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

(Mark One)

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

For the quarterly period ended September 30, 2020

OR

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

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

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 ☒

As of October 20, 2020, there were 947,900,733 shares of the registrant's common stock outstanding.

TESLA, INC.
FORM 10-Q FOR THE QUARTER ENDED SEPTEMBER 30, 2020

INDEX

	<u>Page</u>
<u>PART I. FINANCIAL INFORMATION</u>	
Item 1.	<u>Financial Statements (Unaudited)</u>
	<u>Consolidated Balance Sheets</u>
	<u>Consolidated Statements of Operations</u>
	<u>Consolidated Statements of Comprehensive Income (Loss)</u>
	<u>Consolidated Statements of Redeemable Noncontrolling Interests and Equity</u>
	<u>Consolidated Statements of Cash Flow</u>
	<u>Notes to Consolidated Financial Statements</u>
Item 2.	<u>Management's Discussion and Analysis of Financial Condition and Results of Operations</u>
Item 3.	<u>Quantitative and Qualitative Disclosures About Market Risk</u>
Item 4	<u>Control and Procedures</u>
<u>PART II. OTHER INFORMATION</u>	
Item 1.	<u>Legal Proceedings</u>
Item 1A.	<u>Risk Factors</u>
Item 2	<u>Unregistered Sales of Equity Securities and Use of Proceeds</u>
Item 3	<u>Defaults Upon Senior Securities</u>
Item 4.	<u>Mine Safety Disclosures</u>
Item 5.	<u>Other Information</u>
Item 6.	<u>Exhibits</u>
<u>SIGNATURES</u>	66

Forward-Looking Statements

The discussions in this Quarterly Report on Form 10-Q 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 II, Item 1A, "Risk Factors" in this Quarterly Report on Form 10-Q 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. FINANCIAL INFORMATION
ITEM 1. FINANCIAL STATEMENTS

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

	September 30, 2020	December 31, 2019
Assets		
Current assets		
Cash and cash equivalents	\$ 14,531	\$ 6,268
Accounts receivable, net	1,757	1,324
Inventory	4,218	3,552
Prepaid expenses and other current assets	1,238	959
Total current assets	21,744	12,103
Operating lease vehicles, net	2,742	2,447
Solar energy systems, net	6,025	6,138
Property, plant and equipment, net	11,848	10,396
Operating lease right-of-use assets	1,375	1,218
Intangible assets, net	318	339
Goodwill	203	198
Other non-current assets	1,436	1,470
Total assets	\$ 45,691	\$ 34,309
Liabilities		
Current liabilities		
Accounts payable	\$ 4,958	\$ 3,771
Accrued liabilities and other	3,252	3,222
Deferred revenue	1,258	1,163
Customer deposits	708	726
Current portion of debt and finance leases	3,126	1,785
Total current liabilities	13,302	10,667
Debt and finance leases, net of current portion	10,559	11,634
Deferred revenue, net of current portion	1,233	1,207
Other long-term liabilities	3,049	2,691
Total liabilities	28,143	26,199
Commitments and contingencies (Note 12)		
Redeemable noncontrolling interests in subsidiaries	608	643
Convertible senior notes (Note 10)	48	—
Equity		
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; 948 and 905 shares issued and outstanding as of September 30, 2020 and December 31, 2019, respectively (1)	1	1
Additional paid-in capital (1)	21,574	12,736
Accumulated other comprehensive income (loss)	125	(36)
Accumulated deficit	(5,669)	(6,083)
Total stockholders' equity	16,031	6,618
Noncontrolling interests in subsidiaries	861	849
Total liabilities and equity	\$ 45,691	\$ 34,309

(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)
(unaudited)

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2020	2019	2020	2019
Revenues				
Automotive sales	\$ 7,346	\$ 5,132	\$ 17,150	\$ 13,809
Automotive leasing	265	221	772	644
Total automotive revenues	7,611	5,353	17,922	14,453
Energy generation and storage	579	402	1,242	1,095
Services and other	581	548	1,628	1,646
Total revenues	8,771	6,303	20,792	17,194
Cost of revenues				
Automotive sales	5,361	4,014	12,774	11,124
Automotive leasing	145	117	415	340
Total automotive cost of revenues	5,506	4,131	13,189	11,464
Energy generation and storage	558	314	1,189	956
Services and other	644	667	1,850	2,096
Total cost of revenues	6,708	5,112	16,228	14,516
Gross profit	2,063	1,191	4,564	2,678
Operating expenses				
Research and development	366	334	969	998
Selling, general and administrative	888	596	2,176	1,947
Restructuring and other	—	—	—	161
Total operating expenses	1,254	930	3,145	3,106
Income (loss) from operations	809	261	1,419	(428)
Interest income	6	15	24	34
Interest expense	(163)	(185)	(502)	(515)
Other (expense) income, net	(97)	85	(166)	70
Income (loss) before income taxes	555	176	775	(839)
Provision for income taxes	186	26	209	68
Net income (loss)	369	150	566	(907)
Net income attributable to noncontrolling interests and redeemable noncontrolling interests in subsidiaries	38	7	115	60
Net income (loss) attributable to common stockholders	<u>\$ 331</u>	<u>\$ 143</u>	<u>\$ 451</u>	<u>\$ (967)</u>
Less: Buy-out of noncontrolling interest	31	-	31	8
Net income (loss) used in computing net income (loss) per share of common stock	<u>\$ 300</u>	<u>\$ 143</u>	<u>\$ 420</u>	<u>\$ (975)</u>
Net income (loss) per share of common stock attributable to common stockholders (1)				
Basic	\$ 0.32	\$ 0.16	\$ 0.45	\$ (1.11)
Diluted	<u>\$ 0.27</u>	<u>\$ 0.16</u>	<u>\$ 0.40</u>	<u>\$ (1.11)</u>
Weighted average shares used in computing net income (loss) per share of common stock (1)				
Basic	937	897	927	882
Diluted	<u>1,105</u>	<u>922</u>	<u>1,059</u>	<u>882</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)
(unaudited)

	<u>Three Months Ended September 30,</u>		<u>Nine Months Ended September 30,</u>	
	<u>2020</u>	<u>2019</u>	<u>2020</u>	<u>2019</u>
Net income (loss)	\$ 369	\$ 150	\$ 566	\$ (907)
Other comprehensive income (loss):				
Foreign currency translation adjustment	165	(114)	161	(112)
Comprehensive income (loss)	534	36	727	(1,019)
Less: Comprehensive income attributable to noncontrolling interests and redeemable noncontrolling interests in subsidiaries	38	7	115	60
Comprehensive income (loss) attributable to common stockholders	<u>\$ 496</u>	<u>\$ 29</u>	<u>\$ 612</u>	<u>\$ (1,079)</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)
(unaudited)

	Redeemable Noncontrolling	Common Stock		Additional Paid-In	Accumulated	Accumulated Other Comprehensive	Total Stockholders'	Noncontrolling Interests in	Total
	Interests	Shares (1)	Amount (1)	Capital (1)	Deficit	Loss	Equity	Subsidiaries	Equity
Three Months Ended September 30, 2019									
Balance as of June 30, 2019	\$ 580	896	\$ 1	\$ 12,051	\$ (6,331)	\$ (6)	\$ 5,715	\$ 854	\$ 6,569
Issuance of common stock for equity incentive awards and acquisitions, net of transaction costs	—	5	0	79	—	—	79	—	79
Stock-based compensation	—	—	—	217	—	—	217	—	217
Contributions from noncontrolling interests	12	—	—	—	—	—	—	51	51
Distributions to noncontrolling interests	(11)	—	—	—	—	—	—	(51)	(51)
Net income (loss)	19	—	—	—	143	—	143	(12)	131
Other comprehensive loss	—	—	—	—	—	(114)	(114)	—	(114)
Balance as of September 30, 2019	\$ 600	901	\$ 1	\$ 12,347	\$ (6,188)	\$ (120)	\$ 6,040	\$ 842	\$ 6,882

	Redeemable Noncontrolling	Common Stock		Additional Paid-In	Accumulated	Other Comprehensive	Total Stockholders'	Noncontrolling Interests in	Total
	Interests	Shares (1)	Amount (1)	Capital (1)	Deficit	Loss	Equity	Subsidiaries	Equity
Nine Months Ended September 30, 2019									
Balance as of December 31, 2018	\$ 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 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	—	20	0	393	—	—	393	—	393
Issuance of common stock in May 2019 public offering at \$48.60 per share (1), net of issuance costs of \$15	—	18	0	847	—	—	847	—	847
Stock-based compensation	—	—	—	672	—	—	672	—	672
Contributions from noncontrolling interests	53	—	—	—	—	—	—	100	100
Distributions to noncontrolling interests	(49)	—	—	—	—	—	—	(112)	(112)
Buy-outs of noncontrolling interests	—	—	—	(8)	—	—	(8)	—	(8)
Other	—	—	—	6	—	—	6	—	6
Net income (loss)	40	—	—	—	(967)	—	(967)	20	(947)
Other comprehensive loss	—	—	—	—	—	(112)	(112)	—	(112)
Balance as of September 30, 2019	\$ 600	901	\$ 1	\$ 12,347	\$ (6,188)	\$ (120)	\$ 6,040	\$ 842	\$ 6,882

(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.

	Redeemable Noncontrolling Interests	Common Stock		Additional Paid-In Capital (1)	Accumulated Deficit	Accumulated Other Comprehensive (Loss) Income	Total Stockholders' Equity	Noncontrolling Interests in Subsidiaries	Total Equity
		Shares (1)	Amount (1)						
Three Months Ended September 30, 2020									
Balance as of June 30, 2020	\$ 613	932	\$ 1	\$ 15,894	\$ (6,000)	\$ (40)	\$ 9,855	\$ 869	\$ 10,724
Reclassification between equity and mezzanine equity for convertible senior notes	—	—	—	(4)	—	—	(4)	—	(4)
Exercises of conversion feature of convertible senior notes	—	1	0	32	—	—	32	—	32
Issuance of common stock for equity incentive awards	—	4	0	144	—	—	144	—	144
Issuance of common stock through the at-the-market offering program net of issuance cost of \$26	—	11	0	4,973	—	—	4,973	—	4,973
Stock-based compensation	—	—	—	566	—	—	566	—	566
Contributions from noncontrolling interests	4	—	—	—	—	—	—	—	—
Distributions to noncontrolling interests	(25)	—	—	—	—	—	—	(30)	(30)
Buy-out of noncontrolling interests	—	—	—	(31)	—	—	(31)	—	(31)
Net income	16	—	—	—	331	—	331	22	353
Other comprehensive income	—	—	—	—	—	165	165	—	165
Balance as of September 30, 2020	\$ 608	948	\$ 1	\$ 21,574	\$ (5,669)	\$ 125	\$ 16,031	\$ 861	\$ 16,892

