and the Trustee, related to SolarCity's 5.45% Solar Bonds, Series 2015/C102-15.</u></a>	8-K(1)	001-35758	4.6	September 15, 2015	
4.136	<a href="#"><u>One Hundred-and-Thirty-First Supplemental Indenture, dated as of September 28, 2015, by and between SolarCity and the Trustee, related to SolarCity's 2.65% Solar Bonds, Series 2015/C104-3.</u></a>	8-K(1)	001-35758	4.3	September 29, 2015	
4.137	<a href="#"><u>One Hundred-and-Thirty-Second Supplemental Indenture, dated as of September 28, 2015, by and between SolarCity and the Trustee, related to SolarCity's 3.60% Solar Bonds, Series 2015/C105-5.</u></a>	8-K(1)	001-35758	4.4	September 29, 2015	
4.138	<a href="#"><u>One Hundred-and-Thirty-Third Supplemental Indenture, dated as of September 28, 2015, by and between SolarCity and the Trustee, related to SolarCity's 4.70% Solar Bonds, Series 2015/C106-10.</u></a>	8-K(1)	001-35758	4.5	September 29, 2015	
4.139	<a href="#"><u>One Hundred-and-Thirty-Fourth Supplemental Indenture, dated as of September 28, 2015, by and between SolarCity and the Trustee, related to SolarCity's 5.45% Solar Bonds, Series 2015/C107-15.</u></a>	8-K(1)	001-35758	4.6	September 29, 2015	
4.140	<a href="#"><u>One Hundred-and-Thirty-Sixth Supplemental Indenture, dated as of October 13, 2015, by and between SolarCity and the Trustee, related to SolarCity's 2.65% Solar Bonds, Series 2015/C109-3.</u></a>	8-K(1)	001-35758	4.3	October 13, 2015	

Exhibit Number	Exhibit Description	Incorporated by Reference				Filed Herewith
		Form	File No.	Exhibit	Filing Date	
4.141	<a href="#"><u>One Hundred-and-Thirty-Seventh Supplemental Indenture, dated as of October 13, 2015, by and between SolarCity and the Trustee, related to SolarCity's 3.60% Solar Bonds, Series 2015/C110-5.</u></a>	8-K(1)	001-35758	4.4	October 13, 2015	
4.142	<a href="#"><u>One Hundred-and-Thirty-Eighth Supplemental Indenture, dated as of October 13, 2015, by and between SolarCity and the Trustee, related to SolarCity's 4.70% Solar Bonds, Series 2015/C111-10.</u></a>	8-K(1)	001-35758	4.5	October 13, 2015	
4.143	<a href="#"><u>One Hundred-and-Thirty-Ninth Supplemental Indenture, dated as of October 13, 2015, by and between SolarCity and the Trustee, related to SolarCity's 5.45% Solar Bonds, Series 2015/C112-15.</u></a>	8-K(1)	001-35758	4.6	October 13, 2015	
4.144	<a href="#"><u>One Hundred-and-Forty-First Supplemental Indenture, dated as of October 30, 2015, by and between SolarCity and the Trustee, related to SolarCity's 3.00% Solar Bonds, Series 2015/23-3.</u></a>	8-K(1)	001-35758	4.3	October 30, 2015	
4.145	<a href="#"><u>One Hundred-and-Forty-Second Supplemental Indenture, dated as of October 30, 2015, by and between SolarCity and the Trustee, related to SolarCity's 4.00% Solar Bonds, Series 2015/24-5.</u></a>	8-K(1)	001-35758	4.4	October 30, 2015	
4.146	<a href="#"><u>One Hundred-and-Forty-Third Supplemental Indenture, dated as of October 30, 2015, by and between SolarCity and the Trustee, related to SolarCity's 5.00% Solar Bonds, Series 2015/25-10.</u></a>	8-K(1)	001-35758	4.5	October 30, 2015	
4.147	<a href="#"><u>One Hundred-and-Forty-Fourth Supplemental Indenture, dated as of October 30, 2015, by and between SolarCity and the Trustee, related to SolarCity's 5.75% Solar Bonds, Series 2015/26-15.</u></a>	8-K(1)	001-35758	4.6	October 30, 2015	
4.148	<a href="#"><u>One Hundred-and-Forty-Sixth Supplemental Indenture, dated as of November 4, 2015, by and between SolarCity and the Trustee, related to SolarCity's 2.65% Solar Bonds, Series 2015/C114-3.</u></a>	8-K(1)	001-35758	4.3	November 4, 2015	

