

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 March 31, 2023
OR
☐ TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934
For the transition period from _____ to _____
Commission File Number: 001-34756

Tesla, Inc.

(Exact name of registrant as specified in its charter)

Delaware
(State or other jurisdiction of
incorporation or organization)

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

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

78725
(Zip Code)

(512) 516-8177
(Registrant's telephone number, including area code)
Securities registered pursuant to Section 12(b) of the Act:

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

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

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

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

- Large accelerated filer ☒ Accelerated filer ☐
Non-accelerated filer ☐ Smaller reporting company ☐
Emerging growth company ☐

If an emerging growth company, indicate by check mark if the registrant has elected not to use the extended transition period for complying with any new or revised financial accounting standards provided pursuant to Section 13(a) of the Exchange Act. ☐
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 April 17, 2023, there were 3,169,504,301 shares of the registrant's common stock outstanding.

TESLA, INC.
FORM 10-Q FOR THE QUARTER ENDED MARCH 31, 2023
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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, supply chain constraints, our strategy, competition, future operations and production capacity, future financial position, future revenues, projected costs, profitability, expected cost reductions, capital adequacy, expectations regarding demand and acceptance for our technologies, growth opportunities and trends in the markets in which we operate, prospects and plans and objectives of management. The words “anticipates,” “believes,” “could,” “estimates,” “expects,” “intends,” “may,” “plans,” “projects,” “will,” “would” and similar expressions are intended to identify forward-looking statements, although not all forward-looking statements contain these identifying words. We may not actually achieve the plans, intentions or expectations disclosed in our forward-looking statements and you should not place undue reliance on our forward-looking statements. Actual results or events could differ materially from the plans, intentions and expectations disclosed in the forward-looking statements that we make. These forward-looking statements involve risks and uncertainties that could cause our actual results to differ materially from those in the forward-looking statements, including, without limitation, the risks set forth in Part I, Item 1A, “Risk Factors” of the Annual Report on Form 10-K for the fiscal year ended December 31, 2022 and that are otherwise described or updated from time to time in our other filings with the Securities and Exchange Commission (the “SEC”). We do not assume any obligation to update any forward-looking statements.

PART I. FINANCIAL INFORMATION
ITEM 1. FINANCIAL STATEMENTS

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

	March 31, 2023	December 31, 2022
Assets		
Current assets		
Cash and cash equivalents	\$ 16,048	\$ 16,253
Short-term investments	6,354	5,932
Accounts receivable, net	2,993	2,952
Inventory	14,375	12,839
Prepaid expenses and other current assets	3,227	2,941
Total current assets	42,997	40,917
Operating lease vehicles, net	5,473	5,035
Solar energy systems, net	5,427	5,489
Property, plant and equipment, net	24,969	23,548
Operating lease right-of-use assets	2,800	2,563
Digital assets, net	184	184
Intangible assets, net	204	215
Goodwill	195	194
Other non-current assets	4,584	4,193
Total assets	\$ 86,833	\$ 82,338
Liabilities		
Current liabilities		
Accounts payable	\$ 15,904	\$ 15,255
Accrued liabilities and other	7,321	7,142
Deferred revenue	1,750	1,747
Customer deposits	1,057	1,063
Current portion of debt and finance leases	1,404	1,502
Total current liabilities	27,436	26,709
Debt and finance leases, net of current portion	1,272	1,597
Deferred revenue, net of current portion	2,911	2,804
Other long-term liabilities	5,979	5,330
Total liabilities	37,598	36,440
Commitments and contingencies (Note 9)		
Redeemable noncontrolling interests in subsidiaries	407	409
Equity		
Stockholders' equity		
Preferred stock; \$0.001 par value; 100 shares authorized; no shares issued and outstanding	—	—
Common stock; \$0.001 par value; 6,000 shares authorized; 3,169 and 3,164 shares issued and outstanding as of March 31, 2023 and December 31, 2022, respectively	3	3
Additional paid-in capital	32,878	32,177
Accumulated other comprehensive (loss)	(225)	(361)
Retained earnings	15,398	12,885
Total stockholders' equity	48,054	44,704
Noncontrolling interests in subsidiaries	774	785
Total liabilities and equity	\$ 86,833	\$ 82,338

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 March 31,	
	2023	2022
Revenues		
Automotive sales	\$ 18,878	\$ 15,514
Automotive regulatory credits	521	679
Automotive leasing	564	668
Total automotive revenues	19,963	16,861
Energy generation and storage	1,529	616
Services and other	1,837	1,279
Total revenues	23,329	18,756
Cost of revenues		
Automotive sales	15,422	10,914
Automotive leasing	333	408
Total automotive cost of revenues	15,755	11,322
Energy generation and storage	1,361	688
Services and other	1,702	1,286
Total cost of revenues	18,818	13,296
Gross profit	4,511	5,460
Operating expenses		
Research and development	771	865
Selling, general and administrative	1,076	992
Total operating expenses	1,847	1,857
Income from operations	2,664	3,603
Interest income	213	28
Interest expense	(29)	(61)
Other (expense) income, net	(48)	56
Income before income taxes	2,800	3,626
Provision for income taxes	261	346
Net income	2,539	3,280
Net income (loss) attributable to noncontrolling interests and redeemable noncontrolling interests in subsidiaries	26	(38)
Net income attributable to common stockholders	<u>\$ 2,513</u>	<u>\$ 3,318</u>
Net income per share of common stock attributable to common stockholders (1)		
Basic	<u>\$ 0.80</u>	<u>\$ 1.07</u>
Diluted	<u>\$ 0.73</u>	<u>\$ 0.95</u>
Weighted average shares used in computing net income per share of common stock (1)		
Basic	<u>3,166</u>	<u>3,103</u>
Diluted	<u>3,468</u>	<u>3,472</u>

(1) Prior period results have been adjusted to reflect the three-for-one stock split effected in the form of a stock dividend in August 2022.

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

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

	Three Months Ended March 31,			
	2023		2022	
Net income	\$	2,539	\$	3,280
Other comprehensive income (loss):				
Foreign currency translation adjustment		130		(96)
Unrealized net gain (loss) on investments		6		(8)
Comprehensive income		2,675		3,176
Less: Comprehensive income (loss) attributable to noncontrolling interests and redeemable noncontrolling interests in subsidiaries		26		(38)
Comprehensive income attributable to common stockholders	\$	<u>2,649</u>	\$	<u>3,214</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 Interests	Common Stock		Additional Paid-In Capital	Accumulated Other Comprehensive (Loss)	Retained Earnings	Total Stockholders' Equity	Noncontrolling Interests in Subsidiaries	Total Equity
Three Months Ended March 31, 2023		Shares	Amount						
Balance as of December 31, 2022	\$ 409	3,164	\$ 3	\$ 32,177	\$ (361)	\$ 12,885	\$ 44,704	\$ 785	\$ 45,489
Exercises of conversion feature of convertible senior notes	—	0	0	0	—	—	0	—	0
Issuance of common stock for equity incentive awards	—	5	0	231	—	—	231	—	231
Stock-based compensation	—	—	—	465	—	—	465	—	465
Distributions to noncontrolling interests	(5)	—	—	—	—	—	—	(22)	(22)
Buy-outs of noncontrolling interests	—	—	—	5	—	—	5	(12)	(7)
Net income	3	—	—	—	—	2,513	2,513	23	2,536
Other comprehensive income	—	—	—	—	136	—	136	—	136
Balance as of March 31, 2023	\$ 407	3,169	\$ 3	\$ 32,878	\$ (225)	\$ 15,398	\$ 48,054	\$ 774	\$ 48,828

	Redeemable Noncontrolling Interests	Common Stock		Additional Paid-In Capital	Accumulated Other Comprehensive Income (Loss)	Retained Earnings	Total Stockholders' Equity	Noncontrolling Interests in Subsidiaries	Total Equity
Three Months Ended March 31, 2022		Shares (1)	Amount (1)			(1)			
Balance as of December 31, 2021	\$ 568	3,100	\$ 3	\$ 29,803	\$ 54	\$ 329	\$ 30,189	\$ 826	\$ 31,015
Exercises of conversion feature of convertible senior notes	—	0	0	0	—	—	0	—	0
Issuance of common stock for equity incentive awards	—	8	0	202	—	—	202	—	202
Stock-based compensation	—	—	—	485	—	—	485	—	485
Distributions to noncontrolling interests	(12)	—	—	—	—	—	—	(22)	(22)
Buy-out of noncontrolling interests	(1)	—	—	(5)	—	—	(5)	—	(5)
Net (loss) income	(96)	—	—	—	—	3,318	3,318	58	3,376
Other comprehensive loss	—	—	—	—	(104)	—	(104)	—	(104)
Balance as of March 31, 2022	\$ 459	3,108	\$ 3	\$ 30,485	\$ (50)	\$ 3,647	\$ 34,085	\$ 862	\$ 34,947

(1) Prior period results have been adjusted to reflect the three-for-one stock split effected in the form of a stock dividend in August 2022.