	Redeemable Noncontrolling Interests	Common Stock		Additional Paid-In Capital (1)	Accumulated Deficit	Accumulated Other Comprehensive (Loss) Income	Total Stockholders' Equity	Noncontrolling Interests in Subsidiaries	Total Equity
		Shares (1)	Amount (1)						
Nine Months Ended September 30, 2020									
Balance as of December 31, 2019	\$ 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	—	—	—	(48)	—	—	(48)	—	(48)
Exercises of conversion feature of convertible senior notes	—	2	0	97	—	—	97	—	97
Issuance of common stock for equity incentive awards	—	15	0	361	—	—	361	—	361
Issuance of common stock in February 2020 public offering at \$153.40 per share (1), net of issuance costs of \$28	—	15	0	2,309	—	—	2,309	—	2,309
Issuance of common stock through the at-the-market offering program net of issuance cost of \$26	—	11	0	4,973	—	—	4,973	—	4,973
Stock-based compensation	—	—	—	1,177	—	—	1,177	—	1,177
Contributions from noncontrolling interests	6	—	—	—	—	—	—	17	17
Distributions to noncontrolling interests	(52)	—	—	—	—	—	—	(107)	(107)
Buy-outs of noncontrolling interests	(2)	—	—	(31)	—	—	(31)	—	(31)
Net income	13	—	—	—	451	—	451	102	553
Other comprehensive income	—	—	—	—	—	161	161	—	161
Balance as of September 30, 2020	\$ 608	948	\$ 1	\$ 21,574	\$ (5,669)	\$ 125	\$ 16,031	\$ 861	\$ 16,892

(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 Cash Flows
(in millions)
(unaudited)

	Nine Months Ended September 30,	
	2020	2019
Cash Flows from Operating Activities		
Net income (loss)	\$ 566	\$ (907)
Adjustments to reconcile net income (loss) to net cash provided by operating activities:		
Depreciation, amortization and impairment	1,704	1,577
Stock-based compensation	1,101	617
Amortization of debt discounts and issuance costs	144	138
Inventory and purchase commitments write-downs	140	167
Loss on disposals of fixed assets	67	69
Foreign currency transaction net loss (gain)	144	(102)
Non-cash interest and other operating activities	116	189
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	(550)	(150)
Inventory	(602)	(485)
Operating lease vehicles	(640)	(467)
Prepaid expenses and other current assets	(290)	(236)
Other non-current assets	(105)	46
Accounts payable and accrued liabilities	765	143
Deferred revenue	118	625
Customer deposits	(15)	(114)
Other long-term liabilities	261	58
Net cash provided by operating activities	<u>2,924</u>	<u>980</u>
Cash Flows from Investing Activities		
Purchases of property and equipment excluding finance leases, net of sales	(2,006)	(915)
Purchases of solar energy systems, net of sales	(62)	(68)
Receipt of government grants	1	—
Purchase of intangible assets	(5)	(5)
Business combinations, net of cash acquired	(13)	(45)
Net cash used in investing activities	<u>(2,085)</u>	<u>(1,033)</u>
Cash Flows from Financing Activities		
Proceeds from issuances of common stock in public offerings, net of issuance costs	7,282	848
Proceeds from issuances of convertible and other debt	7,826	7,119
Repayments of convertible and other debt	(7,537)	(5,601)
Collateralized lease repayments	(224)	(302)
Proceeds from exercises of stock options and other stock issuances	361	167
Principal payments on finance leases	(248)	(223)
Debt issuance costs	(6)	(32)
Purchase of convertible note hedges	—	(476)
Proceeds from issuance of warrants	—	174
Proceeds from investments by noncontrolling interests in subsidiaries	23	153
Distributions paid to noncontrolling interests in subsidiaries	(163)	(211)
Payments for buy-outs of noncontrolling interests in subsidiaries	(33)	(8)
Net cash provided by financing activities	<u>7,281</u>	<u>1,608</u>
Effect of exchange rate changes on cash and cash equivalents and restricted cash	100	(6)
Net increase in cash and cash equivalents and restricted cash	8,220	1,549
Cash and cash equivalents and restricted cash, beginning of period	6,783	4,277
Cash and cash equivalents and restricted cash, end of period	<u>\$ 15,003</u>	<u>\$ 5,826</u>
Supplemental Non-Cash Investing and Financing Activities		
Equity issued in connection with business combination	\$ —	\$ 207
Acquisitions of property and equipment included in liabilities	\$ 913	\$ 375
Leased assets obtained in exchange for finance lease liabilities	\$ 116	\$ 497
Leased assets obtained in exchange for operating lease liabilities	\$ 333	\$ 172

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

Tesla, Inc.
Notes to Consolidated Financial Statements
(unaudited)

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 September 30, 2020, there has continued to be widespread impact to the global economy from the COVID-19 pandemic. 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 resulted in challenges in or postponements for our new vehicle deliveries, used vehicle sales, and energy product deployments in 2020. Exiting the first half of 2020, however, we have resumed operations at all of our manufacturing facilities, 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. On the other hand, certain government regulations, public advisories and shifting social behaviors that have temporarily or sporadically limited or closed non-essential transportation, government functions, business activities and person-to-person interactions remain in place. In some cases, the relaxation of such trends has been followed by a return to stringent restrictions. 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.

Note 2 – Summary of Significant Accounting Policies

Unaudited Interim Financial Statements

The consolidated balance sheet as of September 30, 2020, the consolidated statements of operations, the consolidated statements of comprehensive income (loss), the consolidated statements of redeemable noncontrolling interests and equity for the three and nine months ended September 30, 2020 and 2019 and the consolidated statements of cash flows for the nine months ended September 30, 2020 and 2019, as well as other information disclosed in the accompanying notes, are unaudited. The consolidated balance sheet as of December 31, 2019 was derived from the audited consolidated financial statements as of that date. The interim consolidated financial statements and the accompanying notes should be read in conjunction with the annual consolidated financial statements and the accompanying notes contained in our Annual Report on Form 10-K for the year ended December 31, 2019.

The interim consolidated financial statements and the accompanying notes have been prepared on the same basis as the annual consolidated financial statements and, in the opinion of management, reflect all adjustments, which include only normal recurring adjustments, necessary for a fair statement of the results of operations for the periods presented. The consolidated results of operations for any interim period are not necessarily indicative of the results to be expected for the full year or for any other future years or interim periods.

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 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, 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 Quarterly Report on Form 10-Q. 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

Revenue by source

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

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2020	2019	2020	2019
Automotive sales without resale value guarantee	\$ 6,788	\$ 4,821	\$ 15,578	\$ 13,423
Automotive sales with resale value guarantee (1)	161	177	393	(75)
Automotive regulatory credits	397	134	1,179	461
Energy generation and storage sales	439	241	837	680
Services and other	581	548	1,628	1,646
Total revenues from sales and services	8,366	5,921	19,615	16,135
Automotive leasing	265	221	772	644
Energy generation and storage leasing	140	161	405	415
Total revenues	\$ 8,771	\$ 6,303	\$ 20,792	\$ 17,194

- (1) Due to pricing adjustments we made to our vehicle offerings during the nine months ended September 30, 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 automotive sales with resale value guarantee. For the three and nine months ended September 30, 2020, price adjustments resulted in a reduction of automotive sales with resale value guarantee of \$12 million and \$72 million, respectively. For the nine months ended September 30, 2019, price adjustments resulted in a reduction of automotive sales with resale value guarantee by \$555 million. The amounts presented represent automotive sales with resale value guarantee net of such pricing adjustments' impact.

Automotive Sales Revenue

Automotive Sales with and without Resale Value Guarantee

Deferred revenue related to the access to our Supercharger network, internet connectivity and Full Self Driving ("FSD") features and over-the-air software updates on automotive sales with and without resale value guarantee amounted to \$1.73 billion and \$1.47 billion as of September 30, 2020 and December 31, 2019, respectively. 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, 2019 and 2018 was \$223 million and \$177 million for the nine months ended September 30, 2020 and 2019, respectively. Of the total deferred revenue on automotive sales with and without resale value guarantees, we expect to recognize \$969 million of revenue in the next 12 months. The remaining balance will be recognized over the various performance periods of the obligations, which is up to the eight-year life of the vehicle.

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. On a quarterly basis, we assess the estimated market values of vehicles under our buyback options program to determine whether there will be changes to 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 \$12 million and \$72 million, respectively, for the three and nine months ended September 30, 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 automotive cost of sales of \$5 million and \$42 million, respectively, for the three and nine months ended September 30, 2020. The net impact was a reduction in gross profit of \$7 million and \$30 million, respectively, for the three and nine months ended September 30, 2020.

With the exception of two programs which are discussed within the *Automotive Leasing Revenue* section, we recognize revenue when control transfers upon delivery to customers 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 total sales return reserve on vehicles previously sold under our buyback options program was \$682 million and \$639 million as of September 30, 2020 and December 31, 2019, respectively, of which \$163 million and \$93 million was short term, respectively.

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. Deferred revenue related to sales of automotive regulatory credits was \$0 million and \$140 million as of September 30, 2020 and December 31, 2019, respectively. Revenue recognized from the deferred revenue balance as of December 31, 2019 was \$140 million for the nine months ended September 30, 2020.

Automotive Leasing Revenue

Automotive leasing revenue includes revenue recognized under operating lease accounting guidance for our direct leasing programs as well as the two programs with resale value guarantees described below. Additionally, we introduced direct sales-type leasing programs in volume during the third quarter of 2020 where we recognize all revenue associated with the sales-type lease upon delivery to the customer.

Vehicle Sales to Leasing Partners with a Resale Value Guarantee and a Buyback Option

The maximum amount we could be required to pay under our collateralized lease borrowing program, should we decide to repurchase all vehicles, was \$56 million and \$214 million as of September 30, 2020 and December 31, 2019, respectively, including \$19 million within a 12-month period from September 30, 2020. As of September 30, 2020 and December 31, 2019, we had \$56 million and \$238 million, respectively, of collateralized lease borrowings recorded in accrued liabilities and other and other long-term liabilities, and \$13 million and \$29 million, respectively, recorded in deferred revenue liability. For the three and nine months ended September 30, 2020, we recognized \$18 million and \$70 million, respectively, of leasing revenue related to this program, and \$43 million and \$146 million, respectively, for the same periods in 2019. The net carrying amount of operating lease vehicles under this program was \$54 million and \$190 million as of September 30, 2020 and December 31, 2019, respectively.

Vehicle Sales to Customers with a Resale Value Guarantee where Exercise is Probable

As of September 30, 2020, we had an immaterial amount of resale value guarantees where exercise is probable recorded in accrued liabilities and other. As of December 31, 2019, we had \$115 million of resale value guarantees where exercise is probable recorded in accrued liabilities and other. For the three and nine months ended September 30, 2020, we recognized \$1 million and \$102 million, respectively, of leasing revenue related to this program, and \$32 million and \$117 million, respectively, for the same periods in 2019. The net carrying amount of operating lease vehicles under this program was immaterial as of September 30, 2020 and \$83 million as of December 31, 2019.

Energy Generation and Storage Sales

As of September 30, 2020 and December 31, 2019, deferred revenue related to non-refundable customer prepayments, remote monitoring service, and operations and maintenance service amounted to \$189 million and \$156 million, respectively. Revenue recognized from the deferred revenue balance as of December 31, 2019 and 2018 was \$31 million and \$27 million for the nine months ended September 30, 2020 and 2019, respectively. As of September 30, 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 \$95 million. Of this amount, we expect to recognize \$5 million in the next 12 months and the remaining over a period of up to 27 years.