Exhibit Number	Exhibit Description	Incorporated by Reference				Filed Herewith
		Form	File No.	Exhibit	Filing Date	
4.149	<a href="#"><u>One Hundred-and-Forty-Seventh Supplemental Indenture, dated as of November 4, 2015, by and between SolarCity and the Trustee, related to SolarCity's 3.60% Solar Bonds, Series 2015/C115-5.</u></a>	8-K(1)	001-35758	4.4	November 4, 2015	
4.150	<a href="#"><u>One Hundred-and-Forty-Eighth Supplemental Indenture, dated as of November 4, 2015, by and between SolarCity and the Trustee, related to SolarCity's 4.70% Solar Bonds, Series 2015/C116-10.</u></a>	8-K(1)	001-35758	4.5	November 4, 2015	
4.151	<a href="#"><u>One Hundred-and-Forty-Ninth Supplemental Indenture, dated as of November 4, 2015, by and between SolarCity and the Trustee, related to SolarCity's 5.45% Solar Bonds, Series 2015/C117-15.</u></a>	8-K(1)	001-35758	4.6	November 4, 2015	
4.152	<a href="#"><u>One Hundred-and-Fifty-First Supplemental Indenture, dated as of November 16, 2015, by and between SolarCity and the Trustee, related to SolarCity's 2.65% Solar Bonds, Series 2015/C119-3.</u></a>	8-K(1)	001-35758	4.3	November 17, 2015	
4.153	<a href="#"><u>One Hundred-and-Fifty-Second Supplemental Indenture, dated as of November 16, 2015, by and between SolarCity and the Trustee, related to SolarCity's 3.60% Solar Bonds, Series 2015/C120-5.</u></a>	8-K(1)	001-35758	4.4	November 17, 2015	
4.154	<a href="#"><u>One Hundred-and-Fifty-Third Supplemental Indenture, dated as of November 16, 2015, by and between SolarCity and the Trustee, related to SolarCity's 4.70% Solar Bonds, Series 2015/C121-10.</u></a>	8-K(1)	001-35758	4.5	November 17, 2015	
4.155	<a href="#"><u>One Hundred-and-Fifty-Fourth Supplemental Indenture, dated as of November 16, 2015, by and between SolarCity and the Trustee, related to SolarCity's 5.45% Solar Bonds, Series 2015/C122-15.</u></a>	8-K(1)	001-35758	4.6	November 17, 2015	
4.156	<a href="#"><u>One Hundred-and-Fifty-Sixth Supplemental Indenture, dated as of November 30, 2015, by and between SolarCity and the Trustee, related to SolarCity's 2.65% Solar Bonds, Series 2015/C124-3.</u></a>	8-K(1)	001-35758	4.3	November 30, 2015	

Exhibit Number	Exhibit Description	Incorporated by Reference				Filed Herewith
		Form	File No.	Exhibit	Filing Date	
4.157	<a href="#"><u>One Hundred-and-Fifty-Seventh Supplemental Indenture, dated as of November 30, 2015, by and between SolarCity and the Trustee, related to SolarCity's 3.60% Solar Bonds, Series 2015/C125-5.</u></a>	8-K(1)	001-35758	4.4	November 30, 2015	
4.158	<a href="#"><u>One Hundred-and-Fifty-Eighth Supplemental Indenture, dated as of November 30, 2015, by and between SolarCity and the Trustee, related to SolarCity's 4.70% Solar Bonds, Series 2015/C126-10.</u></a>	8-K(1)	001-35758	4.5	November 30, 2015	
4.159	<a href="#"><u>One Hundred-and-Fifty-Ninth Supplemental Indenture, dated as of November 30, 2015, by and between SolarCity and the Trustee, related to SolarCity's 5.45% Solar Bonds, Series 2015/C127-15.</u></a>	8-K(1)	001-35758	4.6	November 30, 2015	
4.160	<a href="#"><u>One Hundred-and-Sixty-First Supplemental Indenture, dated as of December 14, 2015, by and between SolarCity and the Trustee, related to SolarCity's 2.65% Solar Bonds, Series 2015/C129-3.</u></a>	8-K(1)	001-35758	4.3	December 14, 2015	
4.161	<a href="#"><u>One Hundred-and-Sixty-Second Supplemental Indenture, dated as of December 14, 2015, by and between SolarCity and the Trustee, related to SolarCity's 3.60% Solar Bonds, Series 2015/C130-5.</u></a>	8-K(1)	001-35758	4.4	December 14, 2015	
4.162	<a href="#"><u>One Hundred-and-Sixty-Third Supplemental Indenture, dated as of December 14, 2015, by and between SolarCity and the Trustee, related to SolarCity's 4.70% Solar Bonds, Series 2015/C131-10.</u></a>	8-K(1)	001-35758	4.5	December 14, 2015	
4.163	<a href="#"><u>One Hundred-and-Sixty-Fourth Supplemental Indenture, dated as of December 14, 2015, by and between SolarCity and the Trustee, related to SolarCity's 5.45% Solar Bonds, Series 2015/C132-15.</u></a>	8-K(1)	001-35758	4.6	December 14, 2015	
4.164	<a href="#"><u>One Hundred-and-Sixty-Sixth Supplemental Indenture, dated as of December 28, 2015, by and between SolarCity and the Trustee, related to SolarCity's 2.65% Solar Bonds, Series 2015/C134-3.</u></a>	8-K(1)	001-35758	4.3	December 28, 2015	



