

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, 2020

OR

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

Commission File Number: 001-34756

Tesla, Inc.

(Exact name of registrant as specified in its charter)

Delaware

(State or other jurisdiction of
incorporation or organization)

3500 Deer Creek Road
Palo Alto, California
(Address of principal executive offices)

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

94304
(Zip Code)

(650) 681-5000

(Registrant's telephone number, including area code)

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

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

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

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

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

Large accelerated filer 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 23, 2020, there were 185,371,105 shares of the registrant's common stock outstanding.

INDEX

	<u>Page</u>
<u>PART I. FINANCIAL INFORMATION</u>	
Item 1.	4
Financial Statements (Unaudited)	4
Consolidated Balance Sheets	5
Consolidated Statements of Operations	6
Consolidated Statements of Comprehensive Loss	7
Consolidated Statements of Redeemable Noncontrolling Interests and Equity	8
Consolidated Statements of Cash Flow	9
Notes to Consolidated Financial Statements	34
Item 2.	34
Item 3.	47
Item 4.	47
<u>PART II. OTHER INFORMATION</u>	
Item 1.	48
Item 1A.	49
Item 2.	69
Item 3.	69
Item 4.	69
Item 5.	69
Item 6.	70
<u>SIGNATURES</u>	72

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 our strategy, future operations, future financial position, future revenues, projected costs, profitability, expected cost reductions, capital adequacy, expectations regarding demand and acceptance for our technologies, growth opportunities and trends in the market in which we operate, prospects and plans and objectives of management. The words “anticipates,” “believes,” “could,” “estimates,” “expects,” “intends,” “may,” “plans,” “projects,” “will,” “would” and similar expressions are intended to identify forward-looking statements, although not all forward-looking statements contain these identifying words. We may not actually achieve the plans, intentions or expectations disclosed in our forward-looking statements and you should not place undue reliance on our forward-looking statements. Actual results or events could differ materially from the plans, intentions and expectations disclosed in the forward-looking statements that we make. These forward-looking statements involve risks and uncertainties that could cause our actual results to differ materially from those in the forward-looking statements, including, without limitation, the risks set forth in Part II, Item 1A, “Risk Factors” in this Quarterly Report on Form 10-Q and in our other filings with the Securities and Exchange Commission. We do not assume any obligation to update any forward-looking statements.

PART I. FINANCIAL INFORMATION
ITEM 1. FINANCIAL STATEMENTS

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

	March 31, 2020	December 31, 2019
Assets		
Current assets		
Cash and cash equivalents	\$ 8,080	\$ 6,268
Accounts receivable, net	1,274	1,324
Inventory	4,494	3,552
Prepaid expenses and other current assets	1,045	959
Total current assets	<u>14,893</u>	<u>12,103</u>
Operating lease vehicles, net	2,527	2,447
Solar energy systems, net	6,106	6,138
Property, plant and equipment, net	10,638	10,396
Operating lease right-of-use assets	1,197	1,218
Intangible assets, net	323	339
Goodwill	193	198
Other non-current assets	1,373	1,470
Total assets	<u>\$ 37,250</u>	<u>\$ 34,309</u>
Liabilities		
Current liabilities		
Accounts payable	\$ 3,970	\$ 3,771
Accrued liabilities and other	2,825	3,222
Deferred revenue	1,186	1,163
Customer deposits	788	726
Current portion of debt and finance leases	3,217	1,785
Total current liabilities	<u>11,986</u>	<u>10,667</u>
Debt and finance leases, net of current portion	10,666	11,634
Deferred revenue, net of current portion	1,199	1,207
Other long-term liabilities	2,667	2,691
Total liabilities	<u>26,518</u>	<u>26,199</u>
Commitments and contingencies (Note 12)		
Redeemable noncontrolling interests in subsidiaries	632	643
Convertible senior notes (Note 10)	60	—
Equity		
Stockholders' equity		
Preferred stock; \$0.001 par value; 100 shares authorized; no shares issued and outstanding	—	—
Common stock; \$0.001 par value; 2,000 shares authorized; 185 and 181 shares issued and outstanding as of March 31, 2020 and December 31, 2019, respectively	0	0
Additional paid-in capital	15,390	12,737
Accumulated other comprehensive loss	(113)	(36)
Accumulated deficit	(6,104)	(6,083)
Total stockholders' equity	<u>9,173</u>	<u>6,618</u>
Noncontrolling interests in subsidiaries	867	849
Total liabilities and equity	<u>\$ 37,250</u>	<u>\$ 34,309</u>

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,	
	2020	2019
Revenues		
Automotive sales	\$ 4,893	\$ 3,509
Automotive leasing	239	215
Total automotive revenues	5,132	3,724
Energy generation and storage	293	324
Services and other	560	493
Total revenues	5,985	4,541
Cost of revenues		
Automotive sales	3,699	2,856
Automotive leasing	122	117
Total automotive cost of revenues	3,821	2,973
Energy generation and storage	282	316
Services and other	648	686
Total cost of revenues	4,751	3,975
Gross profit	1,234	566
Operating expenses		
Research and development	324	340
Selling, general and administrative	627	704
Restructuring and other	—	44
Total operating expenses	951	1,088
Income (loss) from operations	283	(522)
Interest income	10	9
Interest expense	(169)	(158)
Other (expense) income, net	(54)	26
Income (loss) before income taxes	70	(645)
Provision for income taxes	2	23
Net income (loss)	68	(668)
Net income attributable to noncontrolling interests and redeemable noncontrolling interests in subsidiaries	52	34
Net income (loss) attributable to common stockholders	\$ 16	\$ (702)
Net income (loss) per share of common stock attributable to common stockholders		
Basic	\$ 0.09	\$ (4.10)
Diluted	\$ 0.08	\$ (4.10)
Weighted average shares used in computing net income (loss) per share of common stock		
Basic	183	173
Diluted	199	173

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

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

	<u>Three Months Ended March 31,</u>	
	<u>2020</u>	<u>2019</u>
Net income (loss)	\$ 68	\$ (668)
Other comprehensive loss:		
Foreign currency translation adjustment	(77)	(27)
Comprehensive loss	(9)	(695)
Less: Comprehensive income attributable to noncontrolling interests and redeemable noncontrolling interests in subsidiaries	52	34
Comprehensive loss attributable to common stockholders	<u>\$ (61)</u>	<u>\$ (729)</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 Deficit	Accumulated Other Comprehensive Loss	Total Stockholders' Equity	Noncontrolling Interests in Subsidiaries	Total Equity
		Shares	Amount						
Balance as of December 31, 2018	\$ 556	173	\$ 0	\$ 10,249	\$ (5,318)	\$ (8)	\$ 4,923	\$ 834	\$ 5,757
Adjustments for prior periods from adopting ASC 842	—	—	—	—	97	—	97	—	97
Issuance of common stock for equity incentive awards and acquisitions, net of transaction costs	—	1	0	93	—	—	93	—	93
Stock-based compensation	—	—	—	230	—	—	230	—	230
Contributions from noncontrolling interests	31	—	—	—	—	—	—	16	16
Distributions to noncontrolling interests	(11)	—	—	—	—	—	—	(28)	(28)
Other	—	—	—	(8)	—	—	(8)	—	(8)
Net (loss) income	(6)	—	—	—	(702)	—	(702)	40	(662)
Other comprehensive loss	—	—	—	—	—	(27)	(27)	—	(27)
Balance as of March 31, 2019	<u>\$ 570</u>	<u>174</u>	<u>\$ 0</u>	<u>\$ 10,564</u>	<u>\$ (5,923)</u>	<u>\$ (35)</u>	<u>\$ 4,606</u>	<u>\$ 862</u>	<u>\$ 5,468</u>

	Redeemable Noncontrolling Interests	Common Stock		Additional Paid-In Capital	Accumulated Deficit	Accumulated Other Comprehensive Loss	Total Stockholders' Equity	Noncontrolling Interests in Subsidiaries	Total Equity
		Shares	Amount						
Balance as of December 31, 2019	\$ 643	181	\$ 0	\$ 12,737	\$ (6,083)	\$ (36)	\$ 6,618	\$ 849	\$ 7,467
Adjustments for prior periods from adopting ASU 2016-13	—	—	—	—	(37)	—	(37)	—	(37)
Reclassification from equity to mezzanine equity for 1.25% Convertible Senior Notes due in 2021	—	—	—	(60)	—	—	(60)	—	(60)
Issuance of common stock for equity incentive awards	—	1	0	160	—	—	160	—	160
Issuance of common stock in February 2020 public offering at \$767.00 per share, net of issuance costs of \$28	—	3	0	2,309	—	—	2,309	—	2,309
Stock-based compensation	—	—	—	244	—	—	244	—	244
Contributions from noncontrolling interests	2	—	—	—	—	—	—	17	17
Distributions to noncontrolling interests	(14)	—	—	—	—	—	—	(50)	(50)
Net income	1	—	—	—	16	—	16	51	67
Other comprehensive loss	—	—	—	—	—	(77)	(77)	—	(77)
Balance as of March 31, 2020	<u>\$ 632</u>	<u>185</u>	<u>\$ 0</u>	<u>\$ 15,390</u>	<u>\$ (6,104)</u>	<u>\$ (113)</u>	<u>\$ 9,173</u>	<u>\$ 867</u>	<u>\$ 10,040</u>