Income Taxes

There are transactions that occur during the ordinary course of business for which the ultimate tax determination is uncertain. As of September 30, 2020 and December 31, 2019, the aggregate balances of our gross unrecognized tax benefits were \$264 million and \$273 million, respectively, of which \$239 million and \$247 million, respectively, would not give rise to changes in our effective tax rate since these tax benefits would increase a deferred tax asset that is currently fully offset by a valuation allowance.

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 three and nine months ended September 30, 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 three and nine months ended September 30, 2019, we increased net loss attributable to common stockholders by \$0 and \$8 million, respectively, 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 one of 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, 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 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 notes, we entered into convertible note hedges and warrants (see Note 10, *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.

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):

	<u>Three Months Ended September 30,</u>		<u>Nine Months Ended September 30,</u>	
	<u>2020</u>	<u>2019</u>	<u>2020</u>	<u>2019</u>
Weighted average shares used in computing net income (loss) per share of common stock, basic	937	897	927	882
Add:				
Stock-based awards	74	25	59	—
Convertible senior notes	52	—	45	—
Warrants	42	—	28	—
Weighted average shares used in computing net income (loss) per share of common stock, diluted	<u>1,105</u>	<u>922</u>	<u>1,059</u>	<u>882</u>

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):

	<u>Three Months Ended September 30,</u>		<u>Nine Months Ended September 30,</u>	
	<u>2020</u>	<u>2019</u>	<u>2020</u>	<u>2019</u>
Stock-based awards	1	37	0	61
Convertible senior notes	0	5	1	5

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, depending upon the specific jurisdictions issuing them, can take more than six months to be collected. These various factors may have a significant impact on our accounts receivable balance from period to period.

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 fair value of our restricted cash invested in commercial paper equals the carrying value using quoted prices in active markets (Level I). 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):

	September 30, 2020	December 31, 2019	September 30, 2019	December 31, 2018
Cash and cash equivalents	\$ 14,531	\$ 6,268	\$ 5,338	\$ 3,686
Restricted cash included in prepaid expenses and other current assets	174	246	233	193
Restricted cash included in other non-current assets	298	269	255	398
Total as presented in the consolidated statements of cash flows	<u>\$ 15,003</u>	<u>\$ 6,783</u>	<u>\$ 5,826</u>	<u>\$ 4,277</u>

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 ASU No. 2016-13, *Measurement of Credit Losses on Financial Instruments* ("ASC 326") 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 September 30, 2020 and December 31, 2019, the total outstanding balance of MyPower customer notes receivable, net of allowance for credit losses, was \$342 million and \$402 million, respectively, of which \$9 million was due in the next 12 months as of September 30, 2020 and December 31, 2019. As of September 30, 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 September 30, 2020.

Concentration of Risk

Credit Risk

Financial instruments that potentially subject us to a concentration of credit risk consist of cash and 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 September 30, 2020, one entity represented 10% or more of our total accounts receivable balance, which was related to sales of regulatory credits. As of December 31, 2019, no entity represented 10% 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 we have resumed operations at all of our manufacturing facilities, 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.

Operating Lease Vehicles

The gross cost of operating lease vehicles as of September 30, 2020 and December 31, 2019 was \$3.17 billion and \$2.85 billion, respectively. Operating lease vehicles on the consolidated balance sheets are presented net of accumulated depreciation of \$425 million and \$406 million, as of September 30, 2020 and December 31, 2019, 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 Power Purchase Agreements ("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):

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2020	2019	2020	2019
Accrued warranty—beginning of period	\$ 1,197	\$ 941	\$ 1,089	\$ 748
Warranty costs incurred	(77)	(59)	(220)	(175)
Net changes in liability for pre-existing warranties, including expirations and foreign exchange impact	(26)	(37)	6	36
Provision for warranty	175	138	394	374
Accrued warranty—end of period	\$ 1,269	\$ 983	\$ 1,269	\$ 983

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 September 30, 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 after December 15, 2020. Adoption of the ASU can either be on a modified retrospective or full retrospective basis. We are currently evaluating the impacts of this ASU on our consolidated financial statements.

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. This ASU 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. Adoption of the ASU is prospective. 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). Adoption of the ASU is either retrospective or prospective. We adopted the ASU prospectively on January 1, 2020. The ASU did not have a material impact on our consolidated financial statements.

Note 3 – Intangible Assets

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

	September 30, 2020				December 31, 2019			
	Gross Carrying Amount	Accumulated Amortization	Other	Net Carrying Amount	Gross Carrying Amount	Accumulated Amortization	Other	Net Carrying Amount
Finite-lived intangible assets:								
Developed technology	\$ 302	\$ (102)	\$ 1	\$ 201	\$ 291	\$ (72)	\$ 1	\$ 220
Trade names	3	(1)	—	2	3	(1)	1	3
Favorable contracts and leases, net	113	(30)	—	83	113	(24)	—	89
Other	38	(18)	1	21	38	(16)	—	22
Total finite-lived intangible assets	456	(151)	2	307	445	(113)	2	334
Indefinite-lived intangible assets:								
Gigafactory Nevada water rights	11	—	—	11	5	—	—	5
Total intangible assets	<u>\$ 467</u>	<u>\$ (151)</u>	<u>\$ 2</u>	<u>\$ 318</u>	<u>\$ 450</u>	<u>\$ (113)</u>	<u>\$ 2</u>	<u>\$ 339</u>

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

Three months ending December 31, 2020	\$ 13
2021	51
2022	50
2023	44
2024	27
Thereafter	122
Total	<u>\$ 307</u>

Note 4 – 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):

	September 30, 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)	\$ 9,211	\$ 9,211	\$ —	\$ —	\$ 1,632	\$ 1,632	\$ —	\$ —
Interest rate swap assets	—	—	—	—	1	—	1	—
Interest rate swap liabilities	(64)	—	(64)	—	(27)	—	(27)	—
Total	<u>\$ 9,147</u>	<u>\$ 9,211</u>	<u>\$ (64)</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):

	September 30, 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	\$ 558	\$ —	\$ 64	\$ 821	\$ 1	\$ 27

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

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2020	2019	2020	2019
Gross losses	\$ —	\$ 13	\$ 42	\$ 51
Gross gains	\$ 1	\$ —	\$ 1	\$ —

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 1.25% Convertible Senior Notes due in 2021, 2.375% Convertible Senior Notes due in 2022, 2.00% Convertible Senior Notes due in 2024, 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, 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):

	September 30, 2020		December 31, 2019	
	Carrying Value	Fair Value	Carrying Value	Fair Value
Convertible Senior Notes	\$ 3,769	\$ 27,531	\$ 3,729	\$ 6,110
5.30% Senior Notes due in 2025	\$ 1,784	\$ 1,866	\$ 1,782	\$ 1,748
Solar asset-backed notes	\$ 1,119	\$ 1,132	\$ 1,155	\$ 1,211
Solar loan-backed notes	\$ 146	\$ 151	\$ 175	\$ 189

Note 5 – Inventory

Our inventory consisted of the following (in millions):

	September 30, 2020	December 31, 2019
Raw materials	\$ 1,573	\$ 1,428
Work in process	572	362
Finished goods (1)	1,674	1,356
Service parts	399	406
Total	<u>\$ 4,218</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 three and nine months ended September 30, 2020, we recorded write-downs of \$26 million and \$108 million, respectively, in cost of revenues. During the three and nine months ended September 30, 2019, we recorded write-downs of \$24 million and \$113 million, respectively, in cost of revenues.

Note 6 – Solar Energy Systems, Net

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

	September 30, 2020	December 31, 2019
Solar energy systems in service	\$ 6,744	\$ 6,682
Initial direct costs related to customer solar energy system lease acquisition costs	103	102
	6,847	6,784
Less: accumulated depreciation and amortization	(897)	(723)
	5,950	6,061
Solar energy systems under construction	25	18
Solar energy systems pending interconnection	50	59
Solar energy systems, net (1)	\$ 6,025	\$ 6,138

- (1) As of September 30, 2020 and December 31, 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 7 – Property, Plant and Equipment, Net

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

	September 30, 2020	December 31, 2019
Machinery, equipment, vehicles and office furniture	\$ 7,943	\$ 7,167
Tooling	1,794	1,493
Leasehold improvements	1,291	1,087
Land and buildings	3,245	3,024
Computer equipment, hardware and software	782	595
Construction in progress	1,607	764
	16,662	14,130
Less: Accumulated depreciation	(4,814)	(3,734)
Total	\$ 11,848	\$ 10,396

Construction in progress is primarily comprised of construction of Gigafactory Berlin and Gigafactory Texas, Gigafactory Shanghai expansion and equipment and tooling related to the manufacturing of our products. 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 three and nine months ended September 30, 2020, we capitalized \$13 million and \$33 million, respectively, of interest. During the three and nine months ended September 30, 2019, we capitalized \$6 million and \$21 million, respectively, of interest.

Depreciation expense during the three and nine months ended September 30, 2020 was \$403 million and \$1.13 billion, respectively. Depreciation expense during the three and nine months ended September 30, 2019 was \$353 million and \$987 million, respectively. Gross property plant and equipment under finance leases as of September 30, 2020 and December 31, 2019 was \$2.22 billion and \$2.08 billion, respectively, with accumulated depreciation of \$732 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 September 30, 2020 and December 31, 2019, we had cumulatively capitalized costs of \$1.76 billion and \$1.73 billion, respectively, on the consolidated balance sheets in relation to the production equipment under our Panasonic arrangement.

Note 8 – Accrued Liabilities and Other

As of September 30, 2020 and December 31, 2019, accrued liabilities and other current liabilities consisted of the following (in millions):

	September 30, 2020	December 31, 2019
Accrued purchases (1)	\$ 711	\$ 638
Payroll and related costs	502	466
Taxes payable (2)	635	611
Accrued interest	51	86
Financing obligation, current portion	48	57
Accrued warranty reserve, current portion	400	344
Sales return reserve, current portion	461	272
Resale value guarantees, current portion	20	317
Operating lease liabilities, current portion	251	228
Other current liabilities	173	203
Total	<u>\$ 3,252</u>	<u>\$ 3,222</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.