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

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

	Three Months Ended March 31,	
	2023	2022
Cash Flows from Operating Activities		
Net income	\$ 2,539	\$ 3,280
Adjustments to reconcile net income to net cash provided by operating activities:		
Depreciation, amortization and impairment	1,046	880
Stock-based compensation	418	418
Inventory and purchase commitments write-downs	50	33
Foreign currency transaction net unrealized gain	(25)	(30)
Non-cash interest and other operating activities	15	16
Changes in operating assets and liabilities:		
Accounts receivable	(32)	(409)
Inventory	(1,540)	(633)
Operating lease vehicles	(675)	(462)
Prepaid expenses and other current assets	(79)	(289)
Other non-current assets	(729)	(611)
Accounts payable and accrued liabilities	797	997
Deferred revenue	106	287
Customer deposits	2	204
Other long-term liabilities	620	314
Net cash provided by operating activities	2,513	3,995
Cash Flows from Investing Activities		
Purchases of property and equipment excluding finance leases, net of sales	(2,072)	(1,767)
Purchases of solar energy systems, net of sales	(1)	(5)
Purchase of intangible assets	—	(9)
Purchases of investments	(2,015)	(386)
Proceeds from maturities of investments	1,604	—
Net cash used in investing activities	(2,484)	(2,167)
Cash Flows from Financing Activities		
Repayments of convertible and other debt	(302)	(1,945)
Proceeds from exercises of stock options and other stock issuances	231	202
Principal payments on finance leases	(106)	(123)
Debt issuance costs	(13)	—
Distributions paid to noncontrolling interests in subsidiaries	(36)	(42)
Payments for buy-outs of noncontrolling interests in subsidiaries	(7)	(6)
Net cash used in financing activities	(233)	(1,914)
Effect of exchange rate changes on cash and cash equivalents and restricted cash	50	(18)
Net decrease in cash and cash equivalents and restricted cash	(154)	(104)
Cash and cash equivalents and restricted cash, beginning of period	16,924	18,144
Cash and cash equivalents and restricted cash, end of period	\$ 16,770	\$ 18,040
Supplemental Non-Cash Investing and Financing Activities		
Acquisitions of property and equipment included in liabilities	\$ 1,193	\$ 1,036
Leased assets obtained in exchange for finance lease liabilities	\$ —	\$ 20
Leased assets obtained in exchange for operating lease liabilities	\$ 362	\$ 271

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

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

Note 1 – Summary of Significant Accounting Policies

Unaudited Interim Financial Statements

The consolidated financial statements of Tesla, Inc. (“Tesla”, the “Company”, “we”, “us” or “our”), including the consolidated balance sheet as of March 31, 2023, the consolidated statements of operations, the consolidated statements of comprehensive income, the consolidated statements of redeemable noncontrolling interests and equity, and the consolidated statements of cash flows for the three months ended March 31, 2023 and 2022, as well as other information disclosed in the accompanying notes, are unaudited. The consolidated balance sheet as of December 31, 2022 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, 2022.

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.

Reclassifications

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

Revenue Recognition

Revenue by source

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

	Three Months Ended March 31,	
	2023	2022
Automotive sales	\$ 18,878	\$ 15,514
Automotive regulatory credits	521	679
Energy generation and storage sales	1,413	503
Services and other	1,837	1,279
Total revenues from sales and services	22,649	17,975
Automotive leasing	564	668
Energy generation and storage leasing	116	113
Total revenues	<u>\$ 23,329</u>	<u>\$ 18,756</u>

Automotive Segment

Automotive Sales Revenue

The total sales return reserve on vehicles sold with resale value guarantees was \$68 million and \$91 million as of March 31, 2023 and December 31, 2022, respectively, of which \$34 million and \$40 million was short-term, respectively.

Deferred revenue is related to the access to our Full Self Driving (“FSD”) features and ongoing maintenance, internet connectivity, free Supercharging programs and over-the-air software updates primarily on automotive sales, which amounted to \$3.04 billion and \$2.91 billion as of March 31, 2023 and December 31, 2022, 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, 2022 and 2021 was \$134 million and \$66 million for three months ended March 31, 2023 and 2022, respectively. Of the total deferred revenue balance as of March 31, 2023, we expect to recognize \$679 million of revenue in the next 12 months. The remaining balance will be recognized at the time of transfer of control of the product or over the performance period.

We have been providing loans for financing our automotive deliveries in volume since fiscal year 2022. As of March 31, 2023 and December 31, 2022, we have recorded net financing receivables on the consolidated balance sheets, of which \$191 million and \$128 million, respectively, is recorded within Accounts receivable, net, for the current portion and \$966 million and \$665 million, respectively, is recorded within Other non-current assets for the long-term portion.

Automotive Regulatory Credits

During the three months ended March 31, 2022, we had also recognized \$288 million in revenue due to changes in regulation which entitled us to additional consideration for credits sold previously.

Automotive Leasing Revenue

Direct Sales-Type Leasing Program

For the three months ended March 31, 2023, we recognized \$101 million of sales-type leasing revenue and \$76 million of sales-type leasing cost of revenue. For the three months ended March 31, 2022, we recognized \$265 million of sales-type leasing revenue and \$164 million of sales-type leasing cost of revenue.

Lease receivables relating to sales-type leases are presented on the consolidated balance sheets as follows (in millions):

	March 31, 2023		December 31, 2022	
Gross lease receivables	\$	886	\$	837
Unearned interest income		(99)		(95)
Allowance for expected credit losses		(5)		(4)
Net investment in sales-type leases	\$	<u>782</u>	\$	<u>738</u>
Reported as:				
Prepaid expenses and other current assets	\$	177	\$	164
Other non-current assets		605		574
Net investment in sales-type leases	\$	<u>782</u>	\$	<u>738</u>

Energy Generation and Storage Segment

Energy Generation and Storage Sales

We record as deferred revenue any non-refundable amounts that are collected from customers related to fees charged for prepayments, which is recognized as revenue ratably over the respective customer contract term. As of March 31, 2023 and December 31, 2022, deferred revenue related to such customer payments amounted to \$770 million and \$863 million, respectively, mainly due to billings for milestone payments. Revenue recognized from the deferred revenue balance as of December 31, 2022 and 2021 was \$230 million and \$52 million for the three months ended March 31, 2023 and 2022, respectively. As of March 31, 2023, 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 \$209 million. Of this amount, we expect to recognize \$12 million in the next 12 months and the remaining over a period up to 25 years.

We have been providing loans for financing our energy generation products in volume since fiscal year 2022. As of March 31, 2023 and December 31, 2022, we have recorded net financing receivables on the consolidated balance sheets, of which \$29 million and \$24 million, respectively, is recorded within Accounts receivable, net, for the current portion and \$448 million and \$387 million, respectively, is recorded within Other non-current assets for the long-term portion.

Income Taxes

There are transactions that occur during the ordinary course of business for which the ultimate tax determination is uncertain. As of March 31, 2023 and December 31, 2022, the aggregate balances of our gross unrecognized tax benefits were \$926 million and \$870 million, respectively, of which \$578 million and \$572 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.

We file income tax returns in the U.S. and various state and foreign jurisdictions. We are currently under examination by the Internal Revenue Service ("IRS") for the years 2015 to 2018. Additional tax years within the periods 2004 to 2014 and 2019 to 2021 remain subject to examination for federal income tax purposes. All net operating losses and tax credits generated to date are subject to adjustment for U.S. federal and state income tax purposes. Our returns for 2004 and subsequent tax years remain subject to examination in U.S. state and foreign jurisdictions.

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

Net Income per Share of Common Stock Attributable to Common Stockholders

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

	Three Months Ended March 31,			
	2023		2022	
Net income attributable to common stockholders	\$	2,513	\$	3,318
Less: Buy-out of noncontrolling interest		(5)		5
Net income used in computing basic net income per share of common stock		2,518		3,313
Less: Dilutive convertible debt		0		0
Net income used in computing diluted net income per share of common stock	\$	<u>2,518</u>	\$	<u>3,313</u>

The following table presents the reconciliation of basic to diluted weighted average shares used in computing net income per share of common stock attributable to common stockholders, as adjusted to give effect to the three-for-one stock split effected in the form of a stock dividend in August 2022 (the "2022 Stock Split") (in millions):

	Three Months Ended March 31,			
	2023		2022	
Weighted average shares used in computing net income per share of common stock, basic		3,166		3,103
Add:				
Stock-based awards		289		313
Convertible senior notes		2		5
Warrants		11		51
Weighted average shares used in computing net income per share of common stock, diluted		<u>3,468</u>		<u>3,472</u>

The following table presents the potentially dilutive shares that were excluded from the computation of diluted net income per share of common stock attributable to common stockholders, because their effect was anti-dilutive, as adjusted to give effect to the 2022 Stock Split (in millions):

	Three Months Ended March 31,			
	2023		2022	
Stock-based awards		25		2

Restricted Cash

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

	March 31, 2023	December 31, 2022	March 31, 2022	December 31, 2021
Cash and cash equivalents	\$ 16,048	\$ 16,253	\$ 17,505	\$ 17,576
Restricted cash included in prepaid expenses and other current assets	486	294	297	345
Restricted cash included in other non-current assets	236	377	238	223
Total as presented in the consolidated statements of cash flows	<u>\$ 16,770</u>	<u>\$ 16,924</u>	<u>\$ 18,040</u>	<u>\$ 18,144</u>

Accounts Receivable and Allowance for Doubtful Accounts

Depending on the day of the week on which the end of a fiscal quarter falls, our accounts receivable balance may fluctuate as we are waiting for certain customer payments to clear through our banking institutions and receipts of payments from our financing partners, which can take up to approximately two weeks based on the contractual payment terms with such partners. Our accounts receivable balances associated with our sales of regulatory credits, which are typically transferred to other manufacturers during the last few days of the quarter, is dependent on contractual payment terms. Additionally, government rebates can take up to a year or more to be collected depending on the customary processing timelines of the specific jurisdictions issuing them. These various factors may have a significant impact on our accounts receivable balance from period to period. As of March 31, 2023 and December 31, 2022, we had \$575 million and \$753 million, respectively, of long-term government rebates receivable in Other non-current assets in our consolidated balance sheets.