Exhibit Number	Exhibit Description	Incorporated by Reference				Filed Herewith
		Form	File No.	Exhibit	Filing Date	
4.165	<a href="#"><u>One Hundred-and-Sixty-Seventh Supplemental Indenture, dated as of December 28, 2015, by and between SolarCity and the Trustee, related to SolarCity's 3.60% Solar Bonds, Series 2015/C135-5.</u></a>	8-K(1)	001-35758	4.4	December 28, 2015	
4.166	<a href="#"><u>One Hundred-and-Sixty-Eighth Supplemental Indenture, dated as of December 28, 2015, by and between SolarCity and the Trustee, related to SolarCity's 4.70% Solar Bonds, Series 2015/C136-10.</u></a>	8-K(1)	001-35758	4.5	December 28, 2015	
4.167	<a href="#"><u>One Hundred-and-Sixty-Ninth Supplemental Indenture, dated as of December 28, 2015, by and between SolarCity and the Trustee, related to SolarCity's 5.45% Solar Bonds, Series 2015/C137-15.</u></a>	8-K(1)	001-35758	4.6	December 28, 2015	
4.168	<a href="#"><u>One Hundred-and-Seventy-First Supplemental Indenture, dated as of January 29, 2016, by and between SolarCity and the Trustee, related to SolarCity's 3.00% Solar Bonds, Series 2016/2-3.</u></a>	8-K(1)	001-35758	4.3	January 29, 2016	
4.169	<a href="#"><u>One Hundred-and-Seventy-Second Supplemental Indenture, dated as of January 29, 2016, by and between SolarCity and the Trustee, related to SolarCity's 4.00% Solar Bonds, Series 2016/3-5.</u></a>	8-K(1)	001-35758	4.4	January 29, 2016	
4.170	<a href="#"><u>One Hundred-and-Seventy-Third Supplemental Indenture, dated as of January 29, 2016, by and between SolarCity and the Trustee, related to SolarCity's 5.00% Solar Bonds, Series 2016/4-10.</u></a>	8-K(1)	001-35758	4.5	January 29, 2016	
4.171	<a href="#"><u>One Hundred-and-Seventy-Fourth Supplemental Indenture, dated as of January 29, 2016, by and between SolarCity and the Trustee, related to SolarCity's 5.75% Solar Bonds, Series 2016/5-15.</u></a>	8-K(1)	001-35758	4.6	January 29, 2016	
4.172	<a href="#"><u>One Hundred-and-Seventy-Sixth Supplemental Indenture, dated as of February 26, 2016, by and between SolarCity and the Trustee, related to SolarCity's 4.50% Solar Bonds, Series 2016/7-3.</u></a>	8-K(1)	001-35758	4.3	February 26, 2016	