Note 9 – Other Long-Term Liabilities

As of September 30, 2020 and December 31, 2019, other long-term liabilities consisted of the following (in millions):

	September 30, 2020	December 31, 2019
Accrued warranty reserve	\$ 869	\$ 745
Financing obligation	30	37
Sales return reserve	519	545
Resale value guarantees	36	36
Operating lease liabilities	1,101	956
Other non-current liabilities	494	372
Total other long-term liabilities	<u>\$ 3,049</u>	<u>\$ 2,691</u>

Note 10 –Debt

The following is a summary of our debt and finance leases as of September 30, 2020 (in millions):

	Net Carrying Value		Unpaid Principal Balance	Unused Committed Amount (1)	Contractual Interest Rates	Contractual Maturity Date
	Current	Long-Term				
Recourse debt:						
1.25%Convertible Senior Notes due in 2021 (" 2021 Notes")	\$ 1,350	—	1,376	\$ —	1.25%	March 2021
2.375%Convertible Senior Notes due in 2022 (" 2022 Notes")	249	678	977	—	2.375%	March 2022
2.00%Convertible Senior Notes due in 2024 (" 2024 Notes")	32	1,413	1,833	—	2.00%	May 2024
5.30%Senior Notes due in 2025 (" 2025 Notes")	—	1,784	1,800	—	5.30%	August 2025
Credit Agreement	—	1,885	1,885	281	3.3%	July 2023
Zero-Coupon Convertible Senior Notes due in 2020	3	—	3	—	0.0%	December 2020
Solar Bonds and other Loans	2	52	56	—	3.6%-5.8%	October 2020 - January 2031
Total recourse debt	1,636	5,812	7,930	281		
Non-recourse debt:						
Automotive Asset-backed Notes	857	1,027	1,892	—	0.2%-7.9%	August 2021-August 2024
Solar Asset-backed Notes	40	1,079	1,144	—	3.0%-7.7%	September 2024-February 2048
China Loan Agreements	—	592	592	1,650	4.0%	December 2020-December 2024
Cash Equity Debt	13	421	447	—	5.3%-5.8%	July 2033-January 2035
Solar Loan-backed Notes	13	133	151	—	4.8%-7.5%	September 2048-September 2049
Warehouse Agreements	36	267	303	797	1.7%-1.9%	September 2022
Solar TermLoans	154	—	155	—	3.7%	January 2021
Automotive Lease-backed Credit Facilities	17	18	35	144	1.9%-5.9%	September 2022-November 2022
Solar Renewable Energy Credit and other Loans	—	79	79	21	2.7%-5.1%	June 2022-February 2033
Total non-recourse debt	1,130	3,616	4,798	2,612		
Total debt	2,766	9,428	\$ 12,728	\$ 2,893		
Finance leases	360	1,131				
Total debt and finance leases	\$ 3,126	\$ 10,559				

The following is a summary of our debt and finance leases as of December 31, 2019 (in millions):

	Net Carrying Value		Unpaid	Unused		
	Current	Long-Term	Principal	Committed	Contractual	Contractual
			Balance	Amount (1)	Interest Rates	Maturity Date
Recourse debt:						
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	—	5.30%	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
Total recourse debt	253	7,010	7,898	499		
Non-recourse debt:						
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 TermLoans	8	152	161	—	5.4%	January 2021
Automotive Lease-backed Credit Facility	24	16	40	—	4.2%-5.9%	November 2022
Solar Renewable Energy Credit and other Loans	23	67	89	6	4.5%-7.4%	March 2020-June 2022
Total non-recourse debt	1,146	3,392	4,594	2,481		
Total debt	1,399	10,402	\$ 12,492	\$ 2,980		
Finance leases	386	1,232				
Total debt and finance leases	\$ 1,785	\$ 11,634				

- (1) 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 as may be described in the notes to the consolidated financial statements included in our reports on Form 10-K and Form 10-Q filed subsequent to December 31, 2019 (such as 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, our interests in financing funds or various other assets).

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 September 30, 2020, we were in material compliance with all financial debt covenants, which include minimum liquidity and expense-coverage balances and ratios.

2021 Notes, 2022 Notes and 2024 Notes

During the first quarter of 2020, we classified the carrying value of our 2021 Notes as current liabilities as the maturity date of the 2021 Notes is March 2021. During each of the quarters of 2020 through September 30, 2020, the closing price of our common stock exceeded 130% of the applicable conversion price of each of our 2021 Notes, 2022 Notes and 2024 Notes on at least 20 of the last 30 consecutive trading days of the quarter; causing the 2021 Notes, 2022 Notes and 2024 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 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, we reclassified \$26 million, representing the difference between the aggregate principal of our 2021 Notes and the carrying value as of September 30, 2020, as mezzanine equity from permanent equity on our consolidated balance sheet as of September 30, 2020. As we now expect to settle a portion of the 2022 and 2024 Notes in the fourth quarter of 2020, we reclassified \$249 million and \$32 million, respectively, of the carrying value of the 2022 and 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 September 30, 2020. Additionally, we reclassified \$13 million and \$9 million, respectively, representing the difference between the current portion of aggregate principal of our 2022 and 2024 Notes and the current portion of the carrying value as of September 30, 2020, as mezzanine equity from permanent equity on our consolidated balance sheet as of September 30, 2020. As the settlement of conversion of the remainder of the 2022 Notes and 2024 Notes would be in cash, shares of our common stock or a combination thereof is at our election, the liability is classified as non-current. Should the closing price conditions be met in a future quarter for any of these notes, such notes will be convertible at their holders' option during the immediately following quarter. The debt discounts recorded on the 2021 Notes, the 2022 Notes and the 2024 Notes is recognized as interest expense through the respective maturity dates of each note and early conversions can result in the acceleration of such recognition.

As adjusted to give effect to the Stock Split, each \$1,000 of principal of the 2021 Notes, 2022 Notes and 2024 Notes is now convertible into 13.8940 shares, 15.2670 shares and 16.1380 shares, respectively, of our common stock, which is equivalent to conversion prices of approximately \$71.97, \$65.50 and \$61.97 per share, respectively. Under the note hedge transactions we entered in connection with the issuance of the 2021 Notes, 2022 Notes and 2024 Notes, we have the option to purchase 19.2 million shares, 14.9 million shares and 29.7 million shares, respectively, for the 2021 Notes, 2022 Notes and 2024 Notes at prices of approximately \$71.97, \$65.50, and \$61.97 per share, respectively, as adjusted to give effect to the Stock Split. Additionally, in connection with the issuance of the 2021 Notes, 2022 Notes and 2024 Notes, we sold warrants whereby the holders of the warrants have the option to purchase 19.2 million shares, 14.9 million shares and 29.7 million shares, respectively, for the 2021 Notes, 2022 Notes and 2024 Notes at prices of approximately \$112.13, \$131.00, and \$121.50 per share, respectively, as adjusted to give effect to the Stock Split. 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 2021 Notes, 2022 Notes and 2024 Notes and to effectively increase the overall conversion price from approximately \$71.97, \$65.50, and \$61.97 per share, respectively, to approximately \$112.13, \$131.00, and \$121.50 per share, respectively.

Credit Agreement

In March 2020, we upsized our senior asset-based revolving credit agreement (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

During the second quarter of 2020, \$67 million in aggregate principal amount of the Zero-Coupon Convertible Senior Notes due in 2020 were converted, pursuant to which we issued 1.1 million shares of our common stock to the holders of such notes, as adjusted to give effect to the Stock Split.

During the third quarter of 2020, \$33 million in aggregate principal amount of the Zero-Coupon Convertible Senior Notes due in 2020 were converted, pursuant to which we issued 0.6 million shares of our common stock to the holders of such notes, as adjusted to give effect to the Stock Split.

As adjusted to give effect to the Stock Split, each \$1,000 of principal of the Zero-Coupon Convertible Senior Notes is now convertible into 16.6665 shares of our common stock, which is equivalent to a conversion price of \$60.00 per share.

Automotive Asset-backed Notes

In August 2020, we transferred beneficial interests related to certain leased vehicles into a special purpose entity 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.

China Loan Agreements

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 will mature in June 2021, the first anniversary of the first borrowing under the loan.

In September 2020, the revolving facility that one of our subsidiaries entered in September 2019 to finance vehicles in-transit to China matured.

Warehouse Agreements

In August 2020, one of our subsidiaries terminated the loan and security agreement entered in December 2018 (the “2018 Warehouse Agreement”) after having fully repaid all obligations thereunder. The loan and security agreement entered in August 2016 and amended and restated in August 2017 (the “2016 Warehouse Agreement”) is the only remaining facility under our Warehouse Agreements. In August 2020, we further amended and restated the 2016 Warehouse Agreement (the “A&R 2016 Warehouse Agreement”) to extend the maturity date to September 2022. The A&R 2016 Warehouse Agreement 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.

Automotive Lease-backed Credit Facilities

In September 2020, a special purpose entity 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 special purpose entity. Amounts drawn under this facility bear interests at 1.85% plus LIBOR and are non-recourse to our other assets.

Our credit agreement entered into by one of our Canadian subsidiaries in December 2016, previously referred to as the “Canada Credit Facility,” is also included in this caption.

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 includes the 0.25% Convertible Senior Notes due in 2019 (matured in March 2019), the 2021 Notes, the 2022 Notes and the 2024 Notes (in millions):

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2020	2019	2020	2019
Contractual interest coupon	\$ 19	\$ 19	\$ 58	\$ 45
Amortization of debt issuance costs	2	2	5	5
Amortization of debt discounts	50	43	138	104
Total	<u>\$ 71</u>	<u>\$ 64</u>	<u>\$ 201</u>	<u>\$ 154</u>

Note 11 – 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 September 30, 2020, 52 million shares were reserved and available for issuance under the 2019 Plan, as adjusted to give effect to the Stock Split.

2018 CEO Performance Award

In March 2018, our stockholders approved the Board of Directors' grant of 101,320,210 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 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 September 30, 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	Probable (1)
\$ 75.0	-	\$ 6.0	Probable
\$ 100.0	-	\$ 8.0	-
\$ 125.0	-	\$ 10.0	-
\$ 150.0	-	\$ 12.0	-
\$ 175.0	-	\$ 14.0	-

- (1) Under the terms of the award, this milestone will be achieved as of the date of issuance of this Quarterly Report on Form 10-Q.

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 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 market capitalization milestone period and the valuation of each tranche were 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. Upon vesting of a tranche, all unamortized expense for the tranche will be recognized immediately. Additionally, 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.

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 first 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 through the first quarter of 2022 as determined on the grant date for the second market capitalization milestone period and through the first quarter of 2023 as determined on the grant date for the third market capitalization milestone period, 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.

In October 2020, the market capitalization milestone of \$250.0 billion was achieved, and the operational milestone of annualized Adjusted EBITDA of \$4.5 billion will be achieved as of the date of issuance of this Quarterly Report on Form 10-Q. Accordingly, the fourth tranche of the 2018 CEO Performance Award will vest upon certification by the Board of Directors that such milestones have been achieved. Therefore, we expect that the remaining unamortized expense of \$122 million associated with the fourth market capitalization milestone period, which was previously expected to be recognized ratably in future quarters through the third quarter of 2023 as determined on the grant date, will be accelerated into the fourth quarter of 2020.

As of September 30, 2020, we had \$354 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 2.4 years. As of September 30, 2020, we had unrecognized stock-based compensation expense of \$888 million for the operational milestones that were considered not probable of achievement. For the three and nine months ended September 30, 2020, we recorded stock-based compensation expense of \$338 million and \$571 million, respectively, related to the 2018 CEO Performance Award, and \$56 million and \$167 million, respectively, for the same periods in 2019.

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 5,365,000 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 September 30, 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 September 30, 2020, we had unrecognized stock-based compensation expense of \$4 million for the performance milestone that was considered not probable of achievement. For the three and nine months ended September 30, 2020, and for the same periods in 2019, we did not record any additional stock-based compensation related to these awards.