Financing Receivables

As of March 31, 2023 and December 31, 2022, the majority of our financing receivables were at current status with only immaterial balances being past due. As of March 31, 2023, the majority of our financing receivables, excluding MyPower notes receivable, were originated in 2023 and 2022, and as of December 31, 2022, the majority of our financing receivables, excluding MyPower notes receivable, were originated in 2022.

As of March 31, 2023 and December 31, 2022, the total outstanding balance of MyPower customer notes receivable, net of allowance for expected credit losses, was \$276 million and \$280 million, respectively, of which \$6 million and \$7 million were due in the next 12 months as of March 31, 2023 and December 31, 2022, respectively. As of March 31, 2023 and December 31, 2022, the allowance for expected credit losses was \$37 million.

Concentration of Risk

Credit Risk

Financial instruments that potentially subject us to a concentration of credit risk consist of cash, cash equivalents, investments, restricted cash, accounts receivable and other finance receivables. Our cash and investments balances are primarily comprised of deposits which are diversified among high credit quality financial institutions or invested in U.S. government securities. These deposits are typically in excess of insured limits. As of March 31, 2023 and December 31, 2022, no entity represented 10% or more of our total receivables balance.

Supply Risk

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

Operating Lease Vehicles

The gross cost of operating lease vehicles as of March 31, 2023 and December 31, 2022 was \$6.56 billion and \$6.08 billion, respectively. Operating lease vehicles on the consolidated balance sheets are presented net of accumulated depreciation of \$1.09 billion and \$1.04 billion as of March 31, 2023 and December 31, 2022, respectively.

Warranties

Accrued warranty activity consisted of the following (in millions):

	Three Months Ended March 31,	
	2023	2022
Accrued warranty—beginning of period	\$ 3,505	\$ 2,101
Warranty costs incurred	(280)	(151)
Net changes in liability for pre-existing warranties, including expirations and foreign exchange impact	208	15
Provision for warranty	532	322
Accrued warranty—end of period	<u>\$ 3,965</u>	<u>\$ 2,287</u>

Recent Accounting Pronouncements

Recently adopted accounting pronouncements

In October 2021, the Financial Accounting Standards Board (“FASB”) issued Accounting Standards Update (“ASU”) No. 2021-08, Accounting for Contract Assets and Contract Liabilities from Contracts with Customers (Topic 805). This ASU requires an acquirer in a business combination to recognize and measure contract assets and contract liabilities (deferred revenue) from acquired contracts using the revenue recognition guidance in Topic 606. At the acquisition date, the acquirer applies the revenue model as if it had originated the acquired contracts. The ASU is effective for annual periods beginning after December 15, 2022, including interim periods within those fiscal years. We adopted this ASU prospectively on January 1, 2023. This ASU has not and is currently not expected to have a material impact on our consolidated financial statements.

In March 2022, the FASB issued ASU 2022-02, Troubled Debt Restructurings and Vintage Disclosures. This ASU eliminates the accounting guidance for troubled debt restructurings by creditors that have adopted ASU 2016-13, Measurement of Credit Losses on Financial Instruments, which we adopted on January 1, 2020. This ASU also enhances the disclosure requirements for certain loan refinancing and restructurings by creditors when a borrower is experiencing financial difficulty. In addition, the ASU amends the guidance on vintage disclosures to require entities to disclose current period gross write-offs by year of origination for financing receivables and net investments in leases within the scope of ASC 326-20. The ASU is effective for annual periods beginning after December 15, 2022, including interim periods within those fiscal years. We adopted the ASU prospectively on January 1, 2023. This ASU has not and is currently not expected to have a material impact on our consolidated financial statements.

On August 16, 2022, the Inflation Reduction Act of 2022 (“IRA”) was enacted into law and is effective for taxable years beginning after December 31, 2022. The IRA includes multiple incentives to promote clean energy, electric vehicles, battery and energy storage manufacture or purchase, in addition to a new corporate alternative minimum tax of 15% on adjusted financial statement income of corporations with profits greater than \$1 billion. Some of these measures are expected to materially affect our consolidated financial statements. For the three month period ended March 31, 2023, the impact was primarily a reduction of our material costs. We will continue to evaluate the effects of IRA as more guidance is issued and the relevant implications to our consolidated financial statements.

Note 2 – Fair Value of Financial Instruments

ASC 820, *Fair Value Measurements* (“ASC 820”) 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):

	March 31, 2023				December 31, 2022			
	Fair Value	Level I	Level II	Level III	Fair Value	Level I	Level II	Level III
Money market funds	\$ 483	\$ 483	\$ —	\$ —	\$ 2,188	\$ 2,188	\$ —	\$ —
U.S. government securities	1,418	—	1,418	—	894	—	894	—
Corporate debt securities	836	—	836	—	885	—	885	—
Certificates of deposit and time deposits	4,550	—	4,550	—	4,253	—	4,253	—
Total	\$ 7,287	\$ 483	\$ 6,804	\$ —	\$ 8,220	\$ 2,188	\$ 6,032	\$ —

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 U.S. government securities, certificates of deposit, time deposits and corporate debt securities are classified within Level II of the fair value hierarchy and the market approach was used to determine fair value of these investments.

Our cash, cash equivalents and investments classified by security type as of March 31, 2023 and December 31, 2022 consisted of the following (in millions):

March 31, 2023						
	Adjusted Cost	Gross Unrealized Gains	Gross Unrealized Losses	Fair Value	Cash and Cash Equivalents	Short-Term Investments
Cash	\$ 15,115	\$ —	\$ —	\$ 15,115	\$ 15,115	\$ —
Money market funds	483	—	—	483	483	—
U.S. government securities	1,420	—	(2)	1,418	—	1,418
Corporate debt securities	852	1	(17)	836	—	836
Certificates of deposit and time deposits	4,550	—	—	4,550	450	4,100
Total cash, cash equivalents and short-term investments	<u>\$ 22,420</u>	<u>\$ 1</u>	<u>\$ (19)</u>	<u>\$ 22,402</u>	<u>\$ 16,048</u>	<u>\$ 6,354</u>

December 31, 2022						
	Adjusted Cost	Gross Unrealized Gains	Gross Unrealized Losses	Fair Value	Cash and Cash Equivalents	Short-Term Investments
Cash	\$ 13,965	\$ —	\$ —	\$ 13,965	\$ 13,965	\$ —
Money market funds	2,188	—	—	2,188	2,188	—
U.S. government securities	897	—	(3)	894	—	894
Corporate debt securities	907	—	(22)	885	—	885
Certificates of deposit and time deposits	4,252	1	—	4,253	100	4,153
Total cash, cash equivalents and short-term investments	<u>\$ 22,209</u>	<u>\$ 1</u>	<u>\$ (25)</u>	<u>\$ 22,185</u>	<u>\$ 16,253</u>	<u>\$ 5,932</u>

We record gross realized gains, losses and credit losses as a component of Other (expense) income, net in the consolidated statements of operations. For the three months ended March 31, 2023 and 2022, we did not recognize any material gross realized gains, losses or credit losses. The ending allowance balances for credit losses were immaterial as of March 31, 2023 and December 31, 2022. We have determined that the gross unrealized losses on our investments as of March 31, 2023 and December 31, 2022 were temporary in nature.

The following table summarizes the fair value of our investments by stated contractual maturities as of March 31, 2023 (in millions):

Due in 1 year or less	\$ 5,637
Due in 1 year through 5 years	569
Due in 5 years through 10 years	148
Total	<u>\$ 6,354</u>

Disclosure of Fair Values

Our financial instruments that are not re-measured at fair value include accounts receivable, financing receivables, digital assets, accounts payable, accrued liabilities, customer deposits and debt. The carrying values of these financial instruments approximate their fair values, other than our 2.00% Convertible Senior Notes due in 2024 ("2024 Notes") and digital assets.