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,	
	2020	2019
Cash Flows from Operating Activities		
Net income (loss)	\$ 68	\$ (668)
Adjustments to reconcile net income (loss) to net cash used in operating activities:		
Depreciation, amortization and impairment	553	468
Stock-based compensation	211	208
Amortization of debt discounts and issuance costs	46	40
Inventory and purchase commitments write-downs	45	81
Loss on disposals of fixed assets	7	18
Foreign currency transaction net loss (gain)	19	(39)
Non-cash interest and other operating activities	58	116
Operating cash flow related to repayment of discounted convertible notes	—	(188)
Changes in operating assets and liabilities, net of effect of business combinations:		
Accounts receivable	(14)	(100)
Inventory	(981)	(809)
Operating lease vehicles	(197)	13
Prepaid expenses and other current assets	(154)	(46)
Other non-current assets	40	28
Accounts payable and accrued liabilities	(265)	(41)
Deferred revenue	53	318
Customer deposits	88	(25)
Other long-term liabilities	(17)	(14)
Net cash used in operating activities	(440)	(640)
Cash Flows from Investing Activities		
Purchases of property and equipment excluding finance leases, net of sales	(455)	(280)
Purchases of solar energy systems, net of sales	(26)	(25)
Receipt of government grants	1	—
Business combinations, net of cash acquired	—	(1)
Net cash used in investing activities	(480)	(306)
Cash Flows from Financing Activities		
Proceeds from issuances of common stock in public offerings, net of issuance costs	2,309	—
Proceeds from issuances of convertible and other debt	2,802	1,494
Repayments of convertible and other debt	(2,318)	(1,970)
Collateralized lease repayments	(97)	(134)
Proceeds from exercises of stock options and other stock issuances	160	78
Principal payments on finance leases	(100)	(67)
Debt issuance costs	—	(8)
Proceeds from investments by noncontrolling interests in subsidiaries	19	47
Distributions paid to noncontrolling interests in subsidiaries	(67)	(85)
Payments for buy-outs of noncontrolling interests in subsidiaries	—	(8)
Net cash provided by (used in) financing activities	2,708	(653)
Effect of exchange rate changes on cash and cash equivalents and restricted cash	(24)	5
Net increase (decrease) in cash and cash equivalents and restricted cash	1,764	(1,594)
Cash and cash equivalents and restricted cash, beginning of period	6,783	4,277
Cash and cash equivalents and restricted cash, end of period	\$ 8,547	\$ 2,683
Supplemental Non-Cash Investing and Financing Activities		
Acquisitions of property and equipment included in liabilities	\$ 415	\$ 120
Leased assets obtained in exchange for finance lease liabilities	\$ 32	\$ 218
Leased assets obtained in exchange for operating lease liabilities	\$ 60	\$ 22

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

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

Note 1 – Overview

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

During and following the first quarter of 2020, there has been a widespread worldwide impact from the coronavirus disease (“COVID-19”) pandemic. We experienced a government-imposed suspension of operations for 10 days at Gigafactory Shanghai immediately following a scheduled 7-day closure for the Lunar New Year holiday, after which we resumed operations on February 10, 2020. Panasonic, our partner that manufactures lithium-ion battery cells for our products at our Gigafactory Nevada, suspended its operations there for 14 days before resuming certain operations starting on April 11, 2020. Finally, we temporarily suspended most production at Gigafactory New York starting on March 14, 2020 pursuant to a New York State executive order, and we decided to temporarily suspend all production at the Fremont Factory starting on March 23, 2020 and most production at Gigafactory Nevada starting on April 12, 2020 in order to accommodate the related challenges for our employees and their families and our suppliers. Social distancing measures and reduced operations or closures at government offices and businesses, including motor vehicle departments, vehicle auction houses and municipal and utility company inspectors, also resulted in challenges in or postponements past the first quarter of 2020 for our new vehicle deliveries, used vehicle sales, and energy product deployments, and such conditions have generally continued. Even after we resume operations at our U.S. production facilities, our manufacturing rates and timelines may also be affected by global economic conditions and levels of consumer comfort and spend, which could impact demand in the worldwide transportation and automotive industries and for construction projects such as the addition of solar energy systems.

Note 2 – Summary of Significant Accounting Policies

Unaudited Interim Financial Statements

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

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

Use of Estimates

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

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

Reclassifications

Certain prior period balances have been reclassified to conform to the current period presentation in the consolidated financial statements and the accompanying notes. Restricted cash and MyPower customer notes receivable have been reclassified to other assets and resale value guarantees has been reclassified to other liabilities.

Revenue Recognition

Revenue by source

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

	Three Months Ended March 31,	
	2020	2019
Automotive sales without resale value guarantee	\$ 4,367	\$ 3,683
Automotive sales with resale value guarantee (1)	172	(390)
Automotive regulatory credits	354	216
Energy generation and storage sales	173	212
Services and other	560	493
Total revenues from sales and services	5,626	4,214
Automotive leasing	239	215
Energy generation and storage leasing	120	112
Total revenues	<u>\$ 5,985</u>	<u>\$ 4,541</u>

- (1) Due to pricing adjustments we made to our vehicle offerings in the three months ended March 31, 2019, we estimated that there was a greater likelihood that customers would exercise their buyback options and adjusted our sales return reserve on vehicles previously sold under our buyback options program which resulted in a reduction of automotive sales with resale value guarantee of \$501 million that did not similarly occur during the three months ended March 31, 2020. The amount presented in the three months ended March 31, 2019 represents automotive sales with resale value guarantee net of such pricing adjustments impact.

Automotive Sales Revenue

Automotive Sales with and without Resale Value Guarantee

Deferred revenue related to the access to our Supercharger network, internet connectivity and Full Self Driving (“FSD”) features and over-the-air software updates on automotive sales with and without resale value guarantee amounted to \$1.53 billion and \$1.47 billion as of March 31, 2020 and December 31, 2019, respectively. Deferred revenue is equivalent to the total transaction price allocated to the performance obligations that are unsatisfied, or partially unsatisfied, as of the balance sheet date. Revenue recognized from the deferred revenue balance as of December 31, 2019 and 2018 was \$57 million and \$37 million for the three months ended March 31, 2020 and 2019, respectively. Of the total deferred revenue on automotive sales with and without resale value guarantees, we expect to recognize \$810 million of revenue in the next 12 months. The remaining balance will be recognized over the various performance periods of the obligations, which is up to the eight-year life of the vehicle.

With the exception of two programs which are discussed within the *Automotive Leasing Revenue* section, we recognize revenue when control transfers upon delivery to customers as a sale with a right of return as we do not believe the customer has a significant economic incentive to exercise the resale value guarantee provided to them. The total sales return reserve on vehicles previously sold under our buyback options program was \$ 594 and \$ 639 million as of March 31, 2020 and December 31, 2019, respectively, of which \$ 106 and \$ 93 million was short term, respectively.

Automotive Regulatory Credits

Deferred revenue related to sales of automotive regulatory credits was \$140 million as of March 31, 2020 and December 31, 2019. No revenue was recognized from the deferred revenue balance as of December 31, 2019. We expect to recognize the deferred revenue as of March 31, 2020 in the next 12 months.

Automotive Leasing Revenue

Automotive leasing revenue includes revenue recognized under lease accounting guidance for our direct leasing programs as well as the two programs with resale value guarantees described below.

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

The maximum amount we could be required to pay under our collateralized lease borrowing program, should we decide to repurchase all vehicles, was \$149 million and \$214 million as of March 31, 2020 and December 31, 2019, respectively, including \$113 million within a 12-month period from March 31, 2020. As of March 31, 2020 and December 31, 2019, we had \$164 million and \$238 million, respectively, of collateralized lease borrowings recorded in accrued liabilities and other and other long-term liabilities, and \$20 million and \$29 million, respectively, recorded in deferred revenue liability. For the three months ended March 31, 2020 and 2019, we recognized \$33 million and \$53 million, respectively, of leasing revenue related to this program. The net carrying amount of operating lease vehicles under this program was \$132 million and \$190 million, respectively, as of March 31, 2020 and December 31, 2019.

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

As of March 31, 2020 and December 31, 2019, we had resale value guarantees where exercise is probable of \$74 million and \$115 million, respectively, recorded in accrued liabilities and other. For the three months ended March 31, 2020 and 2019, we recognized \$35 million and \$48 million, respectively, of leasing revenue related to this program. The net carrying amount of operating lease vehicles under this program was \$53 million and \$83 million, respectively, as of March 31, 2020 and December 31, 2019.

Energy Generation and Storage Sales

As of March 31, 2020 and December 31, 2019, deferred revenue related to non-refundable customer prepayments, remote monitoring service, and operations and maintenance service amounted to \$149 million and \$156 million, respectively. Revenue recognized from the deferred revenue balance as of December 31, 2019 and 2018 was \$21 million and \$17 million for the three months ended March 31, 2020 and 2019, respectively. As of March 31, 2020, total transaction price allocated to performance obligations that were unsatisfied or partially unsatisfied for contracts with an original expected length of more than one year was \$102 million. Of this amount, we expect to recognize \$5 million in the next 12 months and the remaining over a period up to 28 years.

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, 2020 and December 31, 2019, the aggregate balances of our gross unrecognized tax benefits were \$274 million and \$273 million, respectively, of which \$248 million and \$247 million, respectively, would not give rise to changes in our effective tax rate since these tax benefits would increase a deferred tax asset that is currently fully offset by a valuation allowance.

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

Basic net income (loss) per share of common stock attributable to common stockholders is calculated by dividing net income (loss) attributable to common stockholders by the weighted-average shares of common stock outstanding for the period. During the three months ended March 31, 2019, we increased net loss attributable to common stockholders by \$8 million to arrive at the numerator used to calculate net loss per share. This adjustment represents the difference between the cash we paid to a financing fund investor for their noncontrolling interest in one of our subsidiaries and the carrying amount of the noncontrolling interest on our consolidated balance sheet, in accordance with ASC 260, *Earnings per Share*. Potentially dilutive shares, which are based on the weighted-average shares of common stock underlying outstanding stock-based awards, warrants and convertible senior notes using the treasury stock method or the if-converted method, as applicable, are included when calculating diluted net income (loss) per share of common stock attributable to common stockholders when their effect is dilutive. Since we intend to settle or have settled in cash the principal outstanding under our 0.25% Convertible Senior Notes due in 2019, 1.25% Convertible Senior Notes due in 2021, 2.375% Convertible Senior Notes due in 2022, 2.00% Convertible Senior Notes due in 2024 and our subsidiary's 5.50% Convertible Senior Notes due in 2022, we use the treasury stock method applied using our average share price during the period when calculating their potential dilutive effect, if any. Furthermore, in connection with the offerings of our notes, we entered into convertible note hedges and warrants (see Note 10, *Debt*). However, our convertible note hedges are not included when calculating potentially dilutive shares since their effect is always anti-dilutive. Warrants which have a strike price above our average share price during the period were out of the money and have not been included in the tables below.