Exhibit Number	Exhibit Description	Incorporated by Reference				Filed Herewith
		Form	File No.	Exhibit	Filing Date	
4.173	<a href="#"><u>One Hundred-and-Seventy-Seventh Supplemental Indenture, dated as of February 26, 2016, by and between SolarCity and the Trustee, related to SolarCity's 5.25% Solar Bonds, Series 2016/8-5.</u></a>	8-K(1)	001-35758	4.4	February 26, 2016	
4.174	<a href="#"><u>One Hundred-and-Seventy-Eighth Supplemental Indenture, dated as of March 21, 2016, by and between SolarCity and the Trustee, related to SolarCity's 4.40% Solar Bonds, Series 2016/9-1.</u></a>	8-K(1)	001-35758	4.2	March 21, 2016	
4.175	<a href="#"><u>One Hundred-and-Seventy-Ninth Supplemental Indenture, dated as of March 21, 2016, by and between SolarCity and the Trustee, related to SolarCity's 5.25% Solar Bonds, Series 2016/10-5.</u></a>	8-K(1)	001-35758	4.3	March 21, 2016	
4.176	<a href="#"><u>One Hundred-and-Eightieth Supplemental Indenture, dated as of June 10, 2016, by and between SolarCity and the Trustee, related to SolarCity's 4.40% Solar Bonds, Series 2016/11-1.</u></a>	8-K(1)	001-35758	4.2	June 10, 2016	
4.177	<a href="#"><u>One Hundred-and-Eighty-First Supplemental Indenture, dated as of June 10, 2016, by and between SolarCity and the Trustee, related to SolarCity's 5.25% Solar Bonds, Series 2016/12-5.</u></a>	8-K(1)	001-35758	4.3	June 10, 2016	
4.178	<a href="#"><u>One Hundred-and-Eighty-Second Supplemental Indenture, dated as of August 17, 2016, by and between SolarCity and the Trustee, related to SolarCity's 6.50% Solar Bonds, Series 2016/13-18M.</u></a>	8-K(1)	001-35758	4.2	August 17, 2016	
10.1**	<a href="#"><u>Form of Indemnification Agreement between the Registrant and its directors and officers.</u></a>	S-1/A	333-164593	10.1	June 15, 2010	
10.2**	<a href="#"><u>2003 Equity Incentive Plan.</u></a>	S-1/A	333-164593	10.2	May 27, 2010	
10.3**	<a href="#"><u>Form of Stock Option Agreement under 2003 Equity Incentive Plan.</u></a>	S-1	333-164593	10.3	January 29, 2010	
10.4**	<a href="#"><u>Amended and Restated 2010 Equity Incentive Plan.</u></a>	—	—	—	—	X
10.5**	<a href="#"><u>Form of Stock Option Agreement under 2010 Equity Incentive Plan.</u></a>	10-K	001-34756	10.6	March 1, 2017	

Exhibit Number	Exhibit Description	Incorporated by Reference				Filed Herewith
		Form	File No.	Exhibit	Filing Date	
10.6**	<a href="#">Form of Restricted Stock Unit Award Agreement under 2010 Equity Incentive Plan.</a>	10-K	001-34756	10.7	March 1, 2017	
10.7**	<a href="#">Amended and Restated 2010 Employee Stock Purchase Plan, effective as of February 1, 2017.</a>	10-K	001-34756	10.8	March 1, 2017	
10.8**	<a href="#">2007 SolarCity Stock Plan and form of agreements used thereunder.</a>	S-1(1)	333-184317	10.2	October 5, 2012	
10.9**	<a href="#">2012 SolarCity Equity Incentive Plan and form of agreements used thereunder.</a>	S-1(1)	333-184317	10.3	October 5, 2012	
10.10**	<a href="#">2010 Zep Solar, Inc. Equity Incentive Plan and form of agreements used thereunder.</a>	S-8(1)	333-192996	4.5	December 20, 2013	
10.11**	<a href="#">Offer Letter between the Registrant and Elon Musk dated October 13, 2008.</a>	S-1	333-164593	10.9	January 29, 2010	
10.12**	<a href="#">Performance Stock Option Agreement between the Registrant and Elon Musk dated January 21, 2018.</a>	DEF 14A	001-34756	Appendix A	February 8, 2018	
10.13**	<a href="#">Offer Letter between the Registrant and Jeffrey B. Straubel dated May 6, 2004.</a>	S-1	333-164593	10.12	January 29, 2010	
10.14**	<a href="#">Offer Letter between the Registrant and Deepak Ahuja dated February 21, 2017.</a>	10-Q	001-34756	10.7	May 10, 2017	
10.15**	<a href="#">Incentive Compensation Plan for July 1, 2017–December 31, 2017, for Jon McNeill.</a>	10-Q	001-34756	10.7	November 3, 2017	
10.16	<a href="#">Form of Call Option Confirmation relating to 1.50% Convertible Senior Note Due June 1, 2018.</a>	8-K	001-34756	10.1	May 22, 2013	
10.17	<a href="#">Form of Warrant Confirmation relating to 1.50% Convertible Senior Note Due June 1, 2018.</a>	8-K	001-34756	10.2	May 22, 2013	
10.18	<a href="#">Indemnification Agreement, dated as of February 27, 2014, by and between the Registrant and J.P. Morgan Securities LLC.</a>	8-K	001-34756	10.1	March 5, 2014	
10.19	<a href="#">Form of Call Option Confirmation relating to 0.25% Convertible Senior Notes Due March 1, 2019.</a>	8-K	001-34756	10.2	March 5, 2014	