We estimate the fair value of the 2024 Notes using commonly accepted valuation methodologies and market-based risk measurements that are indirectly observable, such as credit risk (Level II). In addition, we estimate the fair values of our digital assets based on quoted prices in active markets (Level I). The following table presents the estimated fair values and the carrying values (in millions):

March 31, 2023		December 31, 2022	
Carrying Value	Fair Value	Carrying Value	Fair Value
2024 Notes	\$ 37	\$ 37	\$ 223
Digital assets, net	\$ 184	\$ 184	\$ 191

Note 3 – Inventory

Our inventory consisted of the following (in millions):

	March 31, 2023	December 31, 2022
Raw materials	\$ 6,405	\$ 6,137
Work in process	2,458	2,385
Finished goods (1)	4,591	3,475
Service parts	921	842
Total	<u>\$ 14,375</u>	<u>\$ 12,839</u>

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

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 months ended March 31, 2023 and 2022, we recorded write-downs of \$39 million and \$26 million, respectively, in Cost of revenues in the consolidated statements of operations.

Note 4 – Property, Plant and Equipment, Net

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

	March 31, 2023	December 31, 2022
Machinery, equipment, vehicles and office furniture	\$ 14,139	\$ 13,558
Tooling	2,696	2,579
Leasehold improvements	2,551	2,366
Land and buildings	8,144	7,751
Computer equipment, hardware and software	2,299	2,072
Construction in progress	4,894	4,263
	34,723	32,589
Less: Accumulated depreciation	(9,754)	(9,041)
Total	<u>\$ 24,969</u>	<u>\$ 23,548</u>

Construction in progress is primarily comprised of construction of Gigafactory Texas and Gigafactory Berlin-Brandenburg, and equipment and tooling related to the manufacturing of our products.

Depreciation expense during the three months ended March 31, 2023 and 2022 was \$722 million and \$551 million, respectively.

Note 5 – Accrued Liabilities and Other

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

	March 31, 2023	December 31, 2022
Accrued purchases (1)	\$ 2,640	\$ 2,747
Taxes payable (2)	1,371	1,235
Payroll and related costs	1,064	1,026
Accrued warranty reserve, current portion	1,123	1,025
Sales return reserve, current portion	267	270
Operating lease liabilities, current portion	509	485
Other current liabilities	347	354
Total	<u>\$ 7,321</u>	<u>\$ 7,142</u>

(1) Accrued purchases primarily reflects receipts of goods and services for which we had not yet been invoiced. 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, income tax, sales tax, property tax and use tax payables.

Note 6 – Other Long-Term Liabilities

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

	March 31, 2023	December 31, 2022
Operating lease liabilities	\$ 2,389	\$ 2,164
Accrued warranty reserve	2,842	2,480
Other non-current liabilities	748	686
Total other long-term liabilities	<u>\$ 5,979</u>	<u>\$ 5,330</u>

Note 7 – Debt

The following is a summary of our debt and finance leases as of March 31, 2023 (in millions):

	Net Carrying Value		Unpaid Principal Balance	Unused Committed Amount (1)	Contractual Interest Rates	Contractual Maturity Date
	Current	Long-Term				
Recourse debt:						
2024 Notes	\$ —	\$ 37	\$ 37	\$ —	2.00 %	May 2024
RCF Credit Agreement	—	—	—	5,000	Not applicable	January 2028
Solar Bonds	—	7	7	—	4.70-5.75 %	March 2025 - January 2031
Total recourse debt	—	44	44	5,000		
Non-recourse debt:						
Automotive Asset-backed Notes	903	410	1,317	—	0.36-4.64 %	February 2024-September 2025
Solar Asset-backed Notes	4	12	16	—	4.80 %	December 2026
Cash Equity Debt	28	351	389	—	5.25-5.81 %	July 2033-January 2035
Automotive Lease-backed Credit Facilities	—	—	—	155	Not applicable	September 2024
Total non-recourse debt	935	773	1,722	155		
Total debt	935	817	<u>\$ 1,766</u>	<u>\$ 5,155</u>		
Finance leases	469	455				
Total debt and finance leases	<u>\$ 1,404</u>	<u>\$ 1,272</u>				

The following is a summary of our debt and finance leases as of December 31, 2022 (in millions):

	Net Carrying Value		Unpaid Principal Balance	Unused Committed Amount (2)	Contractual Interest Rates	Contractual Maturity Date
	Current	Long-Term				
Recourse debt:						
2024 Notes	\$ —	\$ 37	\$ 37	\$ —	2.00 %	May 2024
Credit Agreement	—	—	—	2,266	Not applicable	July 2023
Solar Bonds	—	7	7	—	4.70-5.75 %	March 2025 - January 2031
Total recourse debt	—	44	44	2,266		
Non-recourse debt:						
Automotive Asset-backed Notes	984	613	1,603	—	0.36-4.64 %	December 2023-September 2025
Solar Asset-backed Notes	4	13	17	—	4.80 %	December 2026
Cash Equity Debt	28	359	397	—	5.25-5.81 %	July 2033-January 2035
Automotive Lease-backed Credit Facilities	—	—	—	151	Not applicable	September 2024
Total non-recourse debt	1,016	985	2,017	151		
Total debt	1,016	1,029	<u>\$ 2,061</u>	<u>\$ 2,417</u>		
Finance leases	486	568				
Total debt and finance leases	<u>\$ 1,502</u>	<u>\$ 1,597</u>				

(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, except certain specified conditions prior to draw-down, including pledging our leased vehicles and our interests in those leases and as may be described below and in the notes to the consolidated financial statements included in our report on Form 10-K for the year ended December 31, 2022.

(2) There are no restrictions on draw-down or use for general corporate purposes with respect to any available committed funds under our credit facilities, except certain specified conditions prior to draw-down, including pledging to our lenders sufficient amounts of qualified receivables, inventories, leased vehicles and our interests in those leases or various other assets and as may be described in the notes to the consolidated financial statements included in our report on Form 10-K for the year ended December 31, 2022.

Recourse debt refers to debt that is recourse to our general assets of the respective guarantors. Non-recourse debt refers to debt that is recourse to only assets of our subsidiaries. The differences between the unpaid principal balances and the net carrying values are due to debt discounts or deferred financing costs. As of March 31, 2023, we were in material compliance with all financial debt covenants.

2024 Notes

During the first quarter of 2023, the closing price of our common stock continued to exceed 130% of the applicable conversion price of our 2024 Notes on at least 20 of the last 30 consecutive trading days of the quarter, causing the 2024 Notes to be convertible by their holders during the second quarter of 2023. Should the closing price conditions continue to be met in a future quarter for the 2024 Notes, the 2024 Notes will be convertible at their holders' option during the immediately following quarter.

Note 8 – Equity Incentive Plans

Other Performance-Based Grants

2021 Performance-Based Stock Option & Restricted Stock Unit (“RSU”) Awards

During the fourth quarter of 2021, the Compensation Committee of our Board of Directors granted to certain employees performance-based RSUs and stock options to purchase an aggregate 2.2 million shares of our common stock, as adjusted to give effect to the 2022 Stock Split. As of March 31, 2023, we had unrecognized stock-based compensation expense of \$170 million, which will be recognized over a weighted-average period of 3 years. For the three months ended March 31, 2023 and 2022, we recorded \$25 million and \$69 million, respectively, of stock-based compensation expense related to this grant, net of forfeitures.

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):

	Three Months Ended March 31,			
	2023		2022	
Cost of revenues	\$	192	\$	131
Research and development		134		143
Selling, general and administrative		92		144
Total	\$	418	\$	418

Our income tax benefits recognized from stock-based compensation arrangements in each of the periods presented were immaterial due to cumulative losses and valuation allowances.

Note 9 – Commitments and Contingencies

Operating Lease Arrangements in Buffalo, New York and Shanghai, China

For a description of our operating lease arrangements in Buffalo, New York, and Shanghai, China, refer to Note 15, *Commitments and Contingencies*, in our Annual Report on Form 10-K for the year ended December 31, 2022. As of March 31, 2023, we expect to meet the requirements under these arrangements based on our current and anticipated level of operations.

Legal Proceedings

Litigation Relating to the SolarCity Acquisition

Between September 1, 2016 and October 5, 2016, seven lawsuits were filed in the Delaware Court of Chancery by purported stockholders of Tesla challenging our acquisition of SolarCity Corporation (“SolarCity”). Following consolidation, the lawsuit names as defendants the members of Tesla’s board of directors as then constituted and alleges, among other things, that board members breached their fiduciary duties in connection with the acquisition. The complaint asserts both derivative claims and direct claims on behalf of a purported class and seeks, among other relief, unspecified monetary damages, attorneys’ fees and costs. On January 22, 2020, all of the director defendants except Elon Musk reached a settlement to resolve the lawsuit against them for an amount to be paid entirely under the applicable insurance policy. The settlement, which does not involve an admission of any wrongdoing by any party, was approved by the Court on August 17, 2020. Tesla received payment of approximately \$43 million on September 16, 2020, which has been recognized in our consolidated statements of operations as a reduction to Selling, general and administrative operating expenses for costs previously incurred related to the acquisition of SolarCity. The trial was held from July 12 to July 23, 2021 and on August 16, 2021. On October 22, 2021, the Court approved the parties’ joint stipulation that (a) the class is decertified and the action shall continue exclusively as a derivative action under Court of Chancery Rule 23.1 and (b) the direct claims against Elon Musk are dismissed with prejudice. Following post-trial briefing, post-trial argument was held on January 18, 2022.