The following table presents the computation of basic and diluted net income (loss) per share of common stock attributable to common stockholders (in millions, except per share data):

	Three Months Ended March 31,	
	2020	2019
Net income (loss) per share of common stock attributable to common stockholders, basic		
Net income (loss) attributable to common stockholders	\$ 16	\$ (702)
Less: Buy-out of noncontrolling interest	—	8
Net income (loss) used in computing net income (loss) per share of common stock, basic	16	(710)
Weighted average shares used in computing net income (loss) per share of common stock, basic	183	173
Net income (loss) per share of common stock attributable to common stockholders, basic	<u>\$ 0.09</u>	<u>\$ (4.10)</u>
Net income (loss) per share of common stock attributable to common stockholders, diluted		
Net income (loss) attributable to common stockholders	\$ 16	\$ (702)
Less: Buy-out of noncontrolling interest	—	8
Net income (loss) used in computing net income (loss) per share of common stock, diluted	16	(710)
Weighted average shares used in computing net income (loss) per share of common stock, basic	183	173
Add:		
Stock-based awards	9	—
Convertible senior notes	6	—
Warrants	1	—
Weighted average shares used in computing net income (loss) per share of common stock, diluted	199	173
Net income (loss) per share of common stock attributable to common stockholders, diluted	<u>\$ 0.08</u>	<u>\$ (4.10)</u>

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

	Three Months Ended March 31,	
	2020	2019
Stock-based awards	0	11
Convertible senior notes	0	1

Restricted Cash

We maintain certain cash balances restricted as to withdrawal or use. Our restricted cash is comprised primarily of cash as collateral for our sales to lease partners with a resale value guarantee, letters of credit, real estate leases, insurance policies, credit card borrowing facilities and certain operating leases. In addition, restricted cash includes cash received from certain fund investors that have not been released for use by us and cash held to service certain payments under various secured debt facilities. The fair value of our restricted cash invested in commercial paper equals the carrying value using quoted prices in active markets (Level I). We record restricted cash as other assets in the consolidated balance sheets and determine current or non-current classification based on the expected duration of the restriction.

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

	March 31, 2020	December 31, 2019	March 31, 2019	December 31, 2018
Cash and cash equivalents	\$ 8,080	\$ 6,268	\$ 2,198	\$ 3,686
Restricted cash included in prepaid expenses and other current assets	193	246	131	193
Restricted cash included in other non-current assets	274	269	354	398
Total as presented in the consolidated statements of cash flows	<u>\$ 8,547</u>	<u>\$ 6,783</u>	<u>\$ 2,683</u>	<u>\$ 4,277</u>

MyPower Customer Notes Receivable

We have customer notes receivable under the legacy MyPower loan program. MyPower was offered by one of our subsidiaries to provide residential customers with the option to finance the purchase of a solar energy system through a 30-year loan. The outstanding balances, net of any allowance for credit losses, are presented on the consolidated balance sheet as a component of prepaid expenses and other current assets for the current portion and as other non-current assets for the long-term portion. We adopted ASU No. 2016-13, *Measurement of Credit Losses on Financial Instruments* ("ASC 326") on January 1, 2020 on a modified retrospective basis. Under ASC 326, expected credit loss for customer notes receivable are measured on a collective basis and are determined as the difference between the amortized cost basis and the present value of cash flows expected to be collected. In determining expected credit losses, we consider our historical level of credit losses, current economic trends, and reasonable and supportable forecasts that affect the collectability of the future cash flows. We write-off customer notes receivable when they are deemed uncollectible and the amount of potentially uncollectible amounts has been insignificant. Using a modified retrospective approach for the impact upon adoption, we recorded an increase to the allowance for credit losses of \$37 million on January 1, 2020, with an offset to accumulated deficit. As of March 31, 2020 and December 31, 2019, the total outstanding balance of MyPower customer notes receivable, net of allowance for credit losses, was \$358 million and \$402 million, respectively, of which \$9 million was due in the next 12 months as of both periods. As of March 31, 2020, the allowance for credit losses was \$45 million. In addition, there were no material non-accrual or past due customer notes receivable as of March 31, 2020.

Concentration of Risk

Credit Risk

Financial instruments that potentially subject us to a concentration of credit risk consist of cash and cash equivalents, restricted cash, accounts receivable, convertible note hedges, and interest rate swaps. Our cash balances are primarily invested in money market funds or on deposit at high credit quality financial institutions in the U.S. These deposits are typically in excess of insured limits. As of March 31, 2020, one entity represented 10% or more of our total accounts receivable balance, which was related to sales of regulatory credits. As of December 31, 2019, no entity represented 10% of our total accounts receivable balance. The risk of concentration for our interest rate swaps is mitigated by transacting with several highly-rated multinational banks.

Supply Risk

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

The specific timing and pace of our resumption of normal U.S. manufacturing operations will depend on the status of various government regulations and the readiness of our suppliers and vendors. Although we are working with each of our suppliers and government agencies on how best to resume and sustain production, it ultimately remains uncertain how quickly we and our suppliers will be able to return to prior levels of production and maintain such levels.

Operating Lease Vehicles

The gross cost of operating lease vehicles recorded on the consolidated balance sheets as of March 31, 2020 and December 31, 2019 was \$2.94 billion and \$2.85 billion, respectively, net of accumulated depreciation of \$412 million and \$406 million, as of March 31, 2020 and December 31, 2019, respectively.

Warranties

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

	Three Months Ended March 31,	
	2020	2019
Accrued warranty—beginning of period	\$ 1,089	\$ 748
Warranty costs incurred	(81)	(54)
Net changes in liability for pre-existing warranties, including expirations and foreign exchange impact	3	38
Provision for warranty	119	112
Accrued warranty—end of period	\$ 1,130	\$ 844

Recent Accounting Pronouncements

Recently issued accounting pronouncements not yet adopted

In December 2019, the FASB issued ASU No. 2019-12, Simplifying the Accounting for Income Taxes, as part of its initiative to reduce complexity in accounting standards. The amendments in the ASU include removing exceptions to incremental intraperiod tax allocation of losses and gains from different financial statement components, exceptions to the method of recognizing income taxes on interim period losses, and exceptions to deferred tax liability recognition related to foreign subsidiary investments. In addition, the ASU requires that entities recognize franchise tax based on an incremental method and requires an entity to evaluate the accounting for step-ups in the tax basis of Goodwill as inside or outside of a business combination.

The amendments in the ASU are effective for fiscal years beginning after December 15, 2020, including interim periods therein. Early adoption of the standard is permitted, including adoption in interim or annual periods for which financial statements have not yet been issued. We have not early adopted this ASU as of March 31, 2020. The ASU is currently not expected to have a material impact on our consolidated financial statements.

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

Recently adopted accounting pronouncements

In June 2016, the FASB issued ASU No. 2016-13, Measurement of Credit Losses on Financial Instruments, to require financial assets carried at amortized cost to be presented at the net amount expected to be collected based on historical experience, current conditions and forecasts. Subsequently, the FASB issued ASU No. 2018-19, Codification Improvements to Topic 326, to clarify that receivables arising from operating leases are within the scope of lease accounting standards. Further, the FASB issued ASU No. 2019-04, ASU No. 2019-05, ASU 2019-10, ASU 2019-11, ASU 2020-02 and ASU 2020-03 to provide additional guidance on the credit losses standard. The ASUs are effective for interim and annual periods beginning after December 15, 2019. Adoption of the ASUs is on a modified retrospective basis. We adopted the ASUs on January 1, 2020. The ASUs did not have a material impact on our consolidated financial statements. This ASU applies to all financial assets including loans, trade receivables and any other financial assets not excluded from the scope that have the contractual right to receive cash. The adoption of this ASU did not have any impact except on MyPower Customer Notes Receivable. Refer to *MyPower Customer Notes Receivable* above for further details.

In January 2017, the FASB issued ASU No. 2017-04, Simplifying the Test for Goodwill Impairment, to simplify the test for goodwill impairment by removing Step 2. An entity will, therefore, perform the goodwill impairment test by comparing the fair value of a reporting unit with its carrying amount and recognizing an impairment charge for the amount by which the carrying amount exceeds the fair value, not to exceed the total amount of goodwill allocated to the reporting unit. An entity still has the option to perform a qualitative assessment to determine if the quantitative impairment test is necessary. The ASU is effective for interim and annual periods beginning after December 15, 2019. Adoption of the ASU is prospective. We adopted the ASU prospectively on January 1, 2020. The ASU did not have a material impact on our consolidated financial statements.

In August 2018, the FASB issued ASU No. 2018-15, Customer's Accounting for Implementation Costs Incurred in a Cloud Computing Arrangement that Is a Service Contract. The ASU aligns the requirements for capitalizing implementation costs incurred in a hosting arrangement that is a service contract with the requirements for capitalizing implementation costs incurred to develop or obtain internal-use software (and hosting arrangements that include an internal-use software license). The ASU is effective for interim and annual periods beginning after December 15, 2019. Adoption of the ASU is either retrospective or prospective. We adopted the ASU prospectively on January 1, 2020. The ASU did not have a material impact on our consolidated financial statements.

Note 3 – Intangible Assets

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

	March 31, 2020				December 31, 2019			
	Gross Carrying Amount	Accumulated Amortization	Other	Net Carrying Amount	Gross Carrying Amount	Accumulated Amortization	Other	Net Carrying Amount
Finite-lived intangible assets:								
Developed technology	\$ 291	\$ (82)	\$ (2)	\$ 207	\$ 291	\$ (72)	\$ 1	\$ 220
Trade names	3	(1)	0	2	3	(1)	1	3
Favorable contracts and leases, net	113	(26)	—	87	113	(24)	—	89
Other	38	(16)	—	22	38	(16)	—	22
Total finite-lived intangible assets	445	(125)	(2)	318	445	(113)	2	334
Indefinite-lived intangible assets:								
Gigafactory Nevada water rights	5	—	—	5	5	—	—	5
Total intangible assets	\$ 450	\$ (125)	\$ (2)	\$ 323	\$ 450	\$ (113)	\$ 2	\$ 339

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

Nine months ending December 31, 2020	\$ 37
2021	49
2022	48
2023	42
2024	27
Thereafter	115
Total	\$ 318

Note 4 – Fair Value of Financial Instruments

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

	March 31, 2020				December 31, 2019			
	Fair Value	Level I	Level II	Level III	Fair Value	Level I	Level II	Level III
Money market funds (cash and cash equivalents)	\$ 5,293	\$ 5,293	\$ —	\$ —	\$ 1,632	\$ 1,632	\$ —	\$ —
Interest rate swap assets	—	—	—	—	1	—	1	—
Interest rate swap liabilities	(65)	—	(65)	—	(27)	—	(27)	—
Total	\$ 5,228	\$ 5,293	\$ (65)	\$ —	\$ 1,606	\$ 1,632	\$ (26)	\$ —

All of our money market funds were classified within Level I of the fair value hierarchy because they were valued using quoted prices in active markets. Our interest rate swaps were classified within Level II of the fair value hierarchy because they were valued using alternative pricing sources or models that utilized market observable inputs, including current and forward interest rates.