Exhibit Number	Exhibit Description	Incorporated by Reference				Filed Herewith
		Form	File No.	Exhibit	Filing Date	
10.20	<a href="#">Form of Call Option Confirmation relating to 1.25% Convertible Senior Notes Due March 1, 2021.</a>	8-K	001-34756	10.3	March 5, 2014	
10.21	<a href="#">Form of Warrant Confirmation relating to 0.25% Convertible Senior Notes Due March 1, 2019.</a>	8-K	001-34756	10.4	March 5, 2014	
10.22	<a href="#">Form of Warrant Confirmation relating to 1.25% Convertible Senior Notes Due March 1, 2021.</a>	8-K	001-34756	10.5	March 5, 2014	
10.23	<a href="#">Form of Call Option Confirmation relating to 2.375% Convertible Notes due March 15, 2022.</a>	8-K	001-34756	10.1	March 22, 2017	
10.24	<a href="#">Form of Warrant Confirmation relating to 2.375% Convertible Notes due March 15, 2022.</a>	8-K	001-34756	10.2	March 22, 2017	
10.25†	<a href="#">Supply Agreement between Panasonic Corporation and the Registrant dated October 5, 2011.</a>	10-K	-001-34756	10.50	February 27, 2012	
10.26†	<a href="#">Amendment No. 1 to Supply Agreement between Panasonic Corporation and the Registrant dated October 29, 2013.</a>	10-K	001-34756	10.35A	February 26, 2014	
10.27	<a href="#">Agreement between Panasonic Corporation and the Registrant dated July 31, 2014.</a>	10-Q	001-34756	10.1	November 7, 2014	
10.28†	<a href="#">General Terms and Conditions between Panasonic Corporation and the Registrant dated October 1, 2014.</a>	8-K	001-34756	10.2	October 11, 2016	
10.29	<a href="#">Letter Agreement, dated as of February 24, 2015, regarding addition of co-party to General Terms and Conditions, Production Pricing Agreement and Investment Letter Agreement between Panasonic Corporation and the Registrant.</a>	10-K	001-34756	10.25A	February 24, 2016	
10.30†	<a href="#">Amendment to Gigafactory General Terms, dated March 1, 2016, by and among the Registrant, Panasonic Corporation and Panasonic Energy Corporation of North America.</a>	8-K	001-34756	10.1	October 11, 2016	
10.31†	<a href="#">Production Pricing Agreement between Panasonic Corporation and the Registrant dated October 1, 2014.</a>	10-Q	001-34756	10.3	November 7, 2014	
10.32†	<a href="#">Investment Letter Agreement between Panasonic Corporation and the Registrant dated October 1, 2014.</a>	10-Q	001-34756	10.4	November 7, 2014	



Exhibit Number	Exhibit Description	Incorporated by Reference				Filed Herewith
		Form	File No.	Exhibit	Filing Date	
10.33	<a href="#"><u>Amendment to Gigafactory Documents, dated April 5, 2016, by and among the Registrant, Panasonic Corporation, Panasonic Corporation of North America and Panasonic Energy Corporation of North America.</u></a>	10-Q	001-34756	10.2	May 10, 2016	
10.34	<a href="#"><u>ABL Credit Agreement, dated as of June 10, 2015, by and among the Registrant, Tesla Motors Netherlands B.V., certain of the Registrant's and Tesla Motors Netherlands B.V.'s direct or indirect subsidiaries from time to time party thereto, as borrowers, Wells Fargo Bank, National Association, as documentation agent, JPMorgan Chase Bank, N.A., Goldman Sachs Bank USA, Morgan Stanley Senior Funding Inc. and Bank of America, N.A., as syndication agents, the lenders from time to time party thereto, and Deutsche Bank AG New York Branch, as administrative agent and collateral agent.</u></a>	8-K	001-34756	10.1	June 12, 2015	
10.35	<a href="#"><u>First Amendment, dated as of November 3, 2015, to ABL Credit Agreement, dated as of June 10, 2015, by and among the Registrant, Tesla Motors Netherlands B.V., certain of the Registrant's and Tesla Motors Netherlands B.V.'s direct or indirect subsidiaries from time to time party thereto, as borrowers, and the documentation agent, syndication agents, administrative agent, collateral agent and lenders from time to time party thereto.</u></a>	10-Q	001-34756	10.1	November 5, 2015	
10.36	<a href="#"><u>Second Amendment, dated as of December 31, 2015, to ABL Credit Agreement, dated as of June 10, 2015, by and among the Registrant, Tesla Motors Netherlands B.V., certain of the Registrant's and Tesla Motors Netherlands B.V.'s direct or indirect subsidiaries from time to time party thereto, as borrowers, and the documentation agent, syndication agents, administrative agent, collateral agent and lenders from time to time party thereto.</u></a>	10-K	001-34756	10.28B	February 24, 2016	