On April 27, 2022, the Court entered judgment in favor of Mr. Musk on all counts. On May 26, 2022, the plaintiff filed a notice of appeal. Oral argument was held before the Supreme Court of Delaware on March 29, 2023.

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

Litigation Relating to 2018 CEO Performance Award

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

On January 25, 2021, the Court conditionally certified certain claims and a class of Tesla stockholders as a class action. On September 30, 2021, plaintiff filed a motion for leave to file a verified amended derivative complaint. On October 1, 2021, defendants Kimbal Musk and Steve Jurvetson moved for summary judgment as to the claims against them. Following the motion, plaintiff agreed to voluntarily dismiss the claims against Kimbal Musk and Steve Jurvetson. Plaintiff also moved for summary judgment on October 1, 2021. On October 27, 2021, the Court approved the parties' joint stipulation that, among other things, (a) all claims against Kimbal Musk and Steve Jurvetson in the Complaint are dismissed with prejudice; (b) the class is decertified and the action shall continue exclusively as a derivative action under Court of Chancery Rule 23.1; and (c) the direct claims against the remaining defendants are dismissed with prejudice. On November 18, 2021, the remaining defendants (a) moved for partial summary judgment, (b) opposed plaintiff's summary judgment motion and (c) opposed the plaintiff's motion to amend his complaint. In January 2022, the case was assigned to a different judge. On February 24, 2022, the court (i) granted plaintiff's motion to amend his complaint, and (ii) canceled oral argument on the summary judgment motions, stating that the court is "skeptical that this litigation can be resolved based on the undisputed facts" and the "case is going to trial," but that the "parties may reassert their arguments made in support of summary judgment in their pre-trial and post-trial briefs." Trial was held November 14-18, 2022. Post-trial briefing and argument are now complete.

Litigation Related to Directors' Compensation

On June 17, 2020, a purported Tesla stockholder filed a derivative action in the Delaware Court of Chancery, purportedly on behalf of Tesla, against certain of Tesla's current and former directors regarding compensation awards granted to Tesla's directors, other than Elon Musk, between 2017 and 2020. The suit asserts claims for breach of fiduciary duty and unjust enrichment and seeks declaratory and injunctive relief, unspecified damages and other relief. Defendants filed their answer on September 17, 2020. Trial is currently set for November 27, 2023, to December 1, 2023.

Litigation Relating to Potential Going Private Transaction

Between August 10, 2018 and September 6, 2018, nine purported stockholder class actions were filed against Tesla and Elon Musk in connection with Mr. Musk's August 7, 2018 Twitter post that he was considering taking Tesla private. On January 16, 2019, Plaintiffs filed their consolidated complaint in the United States District Court for the Northern District of California and added as defendants the members of Tesla's board of directors. The consolidated complaint asserts claims for violations of the federal securities laws and seeks unspecified damages and other relief. The parties stipulated to certification of a class of stockholders, which the court granted on November 25, 2020. Trial started on January 17, 2023, and on February 3, 2023, a jury rendered a verdict in favor of the defendants on all counts. After trial, plaintiffs filed a motion for judgment as a matter of law and a motion for new trial, which the defendants opposed.

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

On October 21, 2022, a lawsuit was filed in the Delaware Court of Chancery by a purported shareholder of Tesla alleging, among other things, that board members breached their fiduciary duties in connection with their oversight of the Company's 2018 settlement with the SEC, as amended. Among other things, the plaintiff seeks reforms to the Company's corporate governance and internal procedures, unspecified damages, and attorneys' fees. The parties reached an agreement to stay the case until June 5, 2023.

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

Litigation and Investigations Relating to Alleged Discrimination and Harassment

On October 4, 2021, in a case captioned *Diaz v. Tesla*, a jury in the Northern District of California returned a verdict against Tesla on claims by a former contingent worker that he was subjected to race discrimination while assigned to work at Tesla’s Fremont Factory from 2015-2016. On November 16, 2021, Tesla filed a post-trial motion for relief that included a request for a new trial or reduction of the jury’s damages. On April 13, 2022, the Court granted Tesla’s motion in part, reducing the total damages and conditionally denied the motion for a new trial subject to the plaintiff’s acceptance of the reduced award. On June 21, 2022, the plaintiff rejected the reduced award and, as a result, on June 27, 2022, the Court ordered a new trial on damages only, which commenced on March 27, 2023, after which a jury returned a verdict of \$3,175,000. As a result, the damages awarded against Tesla were reduced from an initial \$136.9 million (October 4, 2021) down to \$15 million (April 13, 2022), and then further down to \$3.175 million (April 3, 2023).

On February 9, 2022, shortly after the first *Diaz* jury verdict, the California Civil Rights Department (“CRD,” formerly “DFEH”) filed a civil complaint against Tesla in Alameda County, California Superior Court, alleging systemic race discrimination, hostile work environment and pay equity claims, among others. CRD’s amended complaint seeks monetary damages and injunctive relief. On September 22, 2022, Tesla filed a cross complaint against CRD, alleging that it violated the Administrative Procedures Act by failing to follow statutory pre-requisites prior to filing suit and that cross complaint was subject to a sustained demurrer, which Tesla later amended and refiled. The case is now in discovery.

Additionally, on June 1, 2022 the Equal Employment Opportunity Commission (“EEOC”) issued a cause finding against Tesla that closely parallels the CRD’s allegations. Tesla will engage in a mandatory mediation with the EEOC in June 2023.

On June 16, 2022, two Tesla stockholders filed separate derivative actions in the U.S. District Court for the Western District of Texas, purportedly on behalf of Tesla, against certain of Tesla’s current and former directors. Both suits assert claims for breach of fiduciary duty, unjust enrichment, and violation of the federal securities laws in connection with alleged race and gender discrimination and sexual harassment. Among other things, plaintiffs seek declaratory and injunctive relief, unspecified damages payable to Tesla, and attorneys’ fees. On July 22, 2022, the Court consolidated the two cases and on September 6, 2022, plaintiffs filed a consolidated complaint. On November 7, 2022, the defendants filed a motion to dismiss the case. Plaintiffs filed a response of January 13, 2023, and the defendants replied on February 17, 2023.

Other Litigation Related to Our Products and Services

We are also subject to various lawsuits, including proposed class actions, that seek monetary and other injunctive relief. For example, on September 14, 2022, a proposed class action was filed against Tesla, Inc. and related entities in the U.S. District Court for the Northern District of California, alleging various claims about the Company’s driver assistance technology systems under state and federal law. This case was later consolidated with several other proposed class actions, and a Consolidated Amended Complaint was filed on October 28, 2022, which seeks damages and other relief on behalf of all persons who purchased or leased from Tesla between January 1, 2016 to the present. On October 5, 2022 a proposed class action complaint was filed in the U.S. District Court for the Eastern District of New York asserting similar state and federal law claims against the same defendants. On March 22, 2023, the plaintiffs in the California consolidated action filed a motion for a preliminary injunction to order Tesla to (1) cease using the term “Full Self-Driving Capability” (FSDC), (2) cease the sale and activation of FSDC and deactivate FSDC on Tesla vehicles, and (3) provide certain notices to consumers about proposed court-findings about the accuracy of the use of the terms Autopilot and FSDC.

On February 27, 2023, a proposed class action was filed in the U.S. District Court for the Northern District of California against Tesla, Inc., Elon Musk and certain current and former Company executives. The complaint alleges that the defendants made material misrepresentations and omissions about the Company's Autopilot and FSDC technologies and seeks money damages and other relief on behalf of persons who purchased Tesla stock between February 19, 2019 and February 17, 2023. On April 13, 2023, a putative Tesla shareholder filed a related shareholder derivative complaint against the members of Tesla's board of directors and certain current and former executives, alleging contribution for violations of the federal securities law, breach of fiduciary duties, waste, and unjust enrichment. The complaint asserts derivative claims and seeks, among other relief, unspecified monetary damages, attorneys' fees and costs.

On March 14, 2023 a proposed class action was filed in the U.S. District Court for the Northern District of California. Several similar complaints have also been filed in the same court. These complaints allege that Tesla violates federal antitrust and warranty laws through its repair, service, and maintenance practices and seeks, among other relief, damages for persons who paid Tesla for repairs services or Tesla compatible replacement parts from March 2019 to March 2023.

The Company intends to vigorously defend itself in these matters; however, we cannot predict the outcome or impact. We are unable to reasonably estimate the possible loss or range of loss, if any, associated with these claims, unless noted.

Certain Investigations and Other Matters

We receive requests for information from regulators and governmental authorities, such as the National Highway Traffic Safety Administration, the National Transportation Safety Board, the SEC, the Department of Justice ("DOJ") and various state, federal, and international agencies. We routinely cooperate with such regulatory and governmental requests, including subpoenas, formal and informal requests and other investigations and inquiries.