Interest Rate Swaps

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

	March 31, 2020			December 31, 2019		
	Aggregate Notional Amount	Gross Asset at Fair Value	Gross Liability at Fair Value	Aggregate Notional Amount	Gross Asset at Fair Value	Gross Liability at Fair Value
Interest rate swaps	\$ 738	\$ —	\$ 65	\$ 821	\$ 1	\$ 27

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

	Three Months Ended March 31,	
	2020	2019
Gross losses	\$ 39	\$ 19

Disclosure of Fair Values

Our financial instruments that are not re-measured at fair value include accounts receivable, MyPower customer notes receivable, accounts payable, accrued liabilities, customer deposits and debt. The carrying values of these financial instruments other than our 1.25% Convertible Senior Notes due in 2021, 2.375% Convertible Senior Notes due in 2022 and 2.00% Convertible Senior Notes due in 2024 and our subsidiary's Zero-Coupon Convertible Senior Notes due in 2020 (collectively referred to as "Convertible Senior Notes" below), 5.30% Senior Notes due in 2025, solar asset-backed notes and solar loan-backed notes approximate their fair values.

We estimate the fair value of the Convertible Senior Notes and the 5.30% Senior Notes due in 2025 using commonly accepted valuation methodologies and market-based risk measurements that are indirectly observable, such as credit risk (Level II). In addition, we estimate the fair values of our solar asset-backed notes and solar loan-backed notes based on rates currently offered for instruments with similar maturities and terms (Level III). The following table presents the estimated fair values and the carrying values (in millions):

	March 31, 2020		December 31, 2019	
	Carrying Value	Fair Value	Carrying Value	Fair Value
Convertible Senior Notes	\$ 3,734	\$ 7,375	\$ 3,686	\$ 6,067
5.30% Senior Notes due in 2025	\$ 1,783	\$ 1,688	\$ 1,782	\$ 1,748
Solar asset-backed notes	\$ 1,139	\$ 969	\$ 1,155	\$ 1,211
Solar loan-backed notes	\$ 161	\$ 136	\$ 175	\$ 189

Transactions for our solar asset-backed notes and solar loan-backed notes in April 2020 have indicated pricing which has significantly improved from the levels observed at March 31, 2020.

Note 5 – Inventory

Our inventory consisted of the following (in millions):

	March 31, 2020	December 31, 2019
Raw materials	\$ 1,653	\$ 1,428
Work in process	494	362
Finished goods (1)	1,961	1,356
Service parts	386	406
Total	<u>\$ 4,494</u>	<u>\$ 3,552</u>

- (1) Finished goods inventory includes vehicles in transit to fulfill customer orders, new vehicles available for sale, used vehicles, energy storage products and Solar Roof products available for sale. Finished goods inventory increased from December 31, 2019 to March 31, 2020 due to limited capacity to deliver or install our products at the end of the first quarter in 2020.

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

We write-down inventory for any excess or obsolete inventories or when we believe that the net realizable value of inventories is less than the carrying value. During the three months ended March 31, 2020 and 2019, we recorded write-downs of \$45 million and \$64 million, respectively, in cost of revenues.

Note 6 – Solar Energy Systems, Net

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

	March 31, 2020	December 31, 2019
Solar energy systems in service	\$ 6,703	\$ 6,682
Initial direct costs related to customer solar energy system lease acquisition costs	102	102
	<u>6,805</u>	<u>6,784</u>
Less: accumulated depreciation and amortization	(781)	(723)
	<u>6,024</u>	<u>6,061</u>
Solar energy systems under construction	24	18
Solar energy systems pending interconnection	58	59
Solar energy systems, net (1)	<u>\$ 6,106</u>	<u>\$ 6,138</u>

- (1) As of March 31, 2020 and December 31, 2019, solar energy systems, net, included \$36 million of gross finance leased assets with accumulated depreciation and amortization of \$6 million.

Note 7 – Property, Plant and Equipment, Net

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

	March 31, 2020	December 31, 2019
Machinery, equipment, vehicles and office furniture	\$ 7,428	\$ 7,167
Tooling	1,574	1,493
Leasehold improvements	1,103	1,087
Land and buildings	3,146	3,024
Computer equipment, hardware and software	647	595
Construction in progress	812	764
	<u>14,710</u>	<u>14,130</u>
Less: Accumulated depreciation	(4,072)	(3,734)
Total	<u>\$ 10,638</u>	<u>\$ 10,396</u>

Construction in progress is primarily comprised of equipment and tooling related to the manufacturing of our products and Gigafactory Shanghai expansion. Completed assets are transferred to their respective asset classes, and depreciation begins when an asset is ready for its intended use. Interest on outstanding debt is capitalized during periods of significant capital asset construction and amortized over the useful lives of the related assets. During the three months ended March 31, 2020 and 2019, we capitalized \$10 million and \$8 million, respectively, of interest.

Depreciation expense during the three months ended March 31, 2020 and 2019 was \$371 million and \$299 million, respectively. Gross property plant and equipment under finance leases as of March 31, 2020 and December 31, 2019 was \$2.10 billion and \$2.08 billion, respectively, with accumulated depreciation of \$557 million and \$483 million, respectively.

Panasonic has partnered with us on Gigafactory Nevada with investments in the production equipment that it uses to manufacture and supply us with battery cells. Under our arrangement with Panasonic, we plan to purchase the full output from their production equipment at negotiated prices. As the terms of the arrangement convey a finance lease under ASC 842, *Leases*, we account for their production equipment as leased assets when production commences. This results in us recording the cost of their production equipment within property, plant and equipment, net, on the consolidated balance sheets with a corresponding liability recorded to debt and finance leases. As of March 31, 2020 and December 31, 2019, we had cumulatively capitalized costs of \$1.75 billion and \$1.73 billion, respectively, on the consolidated balance sheets in relation to the production equipment under our Panasonic arrangement.

Note 8 – Accrued Liabilities and Other

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

	March 31, 2020	December 31, 2019
Accrued purchases (1)	\$ 643	\$ 638
Payroll and related costs	409	466
Taxes payable (2)	399	611
Accrued interest	55	86
Financing obligation, current portion	53	57
Accrued warranty reserve, current portion	362	344
Sales return reserve, current portion	289	272
Resale value guarantees, current portion	202	317
Operating lease liabilities, current portion	229	228
Other current liabilities	184	203
Total	\$ 2,825	\$ 3,222

- (1) Accrued purchases primarily reflects receipts of goods and services that we had not been invoiced yet. As we are invoiced for these goods and services, this balance will reduce and accounts payable will increase.
- (2) Taxes payable includes value added tax, sales tax, property tax, use tax and income tax payables.

Note 9 – Other Long-Term Liabilities

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

	March 31, 2020	December 31, 2019
Accrued warranty reserve	\$ 768	\$ 745
Financing obligation	34	37
Sales return reserve	488	545
Resale value guarantees	36	36
Operating lease liabilities	941	956
Other non-current liabilities	400	372
Total other long-term liabilities	\$ 2,667	\$ 2,691

Note 10 –Debt

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

	Net Carrying Value		Unpaid Principal Balance	Unused Committed Amount (1)	Contractual Interest Rates	Contractual Maturity Date
	Current	Long-Term				
Recourse debt:						
1.25% Convertible Senior Notes due in 2021 ("2021 Notes")	\$ 1,320	\$ —	\$ 1,380	\$ —	1.25%	March 2021
2.375% Convertible Senior Notes due in 2022 ("2022 Notes")	—	910	978	—	2.375%	March 2022
2.00% Convertible Senior Notes due in 2024 ("2024 Notes")	—	1,405	1,840	—	2.00%	May 2024
5.30% Senior Notes due in 2025 ("2025 Notes")	—	1,783	1,800	—	5.30%	August 2025
Credit Agreement	158	1,861	2,019	304	1.8% - 3.3%	June 2020-July 2023
Zero-Coupon Convertible Senior Notes due in 2020	99	—	103	—	0.0%	December 2020
Solar Bonds and other Loans	12	52	67	—	3.6%-5.8%	April 2020 - January 2031
Total recourse debt	1,589	6,011	8,187	304		
Non-recourse debt:						
Automotive Asset-backed Notes	604	837	1,447	—	2.0%-7.9%	May 2020- May 2023
Solar Asset-backed Notes	37	1,102	1,167	—	4.0%-7.7%	September 2024-February 2048
China Loan Agreements	338	418	756	1,522	3.7%-4.0%	September 2020-December 2024
Cash Equity Debt	10	427	450	—	5.3%-5.8%	July 2033-January 2035
Solar Loan-backed Notes	12	149	168	—	4.8%-7.5%	September 2048-September 2049
Warehouse Agreements	68	458	526	574	3.0%-3.3%	September 2021
Solar Term Loans	158	—	158	—	5.3%	January 2021
Canada Credit Facility	20	10	30	—	4.2%-5.9%	November 2022
Solar Renewable Energy Credit and other Loans	15	67	82	—	4.3%-7.3%	June 2020-June 2022
Total non-recourse debt	1,262	3,468	4,784	2,096		
Total debt	2,851	9,479	\$ 12,971	\$ 2,400		
Finance leases	366	1,187				
Total debt and finance leases	\$ 3,217	\$ 10,666				

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

	Net Carrying Value		Unpaid	Unused	Contractual Interest Rates	Contractual Maturity Date
	Current	Long-Term	Principal Balance	Committed Amount (1)		
Recourse debt:						
1.25% Convertible Senior Notes due in 2021 ("2021 Notes")	\$ —	\$ 1,304	\$ 1,380	\$ —	1.25%	March 2021
2.375% Convertible Senior Notes due in 2022 ("2022 Notes")	—	902	978	—	2.375%	March 2022
2.00% Convertible Senior Notes due in 2024 ("2024 Notes")	—	1,383	1,840	—	2.00%	May 2024
5.30% Senior Notes due in 2025 ("2025 Notes")	—	1,782	1,800	—	5.30%	August 2025
Credit Agreement	141	1,586	1,727	499	2.7%-4.8%	June 2020-July 2023
Zero-Coupon Convertible Senior Notes due in 2020	97	—	103	—	0.0%	December 2020
Solar Bonds and other Loans	15	53	70	—	3.6%-5.8%	March 2020-January 2031
Total recourse debt	253	7,010	7,898	499		
Non-recourse debt:						
Automotive Asset-backed Notes	573	997	1,577	—	2.0%-7.9%	February 2020- May 2023
Solar Asset-backed Notes	32	1,123	1,183	—	4.0%-7.7%	September 2024-February 2048
China Loan Agreements	444	297	741	1,542	3.7%-4.0%	September 2020-December 2024
Cash Equity Debt	10	430	454	—	5.3%-5.8%	July 2033-January 2035
Solar Loan-backed Notes	11	164	182	—	4.8%-7.5%	September 2048-September 2049
Warehouse Agreements	21	146	167	933	3.1%-3.6%	September 2021
Solar Term Loans	8	152	161	—	5.4%	January 2021
Canada Credit Facility	24	16	40	—	4.2%-5.9%	November 2022
Solar Renewable Energy Credit and other Loans	23	67	89	6	4.5%-7.4%	March 2020-June 2022
Total non-recourse debt	1,146	3,392	4,594	2,481		
Total debt	1,399	10,402	\$ 12,492	\$ 2,980		
Finance leases	386	1,232				
Total debt and finance leases	\$ 1,785	\$ 11,634				

(1) Unused committed amounts under some of our credit facilities and financing funds are subject to satisfying specified conditions prior to draw-down (such as pledging to our lenders sufficient amounts of qualified receivables, inventories, leased vehicles and our interests in those leases, solar energy systems and the associated customer contracts, our interests in financing funds or various other assets). Upon draw-down of any unused committed amounts, there are no restrictions on use of available funds for general corporate purposes.