Exhibit Number	Exhibit Description	Incorporated by Reference				Filed Herewith
		Form	File No.	Exhibit	Filing Date	
10.37	<a href="#"><u>Third Amendment, dated as of February 9, 2016, to ABL Credit Agreement, dated as of June 10, 2015, by and among the Registrant, Tesla Motors Netherlands B.V., certain of the Registrant's and Tesla Motors Netherlands B.V.'s direct or indirect subsidiaries from time to time party thereto, as borrowers, and the documentation agent, syndication agents, administrative agent, collateral agent and lenders from time to time party thereto.</u></a>	10-K	001-34756	10.28C	February 24, 2016	
10.38	<a href="#"><u>Fourth Amendment to Credit Agreement, dated as of July 31, 2016, by and among the Registrant, Tesla Motors Netherlands B.V., the lenders party thereto and Deutsche Bank AG New York Branch, as administrative agent and collateral agent.</u></a>	8-K	001-34756	10.1	August 1, 2016	
10.39	<a href="#"><u>Fifth Amendment to Credit Agreement, dated as of December 15, 2016, among the Registrant, Tesla Motors Netherlands B.V., the lenders party thereto and Deutsche Bank AG, New York Branch, as administrative agent and collateral agent.</u></a>	8-K	001-34756	10.1	December 20, 2016	
10.40	<a href="#"><u>Sixth Amendment to Credit Agreement, dated as of June 19, 2017, among the Registrant, Tesla Motors Netherlands B.V., the lenders party thereto and Deutsche Bank AG, New York Branch, as administrative agent and collateral agent.</u></a>	10-Q	001-34756	10.1	August 4, 2017	
10.41	<a href="#"><u>Seventh Amendment to the ABL Credit Agreement, dated as of August 11, 2017, by and among the Registrant, Tesla Motors Netherlands B.V., Deutsche Bank AG New York Branch, as administrative agent and collateral agent, and the other agents party thereto.</u></a>	8-K	001-34756	10.2	August 23, 2017	
10.42†	<a href="#"><u>Agreement for Tax Abatement and Incentives, dated as of May 7, 2015, by and between Tesla Motors, Inc. and the State of Nevada, acting by and through the Nevada Governor's Office of Economic Development.</u></a>	10-Q	001-34756	10.1	August 7, 2015	

Exhibit Number	Exhibit Description	Incorporated by Reference				Filed Herewith
		Form	File No.	Exhibit	Filing Date	
10.43†	<a href="#"><u>Amended and Restated Loan and Security Agreement, dated as of August 17, 2017, by and among Tesla 2014 Warehouse SPV LLC, Tesla Finance LLC, the Lenders and Group Agents from time to time party thereto, and Deutsche Bank AG, New York Branch, as Administrative Agent.</u></a>	10-Q	001-34756	10.3	November 3, 2017	
10.44†	<a href="#"><u>Amendment No. 1 to Amended and Restated Loan and Security Agreement, dated as of October 18, 2017, by and among Tesla 2014 Warehouse SPV LLC, Tesla Finance LLC, the Lenders and Group Agents from time to time party thereto, Deutsche Bank AG, New York Branch, as Administrative Agent, and Deutsche Bank Trust Company Americas, as Paying Agent.</u></a>	—	—	—	—	X
10.45†	<a href="#"><u>Loan and Security Agreement, dated as of August 17, 2017, by and among LML Warehouse SPV, LLC, Tesla Finance LLC, the Lenders and Group Agents from time to time party thereto, and Deutsche Bank AG, New York Branch, as Administrative Agent.</u></a>	10-Q	001-34756	10.4	November 3, 2017	
10.46†	<a href="#"><u>Amendment No. 1 to Loan and Security Agreement, dated as of October 18, 2017, by and among LML Warehouse SPV, LLC, Tesla Finance LLC, the Lenders and Group Agents from time to time party thereto, Deutsche Bank AG, New York Branch, as Administrative Agent, and Deutsche Bank Trust Company Americas, as Paying Agent.</u></a>	—	—	—	—	X
10.47	<a href="#"><u>Purchase Agreement, dated as of August 11, 2017, by and among the Registrant, SolarCity and Goldman Sachs &amp; Co. LLC and Morgan Stanley &amp; Co. LLC as representatives of the several initial purchasers named therein.</u></a>	8-K	001-34756	10.1	August 23, 2017	