2012 CEO Performance Award

In August 2012, our Board of Directors granted 26,374,505 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 September 30, 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 September 30, 2020, we had unrecognized stock-based compensation expense of \$6 million for the performance milestone that was considered not probable of achievement. For the three and nine months ended September 30, 2020, and for the same periods in 2019, we did not record any additional stock-based compensation expense related to the 2012 CEO Performance Award.

Our CEO historically earned a base salary that reflected the applicable minimum wage requirements under California law, and he was 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):

	<u>Three Months Ended September 30,</u>		<u>Nine Months Ended September 30,</u>	
	<u>2020</u>	<u>2019</u>	<u>2020</u>	<u>2019</u>
Cost of revenues	\$ 62	\$ 29	\$ 147	\$ 91
Research and development	76	72	214	216
Selling, general and administrative	405	98	740	307
Restructuring and other	—	—	—	3
Total	\$ 543	\$ 199	\$ 1,101	\$ 617

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 September 30, 2020, we had \$2.91 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 12 – 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, which was 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.

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 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, as 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 March 29 to April 12, 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, and the parties await a ruling. 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 October 2021. 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. 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. Trial is set for March 2022. Plaintiffs filed their motion for class certification on September 24, 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, 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 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 September 30, 2020, we had \$232 million of unused letters of credit outstanding.

Note 13 – 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):

	September 30, 2020	December 31, 2019
Assets		
Current assets		
Cash and cash equivalents	\$ 113	\$ 106
Accounts receivable, net	49	27
Prepaid expenses and other current assets	92	100
Total current assets	254	233
Operating lease vehicles, net	—	1,183
Solar energy systems, net	4,846	5,030
Other non-current assets	174	156
Total assets	\$ 5,274	\$ 6,602
Liabilities		
Current liabilities		
Accrued liabilities and other	\$ 70	\$ 80
Deferred revenue	10	78
Customer deposits	14	9
Current portion of debt and finance leases	871	608
Total current liabilities	965	775
Deferred revenue, net of current portion	174	264
Debt and finance leases, net of current portion	1,463	1,516
Other long-term liabilities	21	22
Total liabilities	\$ 2,623	\$ 2,577

Note 14 – Related Party Transactions

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 agreed to pay 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 15 – 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):

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2020	2019	2020	2019
Automotive segment				
Revenues	\$ 8,192	\$ 5,901	\$ 19,550	\$ 16,099
Gross profit	\$ 2,042	\$ 1,103	\$ 4,511	\$ 2,539
Energy generation and storage segment				
Revenues	\$ 579	\$ 402	\$ 1,242	\$ 1,095
Gross profit	\$ 21	\$ 88	\$ 53	\$ 139

The following table presents revenues by geographic area based on the sales location of our products (in millions):

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2020	2019	2020	2019
United States	\$ 4,215	\$ 3,127	\$ 10,073	\$ 8,937
China	1,744	669	4,044	2,138
Other	2,812	2,507	6,675	6,119
Total	\$ 8,771	\$ 6,303	\$ 20,792	\$ 17,194

The revenues in certain geographic areas were impacted by the price adjustments we made to our vehicle offerings during the nine months ended September 30, 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):

	September 30, 2020	December 31, 2019
United States	\$ 15,742	\$ 15,644
International	2,131	890
Total	\$ 17,873	\$ 16,534

ITEM 2. 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 Quarterly Report on Form 10-Q.

Overview

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 have produced 329,980 vehicles and delivered 318,980 vehicles through the third quarter. We are currently focused on increasing vehicle production, building new vehicle factories, developing and ramping our battery cell technology, increasing the affordability of our vehicles, and increasing our delivery capabilities.

In 2020, we have deployed 1.44 GWh of energy storage products and 119 MW of solar energy systems through the third quarter. We are currently focused on ramping production of energy storage products, improving our Solar Roof installation capabilities, and increasing market share of retrofit solar energy systems.

During the three and nine months ended September 30, 2020, we recognized total revenues of \$8.77 billion and \$20.79 billion, respectively, representing increases of \$2.47 billion and \$3.60 billion, respectively, over the same periods ended September 30, 2019. We continue to ramp production to enable increased deliveries and deployments of our products and further revenue growth.

During the three and nine months ended September 30, 2020, our net income attributable to common stockholders was \$331 million and \$451 million, respectively, representing favorable changes of \$188 million and \$1.42 billion, respectively, over the same periods ended September 30, 2019. 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.

We ended the third quarter of 2020 with \$14.53 billion in cash and cash equivalents, representing an increase of \$8.26 billion from the end of 2019. Our cash flows from operating activities during the nine month period ended September 30, 2020 was \$2.92 billion, compared to \$980 million during the same period ended September 30, 2019, and capital expenditures amounted to \$2.01 billion during the nine month period ended September 30, 2020, compared to \$915 million during the same period ended September 30, 2019. Sustained growth has allowed our business to fund itself, and we will see a number of capital-intensive projects in upcoming periods.

Management Opportunities, Challenges and Risks

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. Please see the "Results of Operations" section of this Item below and certain risk factors described in Part II, Item 1A, *Risk Factors* in this Quarterly Report on Form 10-Q, 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 vehicle models in production and under development, as of the date of this Quarterly Report on Form 10-Q:

Production Location	Vehicle Model(s)	Production Status
Fremont Factory	Model S and Model X	Active
	Model 3 and Model Y	Active
Gigafactory Shanghai	Model 3	Active
	Model Y	Constructing manufacturing facilities
Gigafactory Berlin	Model Y	Constructing manufacturing facilities
	Model 3	In development
Gigafactory Texas	Model Y	Constructing manufacturing facilities
	Cybertruck	In development
U.S location(s) TBD	Tesla Semi	In development
	Tesla Roadster	In development

Following a quarterly record for vehicle production in the third quarter of 2020, we are focused on further increasing production rates for Model 3 and Model Y in the rest of the year to at least the capacity that we have installed. The next phase of production growth will depend on the construction of Gigafactory Berlin, Gigafactory Texas and Model Y manufacturing facilities at Gigafactory Shanghai, 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. To that end, we recently announced our plans to develop and manufacture our own battery cells, with which we are targeting 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. With these efforts, we also hope to eventually release a future vehicle that is even more affordable than our current offerings.

However, these plans are subject to uncertainties inherent in establishing new manufacturing operations, which may be exacerbated by the number of concurrent international projects and any future impact from 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 manufacturing are key to our vehicles' affordability, and have allowed us to recently decrease Model 3 prices in China. 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. We believe that achieving a quarterly deliveries record in the third quarter of 2020 during an industry-wide downturn in the current global pandemic was aided by our undeterred commitment to our roadmap, the flexibility and resiliency of our operations, and greater consumer awareness of the demonstratively positive environmental impact from the worldwide reduction in fossil fuel consumption.

While such trends are encouraging signs of future demand for our vehicles and sustainable energy products, they are relatively recent indicators and 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 pandemic. In addition, improvements to the macroeconomic outlook may benefit the transportation industry as a whole, making it even more crucial for us to maintain the momentum that we have gained relative to a growing number of potential competitors, including in the electric vehicle market.

Automotive—Deliveries and Customer Infrastructure

Our vehicle delivery capability became a bottleneck on our total deliveries as our production increased to a record level, and we are focused on increasing our capacity and efficiency in this area. 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.

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, particularly for Megapack. 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.

Trends in Cash Flow, Capital Expenditures and Operating Expenses

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 Model Y and Solar Roof, constructing 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 at the high end of our range of \$2.5 to \$3.5 billion in 2020 and increase to \$4.5 to \$6.0 billion in each of the next two fiscal years.

Notwithstanding the capital-intensive projects that are in progress or planned, our business is now consistently generating cash flow from operations in excess of our level of capital spend, and in the third quarter of 2020 we also reduced the use of our working capital credit facilities. We expect our ability to be self-funding to continue as long as macroeconomic factors support current trends in our sales. Combined with better working capital management resulting in shorter days sales outstanding than days payable outstanding, our sales growth is also facilitating positive cash generation. We also opportunistically strengthened our liquidity through an at-the-market offering of common stock in September 2020, with net proceeds to us of approximately \$4.97 billion.

Likewise, as long as we see expanding sales, and excluding the impact of non-cash stock compensation expense attributable to the 2018 CEO Performance Award as explained below, we expect operating expenses relative to revenues to decrease as we additionally increase operational efficiency and process automation.

In March 2018, our stockholders approved the 2018 CEO Performance Award, with vesting contingent on our Board of Directors' certification of the achievement of specified 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. 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. During 2020, a number of operational milestones became probable and a number of 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 11, *Equity Incentive Plans—2018 CEO Performance Award*, to the consolidated financial statements included elsewhere in this Quarterly Report on Form 10-Q 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.

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 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, 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 Quarterly Report on Form 10-Q. 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.

For a description of our critical accounting policies and estimates, refer to Part II, Item 7, *Critical Accounting Policies and Estimates* in our Annual Report on Form 10-K for the year ended December 31, 2019. There have been no material changes to our critical accounting policies and estimates since our Annual Report on Form 10-K for the year ended December 31, 2019.

Recent Accounting Pronouncements

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

Results of Operations

Effects of COVID-19

The COVID-19 pandemic has impacted our business and financial results in 2020.

The temporary suspension of production at our factories during the first half of 2020 had caused production limitations that negatively impacted our deliveries for the first half of 2020. While we have 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 had instituted cost reduction initiatives across our business globally to be commensurate to the scope of our operations while they were scaled back. 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 idle capacity charges disclosed as well as 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)	<u>Three Months Ended September 30,</u>		<u>Change</u>		<u>Nine Months Ended September 30,</u>		<u>Change</u>	
	<u>2020</u>	<u>2019</u>	<u>\$</u>	<u>%</u>	<u>2020</u>	<u>2019</u>	<u>\$</u>	<u>%</u>
Automotive sales	\$ 7,346	\$ 5,132	\$ 2,214	43%	\$ 17,150	\$ 13,809	\$ 3,341	24%
Automotive leasing	265	221	44	20%	772	644	128	20%
Total automotive revenues	7,611	5,353	2,258	42%	17,922	14,453	3,469	24%
Services and other	581	548	33	6%	1,628	1,646	(18)	-1%
Total automotive & services and other segment revenue	8,192	5,901	2,291	39%	19,550	16,099	3,451	21%
Energy generation and storage segment revenue	579	402	177	44%	1,242	1,095	147	13%
Total revenues	<u>\$ 8,771</u>	<u>\$ 6,303</u>	<u>\$ 2,468</u>	<u>39%</u>	<u>\$ 20,792</u>	<u>\$ 17,194</u>	<u>\$ 3,598</u>	<u>21%</u>

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 by quarter depending on when a contract is executed with a buyer and when the credits are delivered. For example, our revenue from regulatory credit sales in the three months ended September 30, 2019 was \$134 million while it was \$397 million in the three months ended September 30, 2020.

Automotive leasing revenue includes the amortization of revenue for Model S, Model X, Model 3 and Model Y 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.