Recourse debt refers to debt that is recourse to our general assets. Non-recourse debt refers to debt that is recourse to only assets of our subsidiaries. The differences between the unpaid principal balances and the net carrying values are due to convertible senior note conversion features, debt discounts or deferred financing costs. As of March 31, 2020, we were in material compliance with all financial debt covenants, which include minimum liquidity and expense-coverage balances and ratios.

2021, 2022 and 2024 Notes

During the first quarter of 2020, the closing price of our common stock exceeded 130% of the applicable conversion price of our 2021, 2022 and 2024 Notes (collectively referred to as "Notes") on at least 20 of the last 30 consecutive trading days of the quarter; therefore, holders of the Notes may convert their notes during the second quarter of 2020. As the maturity date of the 2021 Notes is March 2021, we classified the \$1.32 billion carrying value of our 2021 Notes as current liabilities. Additionally, as the settlement of conversion of the 2021 Notes would be in cash for the principal amount and, if applicable, cash and/or shares of our common stock for any conversion premium at our election, we re classified \$60 million, representing the difference between the aggregate principal of our 2021 Notes and the carrying value, as mezzanine equity from permanent equity on our consolidated balance sheet as of March 31, 2020. As the settlement of conversion of the 2022 Notes and 2024 Notes would be in cash, shares of our common stock or a combination thereof is at our election, the liability is classified as non-current. Should the closing price conditions be met in a future quarter, the Notes will be convertible at their holders' option during the immediately following quarter.

Credit Agreement

In March 2020, we upsized our senior asset-based revolving credit agreement (the “Credit Agreement”) by \$100 million, which matures July 2023, to \$2.525 billion.

Interest Expense

The following table presents the interest expense related to the contractual interest coupon, the amortization of debt issuance costs and the amortization of debt discounts on our convertible senior notes with cash conversion features, which includes the 0.25% Convertible Senior Notes due in 2019 (matured in March 2019) and the Notes (in millions):

	Three Months Ended March 31,	
	2020	2019
Contractual interest coupon	\$ 19	\$ 10
Amortization of debt issuance costs	2	2
Amortization of debt discounts	44	28
Total	\$ 65	\$ 40

Note 11 – Equity Incentive Plans

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

As of March 31, 2020, 11 million shares were reserved and available for issuance under the 2019 Plan.

2018 CEO Performance Award

In March 2018, our stockholders approved the Board of Directors’ grant of 20,264,042 stock option awards to our CEO (the “2018 CEO Performance Award”). The 2018 CEO Performance Award consists of 12 vesting tranches with a vesting schedule based entirely on the attainment of both operational milestones (performance conditions) and market conditions, assuming continued employment either as the CEO or as both Executive Chairman and Chief Product Officer and service through each vesting date. Each of the 12 vesting tranches of the 2018 CEO Performance Award will vest upon certification by the Board of Directors that both (i) the market capitalization milestone for such tranche, which begins at \$100 billion for the first tranche and increases by increments of \$50 billion thereafter (based on both a six calendar month trailing average and a 30 calendar day trailing average, counting only trading days), has been met, and (ii) any one of the following eight operational milestones focused on revenue or eight operational milestones focused on Adjusted EBITDA have been met for the previous four consecutive fiscal quarters on an annualized basis. Adjusted EBITDA is defined as net income (loss) attributable to common stockholders before interest expense, provision (benefit) for income taxes, depreciation and amortization and stock-based compensation. Upon vesting and exercise, our CEO must hold shares that he acquires for five years post-exercise.

Total Annualized Revenue (in billions)	Annualized Adjusted EBITDA (in billions)
\$20.0	\$1.5
\$35.0	\$3.0
\$55.0	\$4.5
\$75.0	\$6.0
\$100.0	\$8.0
\$125.0	\$10.0
\$150.0	\$12.0
\$ 175.0	\$14.0

As of March 31, 2020, two operational milestones have been achieved: (i) \$20.0 billion total annualized revenue and (ii) \$1.5 billion annualized adjusted EBITDA, each subject to the formal certification by our Board of Directors. In addition, as of March 31, 2020, the following operational milestones were considered probable of achievement:

- Adjusted EBITDA of \$3.0 billion
- Total revenue of \$35.0 billion

As of March 31, 2020, no market capitalization milestones have been achieved and consequently, no shares subject to the 2018 CEO Performance Award have vested as of the date of this filing. However, if the value of Tesla's closing stock price continues near or higher than the levels seen in late April 2020, the first market capitalization milestone of \$100 billion is expected to be met during the second quarter of 2020. In such event, subject to certification by our Board of Directors, the first tranche under the 2018 CEO Performance Award would vest.

Stock-based compensation expense associated with each tranche under the 2018 CEO Performance Award is recognized over the longer of (i) the expected achievement period for the operational milestone for such tranche and (ii) the expected achievement period for the related market capitalization milestone determined on the grant date, beginning at the point in time when the relevant operational milestone is considered probable of being met. If such operational milestone becomes probable any time after the grant date, we will recognize a cumulative catch-up expense from the grant date to that point in time. If the related market capitalization milestone is achieved earlier than its expected achievement period and the achievement of the related operational milestone, then the stock-based compensation expense will be recognized over the expected achievement period for the operational milestone, which may accelerate the rate at which such expense is recognized.

The market capitalization milestone period and the valuation of each tranche were determined using a Monte Carlo simulation and is used as the basis for determining the expected achievement period. The probability of meeting an operational milestone is based on a subjective assessment of our future financial projections. No tranches of the 2018 CEO Performance Award will vest unless a market capitalization and a matching operational milestone are both achieved. Upon vesting of a tranche, all unamortized expense for the tranche will be recognized immediately. If the first tranche under the 2018 CEO Performance Award vests during the second quarter of 2020 as currently expected, the remaining unamortized expense of \$22 million for that tranche, which was expected to be recognized in the third quarter of 2020 as determined on the grant date, would be accelerated into the second quarter of 2020. Additionally, stock-based compensation under the 2018 CEO Performance Award represents a non-cash expense and is recorded as a selling, general, and administrative operating expense in our consolidated statement of operations.

As of March 31, 2020, we had \$461 million of total unrecognized stock-based compensation expense for the operational milestones that were considered probable of achievement, which will be recognized over a weighted-average period of 2.6 years. As of March 31, 2020, we had unrecognized stock-based compensation expense of \$1.29 billion for the operational milestones that were considered not probable of achievement. For the three months ended March 31, 2020 and 2019, we recorded stock-based compensation expense of \$66 million and \$55 million, respectively, related to the 2018 CEO Performance Award.

2014 Performance-Based Stock Option Awards

In 2014, to create incentives for continued long-term success beyond the Model S program and to closely align executive pay with our stockholders' interests in the achievement of significant milestones by us, the Compensation Committee of our Board of Directors granted stock option awards to certain employees (excluding our CEO) to purchase an aggregate of 1,073,000 shares of our common stock. Each award consisted of the following four vesting tranches with the vesting schedule based entirely on the attainment of the future performance milestones, assuming continued employment and service through each vesting date:

- 1/4 th of each award vests upon completion of the first Model X production vehicle;
- 1/4th of each award vests upon achieving aggregate production of 100,000 vehicles in a trailing 12-month period;
- 1/4th of each award vests upon completion of the first Model 3 production vehicle; and
- 1/4th of each award vests upon achieving an annualized gross margin of greater than 30% for any three-year period.

As of March 31, 2020, the following performance milestones had been achieved:

- Completion of the first Model X production vehicle;
- Completion of the first Model 3 production vehicle; and
- Aggregate production of 100,000 vehicles in a trailing 12-month period.

We begin recognizing stock-based compensation expense as each performance milestone becomes probable of achievement. As of March 31, 2020, we had unrecognized stock-based compensation expense of \$4 million for the performance milestone that was considered not probable of achievement. For the three months ended March 31, 2020 and 2019, we did not record any additional stock-based compensation related to these awards.

2012 CEO Performance Award

In August 2012, our Board of Directors granted 5,274,901 stock option awards to our CEO (the "2012 CEO Performance Award"). The 2012 CEO Performance Award consists of 10 vesting tranches with a vesting schedule based entirely on the attainment of both performance conditions and market conditions, assuming continued employment and service through each vesting date. Each vesting tranche requires a combination of a pre-determined performance milestone and an incremental increase in our market capitalization of \$4.00 billion, as compared to our initial market capitalization of \$3.20 billion at the time of grant. As of March 31, 2020, the market capitalization conditions for all of the vesting tranches and the following performance milestones had been achieved:

- Successful completion of the Model X alpha prototype;
- Successful completion of the Model X beta prototype;
- Completion of the first Model X production vehicle;
- Aggregate production of 100,000 vehicles;
- Successful completion of the Model 3 alpha prototype;
- Successful completion of the Model 3 beta prototype;
- Completion of the first Model 3 production vehicle;
- Aggregate production of 200,000 vehicles; and
- Aggregate production of 300,000 vehicles.