Exhibit Number	Exhibit Description	Incorporated by Reference				Filed Herewith
		Form	File No.	Exhibit	Filing Date	
10.48	<a href="#"><u>Amended and Restated Agreement For Research &amp; Development Alliance on Triex Module Technology, effective as of September 2, 2014, by and between The Research Foundation For The State University of New York, on behalf of the College of Nanoscale Science and Engineering of the State University of New York, and Silevo, Inc.</u></a>	10-Q(1)	001-35758	10.16	November 6, 2014	
10.49	<a href="#"><u>First Amendment to Amended and Restated Agreement For Research &amp; Development Alliance on Triex Module Technology, effective as of October 31, 2014, by and between The Research Foundation For The State University of New York, on behalf of the College of Nanoscale Science and Engineering of the State University of New York, and Silevo, Inc.</u></a>	10-K(1)	001-35758	10.16a	February 24, 2015	
10.50	<a href="#"><u>Second Amendment to Amended and Restated Agreement For Research &amp; Development Alliance on Triex Module Technology, effective as of December 15, 2014, by and between The Research Foundation For The State University of New York, on behalf of the College of Nanoscale Science and Engineering of the State University of New York, and Silevo, Inc.</u></a>	10-K(1)	001-35758	10.16b	February 24, 2015	
10.51	<a href="#"><u>Third Amendment to Amended and Restated Agreement For Research &amp; Development Alliance on Triex Module Technology, effective as of February 12, 2015, by and between The Research Foundation For The State University of New York, on behalf of the College of Nanoscale Science and Engineering of the State University of New York, and Silevo, Inc.</u></a>	10-Q(1)	001-35758	10.16c	May 6, 2015	

Exhibit Number	Exhibit Description	Incorporated by Reference				Filed Herewith
		Form	File No.	Exhibit	Filing Date	
10.52	<a href="#"><u>Fourth Amendment to Amended and Restated Agreement For Research &amp; Development Alliance on Triex Module Technology, effective as of March 30, 2015, by and between The Research Foundation For The State University of New York, on behalf of the College of Nanoscale Science and Engineering of the State University of New York, and Silevo, Inc.</u></a>	10-Q(1)	001-35758	10.16d	May 6, 2015	
10.53	<a href="#"><u>Fifth Amendment to Amended and Restated Agreement For Research &amp; Development Alliance on Triex Module Technology, effective as of June 30, 2015, by and between The Research Foundation For The State University of New York, on behalf of the College of Nanoscale Science and Engineering of the State University of New York, and Silevo, LLC.</u></a>	10-Q(1)	001-35758	10.16e	July 30, 2015	
10.54	<a href="#"><u>Sixth Amendment to Amended and Restated Agreement For Research &amp; Development Alliance on Triex Module Technology, effective as of September 1, 2015, by and between The Research Foundation For The State University of New York, on behalf of the College of Nanoscale Science and Engineering of the State University of New York, and Silevo, LLC.</u></a>	10-Q(1)	001-35758	10.16f	October 30, 2015	
10.55	<a href="#"><u>Seventh Amendment to Amended and Restated Agreement For Research &amp; Development Alliance on Triex Module Technology, effective as of October 9, 2015, by and between The Research Foundation For The State University of New York, on behalf of the College of Nanoscale Science and Engineering of the State University of New York, and Silevo, LLC.</u></a>	10-Q(1)	001-35758	10.16g	October 30, 2015	