Automotive sales revenue increased \$2.21 billion, or 43%, in the three months ended September 30, 2020 as compared to the three months ended September 30, 2019, primarily due to an increase of 41,820 Model 3 and Model Y cash deliveries at relatively consistent combined average selling prices from production ramping at both Gigafactory Shanghai and the Fremont Factory. Additionally, we had an increase of \$263 million from additional sales of regulatory credits to \$397 million in the three months ended September 30, 2020. These increases were partially offset by 1,596 fewer Model S and Model X cash deliveries at relatively consistent combined average selling prices in the three months ended September 30, 2020 compared to the same period in the prior year.

Automotive sales revenue increased \$3.34 billion, or 24%, in the nine months ended September 30, 2020 as compared to the nine months ended September 30, 2019, primarily due to an increase of 66,685 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 \$718 million from additional sales of regulatory credits to \$1.18 billion in the nine months ended September 30, 2020. Additionally, due to pricing adjustments we made to our vehicle offerings during the nine months ended September 30, 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 nine months ended September 30, 2020. These factors increasing automotive sales revenue were partially offset by a decrease in the average selling price of Model 3 from inclusion of lower priced China manufactured Model 3 and an increase in Standard Range variants in our overall sales mix and 8,841 fewer Model S and Model X cash deliveries at relatively consistent combined average selling prices in the nine months ended September 30, 2020 compared to the same period in the prior year.

Automotive leasing revenue increased \$44 million, or 20%, in the three months ended September 30, 2020 as compared to the three months ended September 30, 2019, primarily due to the introduction of direct sales-type leasing programs which we began offering in volume during the third quarter of 2020 and where we recognize all revenue associated with the sales-type lease upon delivery to the customer. Additionally, we had an increase in cumulative vehicles under our direct operating lease program. These increases were partially offset by the decreases in automotive leasing revenue associated with our resale value guarantee leasing programs which are accounted for as operating leases as those portfolios are declining.

Automotive leasing revenue increased \$128 million, or 20%, in the nine months ended September 30, 2020 as compared to the nine months ended September 30, 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 are declining.

Services and other revenue increased \$33 million, or 6%, in the three months ended September 30, 2020 as compared to the three months ended September 30, 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 the volume of traded-in Tesla vehicles sales at lower average selling prices. These increases were partially offset by a decrease in the volume of traded-in non-Tesla vehicle sales at lower average selling prices.

Services and other revenue decreased \$18 million, or 1%, in the nine months ended September 30, 2020 as compared to the nine months ended September 30, 2019, primarily due to a decrease in the volume of used vehicle sales at increased average selling prices as traded-in Tesla vehicles made up a larger portion of the overall sales mix, partially offset by an increase in non-warranty maintenance services revenue as our fleet continues to grow, an overall increase in retail merchandise revenue and an increase in sales by our acquired subsidiaries to third party customers due to additional acquired subsidiaries since 2019.

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.

Energy generation and storage revenue increased by \$177 million, or 44%, in the three months ended September 30, 2020 as compared to the three months ended September 30, 2019, primarily due to increases in deployments of Megapack, Powerwall and solar cash and loan jobs, partially offset by reduced average selling prices on our solar cash and loan jobs as a result of our low cost solar strategy.

Energy generation and storage revenue increased by \$147 million, or 13%, in the nine months ended September 30, 2020 as compared to the nine months ended September 30, 2019, primarily due to increases in deployments of Megapack 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.

Cost of Revenues and Gross Margin

(Dollars in millions)	<u>Three Months Ended September 30,</u>		<u>Change</u>		<u>Nine Months Ended September 30,</u>		<u>Change</u>	
	<u>2020</u>	<u>2019</u>	<u>\$</u>	<u>%</u>	<u>2020</u>	<u>2019</u>	<u>\$</u>	<u>%</u>
Cost of revenues								
Automotive sales	\$ 5,361	\$ 4,014	\$ 1,347	34%	\$ 12,774	\$ 11,124	\$ 1,650	15%
Automotive leasing	145	117	28	24%	415	340	75	22%
Total automotive cost of revenues	5,506	4,131	1,375	33%	13,189	11,464	1,725	15%
Services and other	644	667	(23)	-3%	1,850	2,096	(246)	-12%
Total automotive & services and other segment cost of revenues	6,150	4,798	1,352	28%	15,039	13,560	1,479	11%
Energy generation and storage segment	558	314	244	78%	1,189	956	233	24%
Total cost of revenues	<u>\$ 6,708</u>	<u>\$ 5,112</u>	<u>\$ 1,596</u>	<u>31%</u>	<u>\$ 16,228</u>	<u>\$ 14,516</u>	<u>\$ 1,712</u>	<u>12%</u>
Gross profit total automotive	\$ 2,105	\$ 1,222			\$ 4,733	\$ 2,989		
Gross margin total automotive	28%	23%			26%	21%		
Gross profit total automotive & services and other segment	\$ 2,042	\$ 1,103			\$ 4,511	\$ 2,539		
Gross margin total automotive & services and other segment	25%	19%			23%	16%		
Gross profit energy generation and storage segment	\$ 21	\$ 88			\$ 53	\$ 139		
Gross margin energy generation and storage segment	4%	22%			4%	13%		
Total gross profit	\$ 2,063	\$ 1,191			\$ 4,564	\$ 2,678		
Total gross margin	24%	19%			22%	16%		

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, manufacturing overhead associated with the sales by our acquired subsidiaries to third party customers.

Cost of automotive sales revenue increased \$1.35 billion, or 34%, in the three months ended September 30, 2020 as compared to the three months ended September 30, 2019, primarily due to an increase of 41,820 Model 3 and Model Y cash deliveries, partially offset by a decrease in average Model 3 costs per unit due to a higher sales mix of lower end trims and lower freight and duty costs from local production in China. Additionally, there was a decrease of 1,596 Model S and Model X cash deliveries.

Cost of automotive sales revenue increased \$1.65 billion, or 15%, in the nine months ended September 30, 2020 as compared to the nine months ended September 30, 2019, primarily due to an increase of 66,685 Model 3 and Model Y cash deliveries. Due to pricing adjustments we made to our vehicle offerings during the nine months ended September 30, 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 nine months ended September 30, 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 a higher sales mix of lower end trims, lower freight and duty costs from local production in China, and additional manufacturing efficiencies in the production of Model 3 in our Fremont Factory, as well as a decrease of 8,841 Model S and Model X cash deliveries in the nine months ended September 30, 2020 compared to the same period in the prior year.

Cost of automotive leasing revenue increased \$28 million, or 24%, in the three months ended September 30, 2020 compared to the three months ended September 30, 2019, primarily due to the introduction of direct sales-type leasing programs which we began offering in volume during the third quarter of 2020 and where we recognize all revenue associated with the sales-type lease upon delivery to the customer. Additionally, we had an increase in cumulative vehicles under our direct operating lease program. These increases were partially offset by the decreases in cost of automotive leasing revenue associated with our resale value guarantee leasing programs which are accounted for as operating leases as those portfolios are declining.

Cost of automotive leasing revenue increased \$75 million, or 22%, in the nine months ended September 30, 2020 as compared to the nine months ended September 30, 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 and 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 lease revenue associated with our resale value guarantee leasing programs which are accounted for as operating leases as those portfolios are declining.

Cost of services and other revenue decreased \$23 million, or 3%, in the three months ended September 30, 2020 as compared to the three months ended September 30, 2019, primarily due to decreased costs of used vehicle sales from a decrease in the volume of traded-in non-Tesla vehicle sales, partially offset by increases in non-warranty maintenance services as our fleet continues to grow and an increase in costs of used vehicle sales from an increase in the volume of traded-in Tesla vehicles.

Cost of services and other revenue decreased \$246 million, or 12%, in the nine months ended September 30, 2020 as compared to the nine months ended September 30, 2019, primarily due to decreased costs of used vehicle sales from lower sales volume, partially offset by increases in non-warranty maintenance services as our fleet continues to grow, increase in cost of sales by our acquired subsidiaries to third party customers in line with the increase in revenue and an increase in costs of retail merchandise as our sales have increased.

Gross margin for total automotive increased from 23% to 28% in the three months ended September 30, 2020 as compared to the three months ended September 30, 2019, primarily due to an increase of \$263 million in sales of regulatory credits and an improvement of Model 3 gross margin primarily from lower freight and duty costs from local production in China, partially offset by a decrease in average selling prices of Model 3 from inclusion of lower priced China manufactured Model 3 in our sales mix in the three months ended September 30, 2020.

Gross margin for total automotive increased from 21% to 26% in the nine months ended September 30, 2020 as compared to the nine months ended September 30, 2019, primarily due to an improvement of Model 3 gross margin primarily from lower freight and duty costs from local production in China and additional manufacturing efficiencies in the production of Model 3 in our Fremont Factory, partially offset by a decrease in average selling prices of Model 3 from inclusion of lower priced China manufactured Model 3 and an increase in Standard Range variants in our overall sales mix. Additionally, there was an increase of \$718 million in sales of regulatory credits. These increases were partially offset by 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.

Gross margin for total automotive & services and other segment increased from 19% to 25% in the three months ended September 30, 2020 as compared to the three months ended September 30, 2019, primarily due to the automotive gross margin impacts discussed above and improved services and other gross margin from improved used vehicle sales gross margins. Additionally, there was an increase due to a lower proportion of services and other, which operates at a lower gross margin than our automotive business, within the segment in the three months ended September 30, 2020.

Gross margin for total automotive & services and other segment increased from 16% to 23% in the nine months ended September 30, 2020 as compared to the nine months ended September 30, 2019 primarily due to the automotive gross margin impacts discussed above and improved services and other gross margin from improved used vehicle sales gross margins and increased operational efficiencies in our non-warranty maintenance services business. Additionally, there was an increase due to a lower proportion of services and other, which operates at a lower gross margin than our automotive business, within the segment in the nine months ended September 30, 2020.

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.

Cost of energy generation and storage revenue increased by \$244 million, or 78%, in the three months ended September 30, 2020 as compared to the three months ended September 30, 2019, primarily due to increases in deployments of Megapack, Powerwall, solar cash and loan jobs and higher costs from temporary manufacturing underutilization of our Solar Roof ramp.

Cost of energy generation and storage revenue increased by \$233 million, or 24%, in the nine months ended September 30, 2020 as compared to the nine months ended September 30, 2019, primarily due to increases in deployments of Megapack and Powerwall, higher costs from temporary manufacturing underutilization of our Solar Roof ramp 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 22% to 4% in the three months ended September 30, 2020 as compared to the three months ended September 30, 2019, primarily due to lower gross margins in our solar cash and loan business driven by higher costs from temporary manufacturing underutilization of our Solar Roof ramp and reduced average selling prices on our solar cash and loan jobs as a result of our low cost solar strategy.

Gross margin for energy generation and storage decreased from 13% to 4% in the nine months ended September 30, 2020 as compared to the nine months ended September 30, 2019, primarily due to lower gross margins in our solar cash and loan business driven by higher costs from temporary manufacturing underutilization of our Solar Roof ramp and reduced average selling prices on our solar cash and loan jobs as a result of our low cost solar strategy, partially offset by an improvement in our energy storage gross margin as a result of lower material costs.