We begin recognizing stock-based compensation expense as each milestone becomes probable of achievement. As of March 31, 2020, we had unrecognized stock-based compensation expense of \$6 million for the performance milestone that was considered not probable of achievement. For the three months ended March 31, 2020 and 2019, we recorded no stock-based compensation expense related to the 2012 CEO Performance Award.

Our CEO earns a base salary that reflects the currently applicable minimum wage requirements under California law, and he is subject to income taxes based on such base salary. However, he has never accepted his salary. Commencing in May 2019 at our CEO's request, we eliminated altogether the earning and accrual of his base salary.

Summary Stock-Based Compensation Information

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

	<u>Three Months Ended March 31,</u>	
	<u>2020</u>	<u>2019</u>
Cost of revenues	\$ 33	\$ 27
Research and development	65	72
Selling, general and administrative	113	107
Restructuring and other	—	2
Total	<u>\$ 211</u>	<u>\$ 208</u>

We realized no income tax benefit from stock option exercises in each of the periods presented due to cumulative losses and valuation allowances. As of March 31, 2020, we had \$1.59 billion of total unrecognized stock-based compensation expense related to non-performance awards, which will be recognized over a weighted-average period of 2.8 years.

Note 12 – Commitments and Contingencies

Operating Lease Arrangement in Buffalo, New York

We have an operating lease through the Research Foundation for the State University of New York (the "SUNY Foundation") for a manufacturing facility constructed on behalf of the SUNY Foundation and which was substantially completed in April 2018. We use this facility, referred to as Gigafactory New York, primarily for the development and production of our Solar Roof and other solar products and components, energy storage components, and Supercharger components, and for other lessor-approved functions. Under the lease and a related research and development agreement, on behalf of the SUNY Foundation, we have and will continue to install certain utilities and other improvements and acquire certain equipment designated by us to be used in the manufacturing facility.

Under the terms of the operating lease arrangement, we are required to achieve specific operational milestones during the initial lease term; which include employing a certain number of employees at the manufacturing facility, within western New York and within the State of New York within specified periods following the completion of the manufacturing facility. We are also required to spend or incur \$ 5.00 billion in combined capital, operational expenses and other costs in the State of New York within 10 years following the achievement of full production. On an annual basis during the initial lease term, as measured on each anniversary of the commissioning of the manufacturing facility, if we fail to meet these specified investment and job creation requirements, then we would be obligated to pay a \$ 41 million "program payment" to the SUNY Foundation for each year that we fail to meet these requirements. Furthermore, if the arrangement is terminated due to a material breach by us, then additional amounts might become payable by us.

In April 2020, the government agency overseeing our agreement with the SUNY Foundation for the construction and use of Gigafactory New York issued guidance that all obligations relating to investment and employment targets under certain of its projects, including our obligation to be compliant with our applicable targets under such agreement on April 30, 2020, may be deferred for a one year period upon such agency's approval of an application for relief by the obligor. As we temporarily suspended most of our manufacturing operations at Gigafactory New York pursuant to a New York State executive order issued in March 2020 as a result of the COVID-19 pandemic, we intend to apply for and expect to be granted such deferral. Moreover, as we had exceeded our investment and employment obligations under this agreement prior to such mandated reduction of operations, we do not currently expect any issues meeting all applicable future obligations under this agreement. However, if our expectations as to the costs and timelines of our investment and operations at Buffalo or our production ramp of the Solar Roof prove incorrect, we may incur additional expenses or substantial payments to the SUNY Foundation.

Operating Lease Arrangement in Shanghai, China

We have an operating lease arrangement for an initial term of 50 years with the local government of Shanghai for land use rights where we are constructing Gigafactory Shanghai. Under the terms of the arrangement, we are required to spend RMB 14.08 billion in capital expenditures, and to generate RMB 2.23 billion of annual tax revenues starting at the end of 2023. If we are unwilling or unable to meet such target or obtain periodic project approvals, in accordance with the Chinese government's standard terms for such arrangements, we would be required to revert the site to the local government and receive compensation for the remaining value of the land lease, buildings and fixtures. We believe the capital expenditure requirement and the tax revenue target will be attainable even if our actual vehicle production was far lower than the volumes we are forecasting.

Legal Proceedings

Securities Litigation Relating to the SolarCity Acquisition

Between September 1, 2016 and October 5, 2016, seven lawsuits were filed in the Delaware Court of Chancery by purported stockholders of Tesla challenging our acquisition of SolarCity. Following consolidation, the lawsuit names as defendants the members of Tesla's board of directors as then constituted and alleges, among other things, that board members breached their fiduciary duties in connection with the acquisition. The complaint asserts both derivative claims and direct claims on behalf of a purported class and seeks, among other relief, unspecified monetary damages, attorneys' fees, and costs. On January 27, 2017, defendants filed a motion to dismiss the operative complaint. Rather than respond to the defendants' motion, the plaintiffs filed an amended complaint. On March 17, 2017, defendants filed a motion to dismiss the amended complaint. On December 13, 2017, the Court heard oral argument on the motion. On March 28, 2018, the Court denied defendants' motion to dismiss. Defendants filed a request for interlocutory appeal, but the Delaware Supreme Court denied that request without ruling on the merits but electing not to hear an appeal at this early stage of the case. Defendants filed their answer on May 18, 2018, and mediations were held on June 10, 2019. Plaintiffs and defendants filed respective motions for summary judgment on August 25, 2019, and further mediations were held on October 3, 2019. The Court held a hearing on the motions for summary judgment on November 4, 2019. On January 22, 2020, all of the director defendants except Elon Musk reached a tentative settlement to resolve the lawsuit against them for an amount that would be paid entirely under the applicable insurance policy. The settlement does not involve an admission of any wrongdoing by any party. Tesla will receive such amount, which would be recognized as a gain in its financial statements, if the settlement is finally approved by the Court. On February 4, 2020, the Court issued a ruling that denied plaintiffs' previously-filed motion and granted in part and denied in part defendants' previously-filed motion. Fact and expert discovery is complete, and the case was set for trial in March 2020 until it was postponed by the Court due to safety precautions concerning COVID-19. The Court set tentative new dates for the trial from July 27 to August 7, 2020, subject to change based on any further COVID-19 related measures implemented.

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

We believe that claims challenging the SolarCity acquisition are without merit and intend to defend against them vigorously. We are unable to estimate the possible loss or range of loss, if any, associated with these claims.

Securities Litigation Relating to Production of Model 3 Vehicles

On October 10, 2017, a purported stockholder class action was filed in the U.S. District Court for the Northern District of California against Tesla, two of its current officers, and a former officer. The complaint alleges violations of federal securities laws and seeks unspecified compensatory damages and other relief on behalf of a purported class of purchasers of Tesla securities from May 4, 2016 to October 6, 2017. The lawsuit claims that Tesla supposedly made materially false and misleading statements regarding the Company's preparedness to produce Model 3 vehicles. Plaintiffs filed an amended complaint on March 23, 2018, and defendants filed a motion to dismiss on May 25, 2018. The court granted defendants' motion to dismiss with leave to amend. Plaintiffs filed their amended complaint on September 28, 2018, and defendants filed a motion to dismiss the amended complaint on February 15, 2019. The hearing on the motion to dismiss was held on March 22, 2019, and on March 25, 2019, the Court ruled in favor of defendants and dismissed the complaint with prejudice. On April 8, 2019, plaintiffs filed a notice of appeal and on July 17, 2019 filed their opening brief. We filed our opposition on September 16, 2019. A hearing on the appeal before the U.S. Court of Appeals for the Ninth Circuit ("Ninth Circuit") is set for April 30, 2020. We continue to believe that the claims are without merit and intend to defend against this lawsuit vigorously. We are unable to estimate the possible loss or range of loss, if any, associated with this lawsuit.

On October 26, 2018, in a similar action, a purported stockholder class action was filed in the Superior Court of California in Santa Clara County against Tesla, Elon Musk and seven initial purchasers in an offering of debt securities by Tesla in August 2017. The complaint alleges misrepresentations made by Tesla regarding the number of Model 3 vehicles Tesla expected to produce by the end of 2017 in connection with such offering and seeks unspecified compensatory damages and other relief on behalf of a purported class of purchasers of Tesla securities in such offering. Tesla thereafter removed the case to federal court. On January 22, 2019, plaintiff abandoned its effort to proceed in state court, instead filing an amended complaint against Tesla, Elon Musk and seven initial purchasers in the debt offering before the same judge in the U.S. District Court for the Northern District of California who is hearing the above-referenced earlier filed federal case. On February 5, 2019, the Court stayed this new case pending a ruling on the motion to dismiss the complaint in such earlier filed federal case. After such earlier filed federal case was dismissed, defendants filed a motion on July 2, 2019 to dismiss this case as well. This case is now stayed pending a ruling from the appellate court on such earlier filed federal case with an agreement that if defendants prevail on appeal in such case, this case will be dismissed. We believe that the claims are without merit and intend to defend against this lawsuit vigorously. We are unable to estimate the possible loss or range of loss, if any, associated with this lawsuit.

Litigation Relating to 2018 CEO Performance Award

On June 4, 2018, a purported Tesla stockholder filed a putative class and derivative action in the Delaware Court of Chancery against Elon Musk and the members of Tesla's board of directors as then constituted, alleging corporate waste, unjust enrichment, and that such board members breached their fiduciary duties by approving the stock-based compensation plan. The complaint seeks, among other things, monetary damages and rescission or reformation of the stock-based compensation plan. On August 31, 2018, defendants filed a motion to dismiss the complaint; plaintiff filed its opposition brief on November 1, 2018 and defendants filed a reply brief on December 13, 2018. The hearing on the motion to dismiss was held on May 9, 2019. On September 20, 2019, the Court granted the motion to dismiss as to the corporate waste claim but denied the motion as to the breach of fiduciary duty and unjust enrichment claims. Our answer was filed on December 3, 2019, and trial is set for June 2021. We believe the claims asserted in this lawsuit are without merit and intend to defend against them vigorously.

Securities Litigation Relating to Potential Going Private Transaction

Between August 10, 2018 and September 6, 2018, nine purported stockholder class actions were filed against Tesla and Elon Musk in connection with Elon Musk's August 7, 2018 Twitter post that he was considering taking Tesla private. All of the suits are now pending in the U.S. District Court for the Northern District of California. Although the complaints vary in certain respects, they each purport to assert claims for violations of federal securities laws related to Mr. Musk's statement and seek unspecified compensatory damages and other relief on behalf of a purported class of purchasers of Tesla's securities. Plaintiffs filed their consolidated complaint on January 16, 2019 and added as defendants the members of Tesla's board of directors. The now-consolidated purported stockholder class action was stayed while the issue of selection of lead counsel was briefed and argued before the Ninth Circuit. The Ninth Circuit ruled regarding lead counsel. Defendants filed a motion to dismiss the complaint on November 22, 2019. The hearing on the motion was held on March 6, 2020. On April 15, 2020, the Court denied defendants' motion to dismiss. We believe that the claims have no merit and intend to defend against them vigorously. We are unable to estimate the potential loss, or range of loss, associated with these claims.