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

Separately, the company has received requests from the DOJ for documents related to Tesla's Autopilot and FSD features. To our knowledge no government agency in any ongoing investigation has concluded that any wrongdoing occurred. 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.

Note 10 – Variable Interest Entity Arrangements

The aggregate carrying values of the variable interest entities' assets and liabilities, after elimination of any intercompany transactions and balances, in the consolidated balance sheets were as follows (in millions):

	March 31, 2023	December 31, 2022
Assets		
Current assets		
Cash and cash equivalents	\$ 58	\$ 68
Accounts receivable, net	29	22
Prepaid expenses and other current assets	265	274
Total current assets	352	364
Solar energy systems, net	4,014	4,060
Other non-current assets	390	404
Total assets	<u>\$ 4,756</u>	<u>\$ 4,828</u>
Liabilities		
Current liabilities		
Accrued liabilities and other	\$ 59	\$ 69
Deferred revenue	9	10
Current portion of debt and finance leases	931	1,013
Total current liabilities	999	1,092
Deferred revenue, net of current portion	148	149
Debt and finance leases, net of current portion	761	971
Other long-term liabilities	3	3
Total liabilities	<u>\$ 1,911</u>	<u>\$ 2,215</u>

Note 11 – Segment Reporting and Information about Geographic Areas

We have two operating and reportable segments: (i) automotive and (ii) energy generation and storage. The following table presents revenues and gross profit by reportable segment (in millions):

	Three Months Ended March 31,	
	2023	2022
Automotive segment		
Revenues	\$ 21,800	\$ 18,140
Gross profit	\$ 4,343	\$ 5,532
Energy generation and storage segment		
Revenues	\$ 1,529	\$ 616
Gross profit	\$ 168	\$ (72)

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

	Three Months Ended March 31,	
	2023	2022
United States	\$ 11,247	\$ 8,734
China	4,891	4,650
Other international	7,191	5,372
Total	<u>\$ 23,329</u>	<u>\$ 18,756</u>

The following table presents long-lived assets by geographic area (in millions):

	March 31, 2023	December 31, 2022
United States	\$ 22,613	\$ 21,667
Germany	3,850	3,547
China	2,953	2,978
Other international	980	845
Total	<u>\$ 30,396</u>	<u>\$ 29,037</u>

The following table presents inventory by reportable segment (in millions):

	March 31, 2023		December 31, 2022	
Automotive	\$	12,538	\$	10,996
Energy generation and storage		1,837		1,843
Total	\$	<u>14,375</u>	\$	<u>12,839</u>

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. Additionally, we are increasingly focused on products and services based on artificial intelligence, robotics and automation.

In 2023, we produced 440,808 consumer vehicles and delivered 422,875 consumer vehicles through the first quarter. We are currently focused on increasing vehicle production, capacity and delivery capabilities, reducing costs, improving and developing battery technologies, improving our FSD capabilities, increasing the affordability and efficiency of our vehicles, bringing new products to market and expanding our global infrastructure.

In 2023, we deployed 3.89 GWh of energy storage products and 67 megawatts of solar energy systems through the first quarter. We are currently focused on ramping production of energy storage products, improving our Solar Roof installation capability and efficiency, and increasing market share of retrofit solar energy systems.

During the three months ended March 31, 2023, we recognized total revenues of \$23.33 billion, representing an increase of \$4.57 billion, compared to the prior year. We continue to ramp production, build new manufacturing capacity and expand our operations to enable increased deliveries and deployments of our products and further revenue growth.

During the three months ended March 31, 2023, our net income attributable to common stockholders was \$2.51 billion, representing an unfavorable change of \$805 million, compared to the prior year. We continue to focus on improving our profitability through production and operational efficiencies.

We ended the first quarter of 2023 with \$22.40 billion in cash and cash equivalents and investments, representing an increase of \$217 million from the end of 2022. Our cash flows provided by operating activities during the three months ended March 2023 and 2022 were \$2.51 billion and \$4.00 billion, respectively, representing a decrease of \$1.48 billion. Capital expenditures amounted to \$2.07 billion during the three months ended March 31, 2023, compared to \$1.77 billion during the same period ended March 31, 2022. Sustained growth has allowed our business to generally fund itself, and we will continue investing in a number of capital-intensive projects in upcoming periods.

Management Opportunities, Challenges and Uncertainties and 2023 Outlook

Automotive—Production

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

Production Location	Vehicle Model(s)	Production Status
Fremont Factory	Model S / Model X	Active
	Model 3 / Model Y	Active
Gigafactory Shanghai	Model 3 / Model Y	Active
Gigafactory Berlin-Brandenburg	Model Y	Active
Gigafactory Texas	Model Y	Active
	Cybertruck	Tooling
Gigafactory Nevada	Tesla Semi	Pilot production
TBD	Tesla Roadster	In development
TBD	Robotaxi & Others	In development

We are focused on growing our manufacturing capacity, which includes ramping all of our production vehicles to their installed production capacities as well as increasing production rate, efficiency and capacity at our current factories. The next phase of production growth will depend on the ramp at Gigafactory Berlin-Brandenburg and Gigafactory Texas, as well as our ability to add to our available sources of battery cell supply by manufacturing our own cells that we are developing to have high-volume output, lower capital and production costs and longer range. Our goals are to improve vehicle performance, decrease production costs and increase affordability and customer awareness.

However, these plans are subject to uncertainties inherent in establishing and ramping manufacturing operations, which may be exacerbated by the new product and manufacturing technologies we are introducing, the number of concurrent international projects, any industry-wide component constraints, labor shortages and any future impact from events outside of our control such as the COVID-19 pandemic. Moreover, we have set 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, Sales, Deliveries and Infrastructure

Our cost reduction efforts, cost innovation strategies, and additional localized procurement and manufacturing are key to our vehicles' affordability, and for example, have allowed us to competitively price our vehicles. We will also continue to generate demand and brand awareness by improving our vehicles' performance and functionality, including through products based on artificial intelligence such as Autopilot and FSD, and other software features, and delivering new vehicles, such as our upcoming Cybertruck. Moreover, we expect to continue to benefit from ongoing electrification of the automotive sector and increasing environmental awareness.

However, we operate in a cyclical industry that is sensitive to political and regulatory uncertainty, including with respect to trade and the environment, all of which can be compounded by inflationary pressures, rising energy prices, increases in interest rates and the liquidity of enterprise customers. For example, inflationary pressures have increased across the markets in which we operate. In an effort to curb this trend, central banks in developed countries raised interest rates rapidly and substantially, impacting the affordability of vehicle lease and finance arrangements. Further, sales of vehicles in the automotive industry also tend to be cyclical in many markets, which may expose us to increased volatility as we expand and adjust our operations. Moreover, as additional competitors enter the marketplace and help bring the world closer to sustainable transportation, we will have to adjust and continue to execute well to maintain our momentum. These macroeconomic and industry trends have had, and will likely continue to have, an impact on the pricing of, and order rate for our vehicles, and in turn our operating margin. We will continue to adjust accordingly to such developments, and we believe our ongoing cost reduction, including improved production innovation and efficiency at our newest factories and lower logistics costs, and focus on operating leverage will continue to benefit us in relation to our competitors.

As our production increases, we must work constantly to similarly increase vehicle delivery capability so that it does not become a bottleneck on our total deliveries. We are also committed to reducing the percentage of vehicles delivered in the third month of each quarter, which will help to reduce the cost per vehicle. As we expand our manufacturing operations globally, we will also have to continue to increase and staff our delivery, servicing and charging infrastructure accordingly, maintain our vehicle reliability and optimize our Supercharger locations to ensure cost effectiveness and customer satisfaction. In particular, we remain focused on increasing the capability and efficiency of our servicing operations.

Energy Generation and Storage Demand, Production and Deployment

The long-term success of this business is dependent upon increasing margins through greater volumes. We continue to increase the production of our energy storage products to meet high levels of demand, including the announcement of a new Megafactory in Shanghai. For Megapack, energy storage deployments can vary meaningfully quarter to quarter depending on the timing of specific project milestones. For Powerwall, better availability and growing grid stability concerns drive higher customer interest. We remain committed to growing our retrofit solar energy business by offering a low-cost and simplified online ordering experience. In addition, we continue to seek to improve our installation capabilities and price efficiencies for Solar Roof. As these product lines grow, we will have to maintain adequate battery cell supply for our energy storage products and hire additional personnel, particularly skilled electricians, to support the ramp of Solar Roof.

Cash Flow and Capital Expenditure Trends

Our capital expenditures are typically difficult to project beyond the short-term given the number and breadth of our core projects at any given time, and may further be impacted by uncertainties in future global market conditions. We are simultaneously ramping new products, ramping manufacturing facilities on three continents, piloting the development and manufacture of new battery cell technologies and investing in autonomy and other artificial intelligence enabled products, 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, all other continuing infrastructure growth and varying levels of inflation, we currently expect our capital expenditures to be between \$7.00 to \$9.00 billion in 2023 and in each of the following two fiscal years.