Research and Development Expense

(Dollars in millions)	<u>Three Months Ended September 30,</u>		<u>Change</u>		<u>Nine Months Ended September 30,</u>		<u>Change</u>	
	<u>2020</u>	<u>2019</u>	<u>\$</u>	<u>%</u>	<u>2020</u>	<u>2019</u>	<u>\$</u>	<u>%</u>
Research and development	\$ 366	\$ 334	\$ 32	10%	\$ 969	\$ 998	\$ (29)	-3%
As a percentage of revenues	4%	5%			5%	6%		

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 \$32 million, or 10%, in the three months ended September 30, 2020 compared to the three months ended September 30, 2019. The increase was primarily due to a \$10 million increase in expensed materials, an \$8 million increase in employee and labor related expenses and a \$7 million increase in facilities, freight and depreciation.

R&D expenses as a percentage of revenue decreased from 5% to 4% in the three months ended September 30, 2020 as compared to the three months ended September 30, 2019. The decrease is primarily from an increase in total revenues from expanding sales, partially offset by an increase in our R&D expenses as detailed above.

R&D expenses decreased \$29 million, or 3%, in the nine months ended September 30, 2020 as compared to the nine months ended September 30, 2019. The decrease was primarily due to a \$41 million decrease in employee and labor related expenses partially offset by an \$15 million increase in facilities, freight and depreciation expenses. The decreases observed were driven by our continued focus on increasing operational efficiency and process automation and from our cost savings initiatives as part of our COVID-19 response strategy as discussed above.

R&D expenses as a percentage of revenue decreased from 6% to 5% in the nine months ended September 30, 2020 as compared to the nine months ended September 30, 2019. The decrease is primarily an increase in total revenues from expanding sales and a decrease in our R&D expenses as detailed above.

Selling, General and Administrative Expense

(Dollars in millions)	<u>Three Months Ended September 30,</u>		<u>Change</u>		<u>Nine Months Ended September 30,</u>		<u>Change</u>	
	<u>2020</u>	<u>2019</u>	<u>\$</u>	<u>%</u>	<u>2020</u>	<u>2019</u>	<u>\$</u>	<u>%</u>
Selling, general and administrative	\$ 888	\$ 596	\$ 292	49%	\$ 2,176	\$ 1,947	\$ 229	12%
As a percentage of revenues	10%	9%			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 \$292 million, or 49%, in the three months ended September 30, 2020 as compared to the three months ended September 30, 2019. The increase was primarily due to an increase of \$307 million in stock-based compensation expense, of which \$282 million was attributable to the 2018 CEO Performance Award. We had recorded a \$77 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 third quarter of 2020 and the remaining unamortized expense of \$95 million and \$118 million for the second and third tranches were recognized in the third quarter of 2020 upon vesting as the second and third market capitalization milestones were achieved (see Note 11, *Equity Incentive Plans*, to the consolidated financial statements included elsewhere in this Quarterly Report on Form 10-Q). The remaining stock-based compensation expense increase of \$25 million attributable to other directors and employees is primarily related to the issuance of equity awards in the current year at higher grant date fair values due to our increased share price. Additionally, there was an increase of \$48 million in employee and related expenses primarily due to headcount increases, partially offset by a reduction to operating expenses for costs previously incurred of \$43 million for the settlement in part of the securities litigation relating to the SolarCity acquisition (see Note 12, *Commitments and Contingencies—Legal Proceedings—Securities Litigation Relating to the SolarCity Acquisition*, to the consolidated financial statements included elsewhere in this Quarterly Report on Form 10-Q).

SG&A expenses as a percentage of revenue increased from 9% to 10% in the three months ended September 30, 2020 as compared to the three months ended September 30, 2019. The increase is primarily due to an increase in our SG&A expenses as detailed above, partially offset by an increase in total revenues from expanding sales.

SG&A expenses increased \$229 million, or 12%, in the nine months ended September 30, 2020 as compared to the nine months ended September 30, 2019. The increase is primarily due to an increase of \$433 million in stock-based compensation expense, of which \$404 million was attributable to the 2018 CEO Performance Award. We had recorded \$156 million cumulative catch-up expense for the service provided from the grant date when two operational milestones were considered probable of being met in the nine months ended September 30, 2020 and the remaining unamortized expense of \$235 million for the first three tranches were recognized in the nine months ended September 30, 2020 upon vesting as the first three market capitalization milestones were achieved (see Note 11, *Equity Incentive Plans*, to the consolidated financial statements included elsewhere in this Quarterly Report on Form 10-Q). The remaining stock-based compensation expense increase of \$29 million attributable to other directors and employees is primarily related to the issuance of equity awards in the current year 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 \$88 million in office, information technology and facilities-related expenses and sales and marketing activities and a decrease of \$76 million in employee and related expenses. The decreases observed were driven by our continued focus on increasing operational efficiency and process automation and from our cost savings initiatives as part of our COVID-19 response strategy as discussed above. Additionally, there was a reduction to operating expenses for costs previously incurred of \$43 million for the settlement in part of the securities litigation relating to the SolarCity acquisition (see Note 12, *Commitments and Contingencies—Legal Proceedings—Securities Litigation Relating to the SolarCity Acquisition*, to the consolidated financial statements included elsewhere in this Quarterly Report on Form 10-Q).

SG&A expenses as a percentage of revenue decreased from 11% to 10% in the nine months ended September 30, 2020 as compared to the nine months ended September 30, 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)	<u>Three Months Ended September 30,</u>		<u>Change</u>		<u>Nine Months Ended September 30,</u>		<u>Change</u>	
	<u>2020</u>	<u>2019</u>	<u>\$</u>	<u>%</u>	<u>2020</u>	<u>2019</u>	<u>\$</u>	<u>%</u>
Restructuring and other	\$ —	\$ —	\$ —	Not meaningful	\$ —	\$ 161	\$ (161)	-100%
As a percentage of revenues	0%	0%			0%	1%		

During the first half of 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. These costs were substantially paid by the end of second quarter of 2019. During the second quarter of 2019, we recognized \$47 million in impairment related to IPR&D as we abandoned further development efforts and \$15 million for the related equipment. We also incurred a loss of \$49 million for closing certain facilities. There were no restructuring actions in the three and nine months ended September 30, 2020.

Interest Expense

(Dollars in millions)	<u>Three Months Ended September 30,</u>		<u>Change</u>		<u>Nine Months Ended September 30,</u>		<u>Change</u>	
	<u>2020</u>	<u>2019</u>	<u>\$</u>	<u>%</u>	<u>2020</u>	<u>2019</u>	<u>\$</u>	<u>%</u>
Interest expense	\$ (163)	\$ (185)	\$ 22	-12%	\$ (502)	\$ (515)	\$ 13	-3%
As a percentage of revenues	2%	3%			2%	3%		

Interest expense decreased by \$22 million, or 12%, in the three months ended September 30, 2020 as compared to the three months ended September 30, 2019, primarily due to a decrease in our weighted average interest rate as compared to the three months ended September 30, 2020.

Interest expense decreased by \$13 million, or 3%, in the nine months ended September 30, 2020 as compared to the nine months ended September 30, 2019, primarily due to an increase of \$12 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 (Expense) Income, Net

(Dollars in millions)	Three Months Ended September 30,		Change		Nine Months Ended September 30,		Change	
	2020	2019	\$	%	2020	2019	\$	%
Other (expense) income, net	\$ (97)	\$ 85	\$ (182)	-214%	\$ (166)	\$ 70	\$ (236)	-337%
As a percentage of revenues	1%	1%			1%	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 \$182 million, in the three months ended September 30, 2020 as compared to the three months ended September 30, 2019. Other (expense) income, net, changed unfavorably by \$236 million, in the nine months ended September 30, 2020 as compared to the nine months ended September 30, 2019. The unfavorable changes were primarily due to unfavorable fluctuations in foreign currency exchange rates compared to the three and nine months ended September 30, 2019.

Provision for Income Taxes

(Dollars in millions)	Three Months Ended September 30,		Change		Nine Months Ended September 30,		Change	
	2020	2019	\$	%	2020	2019	\$	%
Provision for income taxes	\$ 186	\$ 26	\$ 160	615%	\$ 209	\$ 68	\$ 141	207%
Effective tax rate	34%	15%			27%	-8%		

Our provision for income taxes increased by \$160 million, or 615%, in the three months ended September 30, 2020 as compared to the three months ended September 30, 2019. Our provision for income taxes increased by \$141 million, or 207%, in the nine months ended September 30, 2020 as compared to the nine months ended September 30, 2019. The increases were primarily due to the substantial increases in taxable profits within our foreign jurisdictions year-over-year.

Our effective tax rate increased from 15% to 34% in the three months ended September 30, 2020 as compared to the three months ended September 30, 2019. Our effective tax rate increased from -8% to 27% in the nine months ended September 30, 2020 as compared to the nine months ended September 30, 2019. The increases were primarily due to substantial pre-tax income in the three and nine months ended September 30, 2020 as compared to a smaller pre-tax income in the three months and pre-tax loss for the nine months ended September 30, 2019.

Net Income Attributable to Noncontrolling Interests and Redeemable Noncontrolling Interests

(Dollars in millions)	Three Months Ended September 30,		Change		Nine Months Ended September 30,		Change	
	2020	2019	\$	%	2020	2019	\$	%
Net income attributable to noncontrolling interests and redeemable noncontrolling interests in subsidiaries	\$ 38	\$ 7	\$ 31	443%	\$ 115	\$ 60	\$ 55	92%

Our net income attributable to noncontrolling interests and redeemable noncontrolling interests was related to financing fund arrangements.

Net income attributable to noncontrolling interests and redeemable noncontrolling interests increased by \$31 million, or 443%, in the three months ended September 30, 2020 as compared to the three months ended September 30, 2019. Net income attributable to noncontrolling interests and redeemable noncontrolling interests increased by \$55 million, or 92%, in the nine months ended September 30, 2020 as compared to the nine months ended September 30, 2019. The increases were primarily due to lower activities from new financing fund arrangements.

Liquidity and Capital Resources

As of September 30, 2020, we had \$14.53 billion of cash and cash equivalents. Balances held in foreign currencies had a U.S. dollar equivalent of \$3.85 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, production at existing manufacturing facilities, the continued expansion of Gigafactory Nevada and Gigafactory Shanghai, the construction of Gigafactory Berlin and Gigafactory Texas, 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, Supercharger network, and energy product installation capabilities.

As discussed in and subject to the considerations referenced in Part I, Item 2, *Management's Discussion and Analysis of Financial Condition and Results of Operations—Management Opportunities, Challenges and Risks—Trends in Cash Flow, Capital Expenditures and Operating Expenses* in this Quarterly Report on Form 10-Q, we currently expect our capital expenditures to be at the high end of our range of \$2.5 to \$3.5 billion in 2020 and increase to \$4.5 to \$6.0 billion 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, we expect that part of our investment in our future factories will be funded through indebtedness arranged through local financial institutions, such as the credit facilities that our local subsidiary has entered into to support construction and production at Gigafactory Shanghai. See Note 10, *Debt*, to the consolidated financial statements included elsewhere in this Quarterly Report on Form 10-Q. 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 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 as of April 30, 2020 with our applicable targets under such agreement. We do not currently expect any issues meeting all applicable future obligations under this agreement, 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, even considering the anticipated increase in capital expenditures in the 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, the pace of our capital expenditures may be correspondingly slowed. 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 \$2.92 billion of unused committed amounts under our credit facilities and financing funds as of September 30, 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 10, *Debt*, and Note 13, *Variable Interest Entity Arrangements*, to the consolidated financial statements included elsewhere in this Quarterly Report on Form 10-Q.