Between October 17, 2018 and November 9, 2018, five derivative lawsuits were filed in the Delaware Court of Chancery against Mr. Musk and the members of Tesla's board of directors as then constituted in relation to statements made and actions connected to a potential going private transaction. In addition to these cases, on October 25, 2018, another derivative lawsuit was filed in the U.S. District Court for the District of Delaware against Mr. Musk and the members of the Tesla board of directors as then constituted. The Courts in both the Delaware federal court and Delaware Court of Chancery actions have consolidated their respective actions and stayed each consolidated action pending resolution of the above-referenced consolidated purported stockholder class action. We believe that the claims have no merit and intend to defend against them vigorously. We are unable to estimate the potential loss or range of loss, if any, associated with these lawsuits.

On March 7, 2019, various stockholders filed a derivative suit in the Delaware Court of Chancery, purportedly on behalf of the Company, naming Elon Musk and Tesla's board of directors as then constituted, also related to Mr. Musk's August 7, 2018 Twitter post that is the basis of the above-referenced consolidated purported stockholder class action as well as to Mr. Musk's February 19, 2019 Twitter post regarding Tesla's vehicle production. The suit asserts claims for breach of fiduciary duty and seeks declaratory and injunctive relief, unspecified damages, and other relief. Plaintiffs moved for expedited proceedings in connection with the declaratory and injunctive relief. Briefs were filed on March 13, 2019 and the hearing was held on March 18, 2019. Defendants prevailed, with the Court denying plaintiffs' request for an expedited trial and granting defendants' request to stay this action pending the outcome of the above-referenced consolidated purported stockholder class action.

Certain Investigations and Other Matters

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

In particular, the SEC had issued subpoenas to Tesla in connection with (a) Elon Musk's prior statement that he was considering taking Tesla private and (b) certain projections that we made for Model 3 production rates during 2017 and other public statements relating to Model 3 production. The take-private investigation was resolved and closed with a settlement entered into with the SEC in September 2018 and as further clarified in April 2019 in an amendment. On December 4, 2019, the SEC (i) closed the investigation into the projections and other public statements regarding Model 3 production rates and (ii) issued a subpoena seeking information concerning certain financial data and contracts including Tesla's regular financing arrangements. Separately, the DOJ had also asked us to voluntarily provide it with information about the above matters related to taking Tesla private and Model 3 production rates.

Aside from the settlement, as amended, with the SEC relating to Mr. Musk's statement that he was considering taking Tesla private, there have not been any developments in these matters that we deem to be material, and to our knowledge no government agency in any ongoing investigation has concluded that any wrongdoing occurred. As is our normal practice, we have been cooperating and will continue to cooperate with government authorities. We cannot predict the outcome or impact of any ongoing matters. Should the government decide to pursue an enforcement action, there exists the possibility of a material adverse impact on our business, results of operation, prospects, cash flows, and financial position.

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

Indemnification and Guaranteed Returns

We are contractually obligated to compensate certain fund investors for any losses that they may suffer in certain limited circumstances resulting from reductions in U.S. Treasury grants or investment tax credits ("ITC"s). Generally, such obligations would arise as a result of reductions to the value of the underlying solar energy systems as assessed by the U.S. Treasury Department for purposes of claiming U.S. Treasury grants or as assessed by the IRS for purposes of claiming ITCs or U.S. Treasury grants. For each balance sheet date, we assess and recognize, when applicable, a distribution payable for the potential exposure from this obligation based on all the information available at that time, including any guidelines issued by the U.S. Treasury Department on solar energy system valuations for purposes of claiming U.S. Treasury grants and any audits undertaken by the IRS. We believe that any payments to the fund investors in excess of the amounts already recognized by us for this obligation are not probable or material based on the facts known at the filing date.

The maximum potential future payments that we could have to make under this obligation would depend on the difference between the fair values of the solar energy systems sold or transferred to the funds as determined by us and the values that the U.S. Treasury Department would determine as fair value for the systems for purposes of claiming U.S. Treasury grants or the values the IRS would determine as the fair value for the systems for purposes of claiming ITCs or U.S. Treasury grants. We claim U.S. Treasury grants based on guidelines provided by the U.S. Treasury department and the statutory regulations from the IRS. We use fair values determined with the assistance of independent third-party appraisals commissioned by us as the basis for determining the ITCs that are passed-through to and claimed by the fund investors. Since we cannot determine future revisions to U.S. Treasury Department guidelines governing solar energy system values or how the IRS will evaluate system values used in claiming ITCs or U.S. Treasury grants, we are unable to reliably estimate the maximum potential future payments that it could have to make under this obligation as of each balance sheet date.

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

Our lease pass-through financing funds have a one-time lease payment reset mechanism that occurs after the installation of all solar energy systems in a fund. As a result of this mechanism, we may be required to refund master lease prepayments previously received from investors. Any refunds of master lease prepayments would reduce the lease pass-through financing obligation.

Letters of Credit

As of March 31, 2020, we had \$272 million of unused letters of credit outstanding .

Note 13 – Variable Interest Entity Arrangements

We have entered into various arrangements with investors to facilitate the funding and monetization of our solar energy systems and vehicles. In particular, our wholly owned subsidiaries and fund investors have formed and contributed cash and assets into various financing funds and entered into related agreements. We have determined that the funds are variable interest entities (“VIEs”) and we are the primary beneficiary of these VIEs by reference to the power and benefits criterion under ASC 810, *Consolidation*. We have considered the provisions within the agreements, which grant us the power to manage and make decisions that affect the operation of these VIEs, including determining the solar energy systems or vehicles and the associated customer contracts to be sold or contributed to these VIEs, redeploying solar energy systems or vehicles and managing customer receivables. We consider that the rights granted to the fund investors under the agreements are more protective in nature rather than participating.

As the primary beneficiary of these VIEs, we consolidate in the financial statements the financial position, results of operations and cash flows of these VIEs, and all intercompany balances and transactions between us and these VIEs are eliminated in the consolidated financial statements. Cash distributions of income and other receipts by a fund, net of agreed upon expenses, estimated expenses, tax benefits and detriments of income and loss and tax credits, are allocated to the fund investor and our subsidiary as specified in the agreements.

Generally, our subsidiary has the option to acquire the fund investor’s interest in the fund for an amount based on the market value of the fund or the formula specified in the agreements.

Upon the sale or liquidation of a fund, distributions would occur in the order and priority specified in the agreements.

Pursuant to management services, maintenance and warranty arrangements, we have been contracted to provide services to the funds, such as operations and maintenance support, accounting, lease servicing and performance reporting. In some instances, we have guaranteed payments to the fund investors as specified in the agreements. A fund’s creditors have no recourse to our general credit or to that of other funds. None of the assets of the funds had been pledged as collateral for their obligations.

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

	March 31, 2020	December 31, 2019
Assets		
Current assets		
Cash and cash equivalents	\$ 84	\$ 106
Accounts receivable, net	36	27
Prepaid expenses and other current assets	89	100
Total current assets	209	233
Operating lease vehicles, net	1,142	1,183
Solar energy systems, net	4,989	5,030
Other non-current assets	163	156
Total assets	<u>\$ 6,503</u>	<u>\$ 6,602</u>
Liabilities		
Current liabilities		
Accrued liabilities and other	\$ 76	\$ 80
Deferred revenue	74	78
Customer deposits	19	9
Current portion of debt and finance leases	660	608
Total current liabilities	829	775
Deferred revenue, net of current portion	247	264
Debt and finance leases, net of current portion	1,511	1,516
Other long-term liabilities	23	22
Total liabilities	<u>\$ 2,610</u>	<u>\$ 2,577</u>

Note 14 – Related Party Transactions

Related party balances were comprised of the following (in millions):

	March 31, 2020	December 31, 2019
Convertible senior notes due to related parties	\$ 3	\$ 3

Our convertible senior notes are not re-measured at fair value (refer to Note 4, *Fair Value of Financial Instruments*). As of March 31, 2020 and December 31, 2019, the outstanding principal balance of convertible senior notes due to related parties is \$3 million.

In February 2020, our CEO and a member of our Board of Directors purchased from us 13,037 and 1,250 shares, respectively, of our common stock in a public offering at the public offering price for an aggregate \$10 million and \$1 million, respectively.

Note 15 – Segment Reporting and Information about Geographic Areas

We have two operating and reportable segments: (i) automotive and (ii) energy generation and storage. The automotive segment includes the design, development, manufacturing, sales, and leasing of electric vehicles as well as sales of automotive regulatory credits. Additionally, the automotive segment is also comprised of services and other, which includes non-warranty after-sales vehicle services, sales of used vehicles, retail merchandise, sales by our acquired subsidiaries to third party customers, and vehicle insurance revenue. The energy generation and storage segment includes the design, manufacture, installation, sales, and leasing of solar energy generation and energy storage products and related services and sales of solar energy systems incentives. Our CODM does not evaluate operating segments using asset or liability information. The following table presents revenues and gross profit by reportable segment (in millions):

	Three Months Ended March 31,	
	2020	2019
Automotive segment		
Revenues	\$ 5,692	\$ 4,217
Gross profit	\$ 1,223	\$ 558
Energy generation and storage segment		
Revenues	\$ 293	\$ 324
Gross profit	\$ 11	\$ 8

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

	Three Months Ended March 31,	
	2020	2019
United States	\$ 2,768	\$ 2,330
China	900	779
Other	2,317	1,432
Total	\$ 5,985	\$ 4,541

The revenues in certain geographic areas were impacted by the price adjustments we made to our vehicle offerings during the three months ended March 31, 2019. Refer to Note 2, *Summary of Significant Accounting Policies*, for details.

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

	March 31,	December 31,
	2020	2019
United States	\$ 15,657	\$ 15,644
International	1,087	890
Total	\$ 16,744	\$ 16,534

ITEM 2. MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS

The following discussion and analysis should be read in conjunction with the consolidated financial statements and the related notes included elsewhere in this Quarterly Report on Form 10-Q.