Our business has recently been consistently generating cash flow from operations in excess of our level of capital spend, and with better working capital management resulting in shorter days sales outstanding than days payable outstanding, our sales growth is also facilitating positive cash generation. We have and will continue to utilize such cash flows, among other things, to do more vertical integration, expand our product roadmap and provide financing options to our customers. On the other hand, we are likely to see heightened levels of capital expenditures during certain periods depending on the specific pace of our capital-intensive projects and rising material prices and increasing supply chain and labor expenses resulting from changes in global trade conditions and labor availability associated with the COVID-19 pandemic. Overall, we expect our ability to be self-funding to continue as long as macroeconomic factors support current trends in our sales.

Critical Accounting Policies and Estimates

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, 2022. 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, 2022.

Recent Accounting Pronouncements

See Note 1, *Summary of Significant Accounting Policies*, to the consolidated financial statements included elsewhere in this Quarterly Report on Form 10-Q.

Results of Operations

Revenues

(Dollars in millions)	Three Months Ended March 31,		Change	
	2023	2022	\$	%
Automotive sales	\$ 18,878	\$ 15,514	\$ 3,364	22%
Automotive regulatory credits	521	679	(158)	(23)%
Automotive leasing	564	668	(104)	(16)%
Total automotive revenues	19,963	16,861	3,102	18%
Services and other	1,837	1,279	558	44%
Total automotive & services and other segment revenue	21,800	18,140	3,660	20%
Energy generation and storage segment revenue	1,529	616	913	148%
Total revenues	<u>\$ 23,329</u>	<u>\$ 18,756</u>	<u>\$ 4,573</u>	24%

Automotive & Services and Other Segment

Automotive sales revenue increased \$3.36 billion, or 22%, in the three months ended March 31, 2023 as compared to the three months ended March 31, 2022, primarily due to an increase of 108,378 combined Model 3 and Model Y deliveries year over year despite a negative impact from the United States dollar strengthening against other foreign currencies in the three months ended March 31, 2023 as compared to the prior period. This was achieved from production ramping of Model Y at Gigafactory Shanghai, Gigafactory Berlin-Brandenburg, Gigafactory Texas and the Fremont Factory. This increase was partially offset by lower average selling price on our vehicles driven by overall price reductions year over year. There was also a decrease of 2,630 Model S and Model X deliveries year over year.

Automotive regulatory credits revenue decreased \$158 million, or 23%, in the three months ended March 31, 2023 as compared to the three months ended March 31, 2022. We recognized \$288 million in revenue in the first quarter of 2022 primarily due to changes in regulation which entitled us to additional consideration for credits sold previously, in the absence of which we had an increase in automotive regulatory credits revenue year over year. This increase was primarily due to the increase in volume as well as the regional mix of the credits sold.

Automotive leasing revenue decreased \$104 million, or 16%, in the three months ended March 31, 2023 as compared to the three months ended March 31, 2022. The change is primarily due to a decrease in direct sales-type leasing revenue driven by lower deliveries year over year. This was partially offset by an increase from the growing portfolio of our direct operating lease program.

Services and other revenue increased \$558 million, or 44%, in the three months ended March 31, 2023 as compared to the three months ended March 31, 2022. The change is primarily due to an increase in used vehicle revenue driven by increases in volume offset by decreases in average selling price of used Tesla and non-Tesla vehicles, non-warranty maintenance services revenue as our fleet continues to grow, paid Supercharging revenue, insurance services revenue and retail merchandise revenue.

Energy Generation and Storage Segment

Energy generation and storage revenue increased \$913 million, or 148%, in the three months ended March 31, 2023 as compared to the three months ended March 31, 2022, primarily due to an increase in deployments of Megapack, higher solar cash and loan deployments at a higher average selling price, as well as increase in deployments of Powerwall at a higher average selling price, year over year.

Cost of Revenues and Gross Margin

(Dollars in millions)	Three Months Ended March 31,		Change	
	2023	2022	\$	%
Cost of revenues				
Automotive sales	\$ 15,422	\$ 10,914	\$ 4,508	41 %
Automotive leasing	333	408	(75)	(18) %
Total automotive cost of revenues	15,755	11,322	4,433	39 %
Services and other	1,702	1,286	416	32 %
Total automotive & services and other segment cost of revenues	17,457	12,608	4,849	38 %
Energy generation and storage segment	1,361	688	673	98 %
Total cost of revenues	<u>\$ 18,818</u>	<u>\$ 13,296</u>	<u>\$ 5,522</u>	42 %
Gross profit total automotive	\$ 4,208	\$ 5,539		
Gross margin total automotive	21.1 %	32.9 %		
Gross profit total automotive & services and other segment	\$ 4,343	\$ 5,532		
Gross margin total automotive & services and other segment	19.9 %	30.5 %		
Gross profit energy generation and storage segment	\$ 168	\$ (72)		
Gross margin energy generation and storage segment	11.0 %	(11.7) %		
Total gross profit	\$ 4,511	\$ 5,460		
Total gross margin	19.3 %	29.1 %		

Automotive & Services and Other Segment

Cost of automotive sales revenue increased \$4.51 billion, or 41%, in the three months ended March 31, 2023 as compared to the three months ended March 31, 2022, in line with the growth in deliveries year over year, as discussed above. Further, the average combined cost per unit of our vehicles increased year over year due to increasing prices of raw materials, manufacturing, logistics and warranty costs. These costs were partially offset by manufacturing credits earned as part of the IRA during the three months ended March 31, 2023. There were also idle capacity charges primarily related to the ramping up of production in Gigafactory Texas and our proprietary battery cells manufacturing during the three months ended March 31, 2023. We had also incurred costs related to the ramp up of production in Gigafactory Berlin-Brandenburg during the three months ended March 31, 2022. These increases in costs of revenue were positively impacted by the United States dollar strengthening against other foreign currencies in the three months ended March 31, 2023 as compared to the prior period.

Cost of automotive leasing revenue decreased \$75 million, or 18%, in the three months ended March 31, 2023 as compared to the three months ended March 31, 2022, primarily due to a decrease in direct sales-type leasing cost of revenue driven by lower deliveries year over year. This was partially offset by an increase in cost of revenue from the growing portfolio of our direct operating lease program.

Cost of services and other revenue increased \$416 million, or 32%, in the three months ended March 31, 2023 as compared to the three months ended March 31, 2022. The change is primarily due to an increase in used vehicle cost of revenue driven by increases in volume offset by a decrease in costs of used Tesla and non-Tesla vehicle sales, an increase in non-warranty maintenance service cost of revenue, and an increase in costs of paid Supercharging, insurance services and retail merchandise.

Gross margin for total automotive decreased from 32.9% to 21.1% in the three months ended March 31, 2023 as compared to the three months ended March 31, 2022. This was driven by the changes in automotive sales revenue and cost of automotive sales revenue, as well as a decrease in regulatory credits revenue, as discussed earlier.

Gross margin for total automotive & services and other segment decreased from 30.5% to 19.9% in the three months ended March 31, 2023 as compared to the three months ended March 31, 2022, primarily due to the automotive gross margin decrease discussed above, partially offset by an improvement in our services and other gross margin. Additionally, services and other was a higher percentage of the segment gross margin during the first quarter of 2023 as compared to the prior year.

Energy Generation and Storage Segment

Cost of energy generation and storage revenue increased \$673 million, or 98%, in the three months ended March 31, 2023 as compared to the three months ended March 31, 2022, primarily due to increase in deployments of Megapack, increase in solar cash and loan deployments at a higher average cost due to increased component costs, as well as increase in deployments of Powerwall.

Gross margin for energy generation and storage improved from -11.7% to 11.0% in the three months ended March 31, 2023 as compared to the three months ended March 31, 2022. This was driven by the growth in energy generation and storage revenue and cost of energy generation and storage revenue as discussed above. Additionally, there was a higher proportion of energy storage sales, which operated at a higher gross margin, within the segment.

Research and Development Expense

(Dollars in millions)	Three Months Ended March 31,		Change	
	2023	2022	\$	%
Research and development	\$ 771	\$ 865	\$ (94)	(11)%
As a percentage of revenues	3%	5%		

Research and development (“R&D”) expenses decreased \$94 million, or 11%, in the three months ended March 31, 2023 as compared to the three months ended March 31, 2022. The overall decrease was primarily driven by additional costs in the three months ended March 31, 2022 as compared to the current period, as we were in the pre-production phase at Gigafactory Texas and started production at Gigafactory Berlin-Brandenburg only closer to the end of the first quarter of 2022.

R&D expenses as a percentage of revenue decreased from 5% to 3% in the three months ended March 31, 2023 as compared to the three months ended March 31, 2022. Our R&D expenses have decreased as a proportion of total revenues despite expanding product roadmap and technologies.

Selling, General and Administrative Expense

(Dollars in millions)	Three Months Ended March 31,		Change	
	2023	2022	\$	%
Selling, general and administrative	\$ 1,076	\$ 992	\$ 84	8%
As a percentage of revenues	5%	5%		

Selling, general and administrative (“SG&A”) expenses increased \$84 million, or 8%, in the three months ended March 31, 2023 as compared to the three months ended March 31, 2022. This was driven by a \$84 million increase in facilities-related expenses and a \$49 million increase in employee and labor costs primarily from increased headcount, including professional services. These increases were offset by a decrease of \$52 million in stock-based compensation expense, most of which is attributable to the lower stock-based compensation expense of \$48 million on the 2018 CEO Performance Award which was fully expensed as of December 31, 2022.