Exhibit Number	Exhibit Description	Incorporated by Reference				Filed Herewith
		Form	File No.	Exhibit	Filing Date	
10.56	<a href="#"><u>Eighth Amendment to Amended and Restated Agreement For Research &amp; Development Alliance on Triex Module Technology, effective as of October 26, 2015, by and between The Research Foundation For The State University of New York, on behalf of the College of Nanoscale Science and Engineering of the State University of New York, and Silevo, LLC.</u></a>	10-Q(1)	001-35758	10.16h	October 30, 2015	
10.57	<a href="#"><u>Ninth Amendment to Amended and Restated Agreement For Research &amp; Development Alliance on Triex Module Technology, effective as of December 9, 2015, by and between The Research Foundation For The State University of New York, on behalf of the College of Nanoscale Science and Engineering of the State University of New York, and Silevo, LLC.</u></a>	10-K(1)	001-35758	10.16i	February 10, 2016	
10.58	<a href="#"><u>Tenth Amendment to Amended and Restated Agreement For Research &amp; Development Alliance on Triex Module Technology, effective as of March 31, 2017, by and between The Research Foundation For The State University of New York, on behalf of the Colleges of Nanoscale Science and Engineering of the State University of New York, and Silevo, LLC.</u></a>	10-Q	001-34756	10.8	May 10, 2017	
12.1	<a href="#"><u>Statement regarding Computation of Ratio of Earnings to Fixed Charges</u></a>	—	—	—	—	X
21.1	<a href="#"><u>List of Subsidiaries of the Registrant</u></a>	—	—	—	—	X
23.1	<a href="#"><u>Consent of PricewaterhouseCoopers LLP, Independent Registered Public Accounting Firm</u></a>	—	—	—	—	X
23.2	<a href="#"><u>Consent of Ernst &amp; Young LLP, Independent Registered Public Accounting Firm</u></a>	—	—	—	—	X
31.1	<a href="#"><u>Rule 13a-14(a) / 15(d)-14(a) Certification of Principal Executive Officer</u></a>	—	—	—	—	X
31.2	<a href="#"><u>Rule 13a-14(a) / 15(d)-14(a) Certification of Principal Financial Officer</u></a>	—	—	—	—	X

Exhibit Number	Exhibit Description	Incorporated by Reference				Filed Herewith
		Form	File No.	Exhibit	Filing Date	
32.1*	<a href="#">Section 1350 Certifications</a>	—	—	—	—	
99.1	<a href="#">Certain Excerpts from Annual Report on Form 10-K of SolarCity</a>	10-K	001-34756	99.1	March 1, 2017	
101.INS	XBRL Instance Document					
101.SCH	XBRL Taxonomy Extension Schema Document					
101.CAL	XBRL Taxonomy Extension Calculation Linkbase Document.					
101.DEF	XBRL Taxonomy Extension Definition Linkbase Document					
101.LAB	XBRL Taxonomy Extension Label Linkbase Document					
101.PRE	XBRL Taxonomy Extension Presentation Linkbase Document					

\* Furnished herewith

\*\* Indicates a management contract or compensatory plan or arrangement

† Confidential treatment has been requested for portions of this exhibit

(1) Indicates a filing of SolarCity

#### ITEM 16. SUMMARY

None

## SIGNATURES

Pursuant to the requirements of Section 13 or 15(d) the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned, thereunto duly authorized.

Tesla, Inc.

Date: February 22, 2018

\_\_\_\_\_  
/s/ Elon Musk  
Elon Musk  
Chief Executive Officer  
(Principal Executive Officer)

Pursuant to the requirements of the Securities Exchange Act of 1934, this report has been signed below by the following persons on behalf of the registrant and in the capacities and on the dates indicated.

<u>Signature</u>	<u>Title</u>	<u>Date</u>
_____ /s/ Elon Musk Elon Musk	Chief Executive Officer and Director (Principal Executive Officer)	February 22, 2018
_____ /s/ Deepak Ahuja Deepak Ahuja	Chief Financial Officer (Principal Financial Officer)	February 22, 2018
_____ /s/ Eric Branderiz Eric Branderiz	Chief Accounting Officer (Principal Accounting Officer)	February 22, 2018
_____ /s/ Brad W. Buss Brad W. Buss	Director	February 22, 2018
_____ /s/ Robyn Denholm Robyn Denholm	Director	February 22, 2018
_____ /s/ Ira Ehrenpreis Ira Ehrenpreis	Director	February 22, 2018
_____ /s/ Antonio J. Gracias Antonio J. Gracias	Director	February 22, 2018
_____ /s/ James Murdoch James Murdoch	Director	February 22, 2018
_____ /s/ Kimbal Musk Kimbal Musk	Director	February 22, 2018
_____ /s/ Linda Johnson Rice Linda Johnson Rice	Director	February 22, 2018
_____ Stephen T. Jurvetson	Director	