Summary of Cash Flows

(Dollars in millions)	Nine Months Ended September 30,			
	2020		2019	
Net cash provided by operating activities	\$	2,924	\$	980
Net cash used in investing activities	\$	(2,085)	\$	(1,033)
Net cash provided by financing activities	\$	7,281	\$	1,608

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 \$1.94 billion to \$2.92 billion during the nine months ended September 30, 2020 from \$980 million during the nine months ended September 30, 2019. This favorable change was primarily due to an increase in net income, excluding non-cash expenses and gains, of \$2.23 billion 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 was classified as an operating activity, as this represented an interest payment on the discounted convertible notes), partially offset by an increase in our net operating assets and liabilities of \$478 million. The increase in our net operating assets and liabilities was mainly driven by a smaller increase in deferred revenue in the nine months ended September 30, 2020 as compared to the same period in 2019 due to delivery of regulatory credits under a previous arrangement where we had received payment in advance, larger increases in accounts receivable from increase in receivables of government rebates already passed through to customers and regulatory credits, and 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. The increase in our net operating assets and liabilities was partially offset by a larger increase in accounts payable and accrued liabilities from ramp up in production at the Fremont Factory and Gigafactory Shanghai.

Cash Flows from Investing Activities

Cash flows from investing activities and their variability across each period related primarily to capital expenditures, which were \$2.01 billion during the nine months ended September 30, 2020, mainly for Model Y production expansion at the Fremont Factory and construction of Gigafactory Shanghai, Gigafactory Berlin and Gigafactory Texas, and \$915 million during the nine months ended September 30, 2019, mainly for Gigafactory Shanghai and Model 3 production expansion. Design, acquisition and installation of solar energy systems amounted to \$62 million and \$68 million for the nine months ended September 30, 2020 and 2019, respectively. Additionally, we also paid \$13 million and \$45 million, net of the cash acquired, for business combinations in the nine months ended September 30, 2020 and September 30, 2019, respectively.

Cash Flows from Financing Activities

Cash flows from financing activities during the nine months ended September 30, 2020 consisted primarily of \$4.97 billion from issuance of common stock through the at-the-market offering program in September 2020, net of issuance cost, \$2.31 billion from our February 2020 public offering of common stock, net of issuance costs, \$361 million of proceeds from exercise of stock options and other stock issuances, and \$315 million net borrowings from the automotive asset-backed notes. These cash inflows were partially offset by \$248 million principal repayments of our finance leases, collateralized lease repayments of \$224 million, and \$173 million net payments to financing fund investors.

Cash flows from financing activities during the nine months ended September 30, 2019 consisted primarily of \$1.82 billion from the issuance of the 2024 Notes, net of transaction costs, and \$847 million from the issuance of common stock, net of underwriting discounts and offering costs, in registered public offerings, \$494 million of net borrowings under our Warehouse Agreements, \$287 million of net borrowings under the Credit Agreement, 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 purchase of convertible note hedges of \$476 million in connection with the offering of the 2024 Notes, repayments of \$345 million of the automotive asset-backed notes and collateralized lease repayments of \$302 million.

Contractual Obligations

Contractual obligations did not materially change during the nine months ended September 30, 2020 except for debt and finance lease activity, as discussed in more detail in Note 10, *Debt*, and the aggregate impact of new and updated supplier arrangements for Gigafactory Shanghai, Gigafactory Berlin and Gigafactory Texas during the nine months ended September 30, 2020. The following tables sets forth the aggregate impact from these supplier arrangements on our purchase obligations as of September 30, 2020 (in millions):

Three months ending December 31, 2020	\$	1,307
2021		495
Total	\$	<u>1,802</u>

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 3. 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 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 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 nine months ended September 30, 2020, we recognized a net foreign currency loss of \$144 million in other (expense) income, net, with our largest re-measurement exposures from the U.S. dollar, euro and Chinese yuan as our subsidiaries' monetary assets and liabilities are denominated in various local currencies. For the nine months ended September 30, 2019, we recognized a net foreign currency gain of \$102 million in other (expense) income, net, with our largest re-measurement exposures from the U.S. dollar, euro 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 \$108 million at September 30, 2020 and \$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 nine months ended September 30, 2020 and 2019 by \$4 million and \$7 million, respectively.

ITEM 4. 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 September 30, 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.

Changes in Internal Control over Financial Reporting

There were no changes in our internal control over financial reporting, as identified in connection with the evaluation required by Rule 13a-15(d) and Rule 15d-15(d) of the Exchange Act, that occurred during the three months ended September 30, 2020 that have materially affected, or are reasonably likely to materially affect, our internal control over financial reporting.

PART II OTHER INFORMATION

ITEM 1. LEGAL PROCEEDINGS

For a description of our material pending legal proceedings, please see Note 12, *Commitments and Contingencies*, to the consolidated financial statements included elsewhere in this Quarterly Report on Form 10-Q.

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 Tesla 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.

The German Umweltbundesamt (“UBA”) 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.

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 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 resulted in challenges in or postponements for our new vehicle deliveries, used vehicle sales, and energy product deployments in 2020. Global macroeconomic conditions and changes to levels of consumer outlook and spend in the future may further adversely impact the automotive and energy product industries. 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, as we did with aluminum spot welding and high-speed blow forming systems, large display screens, dual motor drivetrain, hardware for our Autopilot and FSD hardware, falcon-wing doors, heat pump and octovalve system, and larger castings. There is no guarantee that we will be able to successfully and timely introduce and scale such processes or features. Finally, because our vehicle models share certain manufacturing resources, any issues with the production of one model may negatively impact the production of other models.

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 at high volumes and even less experience building and ramping vehicle production lines across multiple factories in different geographies. Moreover, it is still relatively early in the production ramp of Model Y, which commenced in January 2020. 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 the Solar Roof; new product 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.

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 this 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 logistical 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 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, 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 and 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, 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. 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 able to sustainably meet our timelines or our cost, quality and volume needs, or may increase prices to do so, requiring 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, particularly with highly-customized components. 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 experience issues with lithium-ion cells or other components manufactured at Gigafactory Nevada, which may harm the production and profitability of our products, including Model 3, Model Y and our 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 components for Model 3 and Model Y, such as battery modules incorporating the cells produced by Panasonic and drive units (including to support Gigafactory Shanghai production), at Gigafactory Nevada, and 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 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, 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. Moreover, we have announced our intention 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. If we experience any issues or delays in meeting our projected timelines, costs, capital efficiency and production capacity for our new factories, implementing 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.

In particular, local manufacturing is critical to our expansion and sales in China, which is the largest market for electric vehicles in the world. We are currently manufacturing Model 3 at Gigafactory Shanghai and constructing its next phase to add Model Y manufacturing capacity there, and we will need demand to keep pace with our planned production. Our vehicle sales in China have also been harmed in the past by certain tariffs on automobiles manufactured in the U.S., such as our vehicles. If we are not able to successfully and timely ramp Gigafactory Shanghai as planned, we may be exposed to the impact of such unfavorable tariffs, duties or costs to our detriment compared to locally-based competitors, or be unable to offer our products in China at competitive prices, or at all.

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 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 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. In particular, the operation of our vehicles is 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 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, including BMW, Ford, Lexus, Mercedes, Volkswagen Group and Volvo. 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 other vehicle applications and software platforms. In some cases, our competitors offer or will offer alternative fuel 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 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 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. Moreover, if prices for components we use decline, such as has been the case with solar product components, it may put additional pressure on the costs we incur for such components.

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 the United States, Canada, China, Germany and the U.K. Depending on the country, such arrangements are available for certain 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.

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, 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. 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 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 according to the type of construction. 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. The benefit available under net energy 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 (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 the ITC 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 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 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. 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 \$41.2 million to the SUNY Foundation for such year, 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 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, 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 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. 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.

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 internationally. 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 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, 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. Certain existing or proposed regulations and policies would limit the economic or practical benefits of our energy systems for our customers. If such regulations and policies are continued or 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 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 has 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. 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.

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. 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, concerns of corrosion in Model S and Model X power steering assist motor bolts, and certain suspension failures in Model S and Model X. 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, even if attributable to unique local circumstances and without indication of actual harm, such as our recall in China of certain Model S and Model X to replace suspension linkages. In the future, we may voluntarily or involuntarily initiate recalls if any of our products, including as a result of 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 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 warranties on the installation and maintenance of our energy generation and storage systems we sell as well as on their components; for components not manufactured by us, we pass through to our customers the inverter and panel manufacturers' warranties. Finally, we offer a performance guarantee with our financed solar energy systems that can compensate 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 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, 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 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.

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 September 30, 2020, we and our subsidiaries had outstanding \$12.73 billion in aggregate principal amount of indebtedness (see Note 10, *Debt*, to the consolidated financial statements included elsewhere in this Quarterly Report on Form 10-Q). 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. 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 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.

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

Our business is and our future plans for expansion will be capital-intensive, 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 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 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 12, *Commitments and Contingencies*, to the consolidated financial statements included elsewhere in this Quarterly Report on Form 10-Q. 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.

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, manufacturing technology may evolve rapidly, and we may decide to update our 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 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 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. Laws in some states have also limited our ability to obtain dealer licenses from state motor vehicle regulators and may continue to do so. 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 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. 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.

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

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, 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 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 \$502.49 per share and a low of \$61.85 per share (as adjusted to give effect to 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 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 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.

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 cause or prevent an increase or a decrease in 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 2. UNREGISTERED SALES OF EQUITY SECURITIES AND USE OF PROCEEDS

None.

ITEM 3. DEFAULT UPON SENIOR SECURITIES

None.

ITEM 4. MINE SAFETY DISCLOSURES

Not applicable.

ITEM 5. OTHER INFORMATION

None.

ITEM 6. EXHIBITS

See Index to Exhibits at the end of this Quarterly Report on Form 10-Q for the information required by this Item.

INDEX TO EXHIBITS

Exhibit Number	Exhibit Description	Incorporated by Reference				Filed Herewith
		Form	File No.	Exhibit	Filing Date	
10.1†	<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>	—	—	—	—	X
10.2†	<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>	—	—	—	—	X
10.3	<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>	—	—	—	—	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>	—	—	—	—	
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

Exhibit Number	Exhibit Description	Incorporated by Reference				Filed Herewith
		Form	File No.	Exhibit	Filing Date	
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)					

† Portions of this exhibit have been redacted in compliance with Regulation S-K Item 601(b)(10).

* Furnished herewith

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.

Date: October 26, 2020

Tesla, Inc.

/s/ Zachary J. Kirkhom
Zachary J. Kirkhom
Chief Financial Officer
(Principal Financial Officer and
Duly Authorized Officer)