Interest Income

(Dollars in millions)	Three Months Ended March 31,		Change	
	2023	2022	\$	%
Interest income	\$ 213	\$ 28	\$ 185	661%

Interest income increased \$185 million, or 661%, in the three months ended March 31, 2023 as compared to the three months ended March 31, 2022. This increase was primarily due to higher interest earned on our cash and cash equivalents and short-term investments during the three months ended March 31, 2023 as compared to the prior period. This was driven by an increase in our short-term investments balance and rising interest rates.

Other (Expense) Income, Net

(Dollars in millions)	Three Months Ended March 31,		Change	
	2023	2022	\$	%
Other (expense) income, net	\$ (48)	\$ 56	\$ (104)	Not meaningful

Other (expense) income, net, changed unfavorably by \$104 million in the three months ended March 31, 2023 as compared to the three months ended March 31, 2022. The change is primarily due to fluctuations in foreign currency exchange rates.

Provision for Income Taxes

(Dollars in millions)	Three Months Ended March 31,		Change	
	2023	2022	\$	%
Provision for income taxes	\$ 261	\$ 346	\$ (85)	(25)%
Effective tax rate	9%	10%		

Our provision for income taxes decreased by \$85 million, or 25%, in the three months ended March 31, 2023 as compared to the three months ended March 31, 2022, primarily due to the change in our pre-tax income year over year.

Our effective tax rate decreased from 10% to 9% in the three months ended March 31, 2023 as compared to the three months ended March 31, 2022, primarily due to changes in mix of jurisdictional earnings.

See Note 1, *Summary of Significant Accounting Policies*, to the consolidated financial statements included elsewhere in this Quarterly Report on Form 10-Q for further details.

Liquidity and Capital Resources

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

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

Accordingly, we believe that our current sources of funds will provide us with adequate liquidity during the 12-month period following March 31, 2023, as well as in the long-term.

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

Material Cash Requirements

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

As discussed in and subject to the considerations referenced in Part I, Item 2, *Management's Discussion and Analysis of Financial Condition and Results of Operations—Management Opportunities, Challenges and Uncertainties and 2023 Outlook—Cash Flow and Capital Expenditure Trends* in this Quarterly Report on Form 10-Q, we currently expect our capital expenditures to support our projects globally to be between \$7.00 to \$9.00 billion in 2023 and in each of the following two fiscal years. We also have certain obligations in connection with our operations at Gigafactory New York and Gigafactory Shanghai, as outlined in Part II, Item 7, *Management's Discussion and Analysis of Financial Condition and Results of Operations—Liquidity and Capital Resources—Material Cash Requirements* in our Annual Report on Form 10-K for the year ended December 31, 2022.

As of March 31, 2023, we and our subsidiaries had outstanding \$1.77 billion in aggregate principal amount of indebtedness, of which \$939 million is scheduled to become due in the succeeding 12 months. For details regarding our indebtedness, refer to Note 7, *Debt*, to the consolidated financial statements included elsewhere in this Quarterly Report on Form 10-Q.

Sources and Conditions of Liquidity

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

As of March 31, 2023, we had \$16.05 billion and \$6.35 billion of cash and cash equivalents and short-term investments, respectively. Balances held in foreign currencies had a U.S. dollar equivalent of \$4.26 billion and consisted primarily of Chinese yuan, euros and Canadian dollar. We had \$5.16 billion of unused committed amounts under our credit facilities as of March 31, 2023. Certain of such unused committed amounts are subject to satisfying specified conditions prior to draw-down (such as pledging to leased vehicles and our interests in those leases). For details regarding our indebtedness, refer to Note 7, *Debt*, to the consolidated financial statements included elsewhere in this Quarterly Report on Form 10-Q.

We continue adapting our strategy to meet our liquidity and risk objectives, such as investing in U.S. government and other investments, to do more vertical integration, expand our product roadmap and provide financing options to our customers.

Summary of Cash Flows

(Dollars in millions)	Three Months Ended March 31,			
	2023		2022	
Net cash provided by operating activities	\$	2,513	\$	3,995
Net cash used in investing activities	\$	(2,484)	\$	(2,167)
Net cash used in financing activities	\$	(233)	\$	(1,914)

Cash Flows from Operating Activities

Net cash provided by operating activities decreased by \$1.48 billion to \$2.51 billion during the three months ended March 31, 2023 from \$4.00 billion during the three months ended March 31, 2022. This decrease was primarily due to the overall increase in net operating assets and liabilities of \$928 million and the decrease in net income excluding non-cash expenses, gains and losses of \$554 million. The increase in our net operating assets and liabilities was mainly driven by a larger increase of inventory in the three months ended March 31, 2023 as compared to the three months ended March 31, 2022.

Cash Flows from Investing Activities

Cash flows from investing activities and their variability across each period related primarily to capital expenditures, which were \$2.07 billion for the three months ended March 31, 2023 and \$1.77 billion for the three months ended March 31, 2022, mainly for the expansions of Gigafactory Texas, the Fremont Factory, Gigafactory Berlin-Brandenburg, and Gigafactory Shanghai. We also purchased \$411 million and \$386 million of investments, net of proceeds from maturities, for the three months ended March 31, 2023 and March 31, 2022, respectively.

Cash Flows from Financing Activities

Net cash used in financing activities decreased by \$1.68 billion to \$233 million during the three months ended March 31, 2023 from \$1.91 billion during the three months ended March 31, 2022. The decrease was primarily due to a \$1.64 billion decrease in repayments of convertible and other debt. See Note 7, *Debt*, to the consolidated financial statements included elsewhere in this Quarterly Report on Form 10-Q for further details regarding our debt obligations.

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, Australian dollar and Canadian dollar in relation to our current year operations). In general, we are a net receiver of currencies other than the U.S. dollar for our foreign subsidiaries. Accordingly, changes in exchange rates affect our revenue and other operating results as expressed in U.S. dollars as we do not typically hedge foreign currency risk.

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

We considered the historical trends in foreign currency exchange rates and determined that it is reasonably possible that adverse changes in foreign currency exchange rates of 10% for all currencies could be experienced in the near-term. These changes were applied to our total monetary assets and liabilities denominated in currencies other than our local currencies at the balance sheet date to compute the impact these changes would have had on our net income before income taxes. These changes would have resulted in a gain or loss of \$435 million at March 31, 2023 and \$473 million at December 31, 2022, assuming no foreign currency hedging.

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 March 31, 2023, our disclosure controls and procedures were designed at a reasonable assurance level and were effective to provide reasonable assurance that the information we are required to disclose in reports that we file or submit under the Exchange Act is recorded, processed, summarized and reported within the time periods specified in the SEC rules and forms, and that such information is accumulated and communicated to our management, including our Chief Executive Officer and our Chief Financial Officer, as appropriate, to allow timely decisions regarding required disclosures.

Changes in Internal Control over Financial Reporting

There was no change in our internal control over financial reporting that occurred during the quarter ended March 31, 2023, which has materially affected, or is 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 9, *Commitments and Contingencies*, to the consolidated financial statements included elsewhere in this Quarterly Report on Form 10-Q.

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

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

ITEM 1A. RISK FACTORS

Our operations and financial results are subject to various risks and uncertainties, including the factors discussed in Part I, Item 1A, *Risk Factors* in our Annual Report on Form 10-K for the year ended December 31, 2022, which could adversely affect our business, financial conditions and future results.

ITEM 2. UNREGISTERED SALES OF EQUITY SECURITIES AND USE OF PROCEEDS

None.

ITEM 3. DEFAULTS 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	Form	Incorporated by Reference		Filing Date	Filed Herewith
			File No.	Exhibit		
31.1	Rule 13a-14(a) / 15(d)-14(a) Certification of Principal Executive Officer	—	—	—	—	X
31.2	Rule 13a-14(a) / 15(d)-14(a) Certification of Principal Financial Officer	—	—	—	—	X
32.1*	Section 1350 Certifications	—	—	—	—	
101.INS	Inline XBRL Instance Document	—	—	—	—	X
101.SCH	Inline XBRL Taxonomy Extension Schema Document	—	—	—	—	X
101.CAL	Inline XBRL Taxonomy Extension Calculation Linkbase Document.	—	—	—	—	X
101.DEF	Inline XBRL Taxonomy Extension Definition Linkbase Document	—	—	—	—	X
101.LAB	Inline XBRL Taxonomy Extension Label Linkbase Document	—	—	—	—	X
101.PRE	Inline XBRL Taxonomy Extension Presentation Linkbase Document	—	—	—	—	X
104	Cover Page Interactive Data File (formatted as inline XBRL with applicable taxonomy extension information contained in Exhibits 101)					

* Furnished herewith

SIGNATURES

Pursuant to the requirements of Section 13 or 15(d) the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned, thereunto duly authorized.

Tesla, Inc.

Date: April 21, 2023

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