Overview

Our mission is to accelerate the world's transition to sustainable energy. We design, develop, manufacture, lease and sell high-performance fully electric vehicles, solar energy generation systems and energy storage products. We also offer maintenance, installation, operation and other services related to our products.

Automotive

We achieved first-quarter records for vehicle production and deliveries in the first quarter of 2020 with 102,672 and 88,496, respectively. This contributed to our achievement, for the first time in our history, of both positive income from operations and net income for the seasonally weak first fiscal quarter of the year. We also commenced production and deliveries of Model Y, our compact sport utility vehicle built on the Model 3 platform, in the first quarter of 2020, significantly ahead of the schedule we announced at its unveiling.

Energy Generation and Storage

During the first quarter of 2020, we continued to ramp customer installations of our Solar Roof product and its production at Gigafactory New York, and reached a significant milestone of production in one week of roof tiles sufficient for 1,000 roofs. We also deployed our first Megapack, our up to 3 MWh energy storage system for commercial, industrial and utility and energy generation customers, and installed our 100,000th Powerwall.

Management Opportunities, Challenges and Risks

Impact of Current Macroeconomic Factors

During and following the first quarter of 2020, there has been a widespread worldwide impact from the COVID-19 pandemic. Numerous government regulations and public advisories, as well as shifting social behaviors, have temporarily limited or closed non-essential transportation, government functions, business activities and person-to-person interactions, and the duration of such trends is difficult to predict. Our operations have also been adversely affected in the first quarter of 2020 and beyond, including as described below.

We experienced a government-imposed suspension of operations for 10 days at Gigafactory Shanghai immediately following a scheduled 7-day closure for the Lunar New Year holiday, after which we resumed operations on February 10, 2020. Panasonic, our partner that manufactures lithium-ion battery cells for our products at our Gigafactory Nevada, suspended its operations there for 14 days before resuming certain operations starting on April 11, 2020. Finally, we temporarily suspended most production at Gigafactory New York starting on March 14, 2020 pursuant to a New York State executive order, and we decided to temporarily suspend all production at the Fremont Factory starting on March 23, 2020 and most production at Gigafactory Nevada starting on April 12, 2020 in order to accommodate the related challenges for our employees and their families and our suppliers. We also instituted certain temporary cost reduction measures by furloughing certain of our hourly employees and reducing most salaried employees' base salaries globally while our U.S. operations are scaled back. Social distancing measures and reduced operations or closures at government offices and businesses, including motor vehicle departments, vehicle auction houses and municipal and utility company inspectors, also resulted in challenges in or postponements past the first quarter of 2020 for our new vehicle deliveries, used vehicle sales, and energy product deployments, and such conditions have generally continued.

The specific timing and pace of our resumption of normal U.S. manufacturing operations will depend on the status of various government regulations and the readiness of our suppliers, vendors and currently inactive production workforce. Although we are working with each of our suppliers and government agencies on how best to resume and sustain production, it ultimately remains uncertain how quickly we and our suppliers will be able to return to prior levels of production and maintain such levels. Likewise, it is possible that the contingencies generally inherent in our ongoing construction of and ramp at Gigafactory Shanghai and Gigafactory Berlin may be exacerbated by such conditions.

Even after we restore operations at our U.S. production facilities, our manufacturing rates and timelines may also be affected by global economic conditions and levels of consumer comfort and spend, which could impact demand in the worldwide transportation and automotive industries and for construction projects such as the addition of solar energy systems. We have always monitored macroeconomic conditions to remain flexible and optimize and evolve our business as appropriate, and we will continue to do so. Because the impact of current conditions on an ongoing basis is yet largely unknown, is rapidly evolving, and has been varied across geographic regions, this ongoing assessment will be particularly critical to allow us to accurately project demand and infrastructure requirements globally and deploy our production, workforce, and other resources accordingly. Moreover, as we have offered and continue to offer various financing options for our vehicles and energy products, we bear the credit risk on such transactions. To the extent that market conditions, unemployment rates and/or government-mandated moratoriums on periodic payments result in significant rates of default by our customers, our business would be adversely impacted.

Automotive—Production

We have experienced early success with the production ramp of Model Y at the Fremont Factory, and we were able to manufacture more vehicles in less than a full quarter of production than either in the first six months of Model 3 production at Fremont or in the first quarter of Model 3 production at Gigafactory Shanghai. Production of Model Y includes processes that also accommodate Model 3 production, and the benefit of our simplified, flexible and scalable approach to manufacturing is increasingly evident.

Investing in our product roadmap remains a key priority and opportunity, and we are supporting this investment with ongoing cost reduction and productivity improvement efforts. At Gigafactory Shanghai, we have continued to ramp our installed Model 3 capacity, and construction of the next phase to add Model Y manufacturing capacity remains underway. We also completed land preparations at and are proceeding with the construction of Gigafactory Berlin, where Model Y will be the first vehicle we produce. The construction of and ramp at these factories are subject to a number of uncertainties inherent in all new manufacturing operations, including ongoing compliance with regulatory requirements, maintenance of operational licenses and approvals for additional expansion, potential supply chain constraints, hiring, training and retention of qualified employees, and the pace of bringing production equipment and processes online with the capability to manufacture high-quality units at scale, and it is not yet certain whether and to what extent the COVID-19 pandemic may further affect such uncertainties.

Overall, we are encouraged by our early Model Y progress and the achievement of our all-time first quarter vehicle production record, assisted by our expansion to multiple factories. Our manufacturing capabilities are becoming increasingly resilient, and we plan to continue that trend with our existing and future factories.

Automotive—Demand and Sales

Likewise, we achieved a first-quarter vehicle delivery record in the first quarter of 2020 notwithstanding, in addition to COVID-19-related challenges, the sunset or reduction of government incentives on electric vehicles in the U.S. and Norway and the fact that sales of vehicles in the automotive industry tend to be particularly difficult to grow in the seasonally low early part of the year. The maturity and adaptability of our business model, together with the advanced technology in our vehicles, allowed us to pioneer touchless vehicle deliveries in certain regions, which contributed to our deliveries, as well as touchless test drives, which allow prospective customers to experience our vehicles while promoting their comfort and convenience.

We continue to increase our addressable market by offering additional Model 3 trims in China that will be produced at Gigafactory Shanghai, and for Model Y, ramping production at the Fremont Factory and preparing for future production at Gigafactory Shanghai and Gigafactory Berlin. As always, we also strive to improve the performance and functionality of our products, including by increasing the EPA-estimated maximum range of Model S to 391 miles and of Model X to 351 miles without increasing battery size, and introducing a heat pump and octovalve system in Model Y to increase its power efficiency. In April 2020, we also enabled for our applicable FSD-optional users stop sign and traffic light recognition and braking, which we had piloted during the first quarter of 2020 through our Early Access Program, and we expect this critical step on the path to fully autonomous driving to improve markedly with additional fleet learning.

As is inherent in the automotive industry, we may be impacted by trade and environmental policies, political uncertainty and economic cycles involving geographic regions where we have significant operations, which are inherently unpredictable. We may also make certain adjustments to our prices from time to time in the ordinary course of business, including as we introduce new vehicles and variants and optimize the pricing among them. Such pricing changes may impact our vehicles' resale values, and in turn our operating results. While we cannot predict the magnitude or duration of current macroeconomic conditions, we believe that we have gained key advantages with the flexibility and momentum we have shown in the first quarter of 2020, the ongoing ramp of our offering of Model Y in the globally popular compact sport utility vehicle space, and a significant backlog of vehicle orders. Moreover, we are hopeful that the demonstrably positive environmental impact from the recent worldwide reduction in the transportation-related consumption of fossil fuels will facilitate greater awareness for the importance of sustainable energy and related products, including our products.

Automotive—Deliveries and Customer Infrastructure

We continue to optimize our worldwide vehicle manufacturing and delivery patterns while relying on production at only two factories. While we have historically experienced planning and logistics challenges related to single-site production, Gigafactory Shanghai is becoming an increasingly larger contributor to our overall production and we expect to ultimately alleviate such challenges through increased local production, including at Gigafactory Berlin.

We also continue to expand and invest in our servicing and charging locations and capabilities to keep pace with our customer vehicle fleet and ensure a convenient and efficient customer experience. However, if our customer vehicles, particularly in the rapidly growing Model 3 fleet and newly launched Model Y fleet, experience unexpected reliability issues, it could outpace and overburden our servicing capabilities and parts inventory.

Energy Generation and Storage Demand, Production and Deployment

We believe we have positioned ourselves well for growth upon the resumption of our energy product-related operations that were gaining momentum prior to their temporary suspension or reduction, including the ramp of our Solar Roof production and installation training, and the offering of our largest energy storage product with Megapack, for which the demand is currently far outpacing our production capacity. Cross-selling between our solar energy systems and energy storage systems is another area of opportunity, and a significant portion of our residential customers of the former are also opting for the latter.

In April 2020, the government agency overseeing our agreement with the SUNY Foundation for the construction and use of Gigafactory New York issued guidance that all obligations relating to investment and employment targets under certain of its projects, including our obligation to be compliant with our applicable targets under such agreement on April 30, 2020, may be deferred for a one-year period upon such agency's approval of an application for relief by the obligor. As we temporarily suspended most of our manufacturing operations at Gigafactory New York pursuant to a New York State executive order issued in March 2020 as a result of the COVID-19 pandemic, we intend to apply for and expect to be granted such deferral. Moreover, as we had exceeded our investment and employment obligations under this agreement prior to such mandated reduction of operations, we do not currently expect any issues meeting all applicable future obligations under this agreement. However, if our expectations set forth above or as to the costs and timelines of our investment and operations at Buffalo or our production ramp of the Solar Roof prove incorrect, we may incur additional expenses or substantial payments to the SUNY Foundation.

Trends in Cash Flow, Capital Expenditures and Operating Expenses

Our capital expenditures are typically difficult to project beyond the short term given the number and breadth of our core projects at any given time, and uncertainties in future global market conditions resulting from the COVID-19 pandemic currently makes projections, including in the near-term, more challenging. For example, the curve of any new product ramp, such as for Model Y and the Solar Roof, is inherently subject to uncertainty of timing, and if we are able to meet various milestones along such ramp more quickly than expected, our capital expenditures may be accelerated. We also continuously evaluate, and as appropriate adjust, our capital expenditures based on, among other things: our manufacturing plans for our various products, which we may rebalance from time to time based on the mix of demand among them and other contingent factors; the pace and prioritization of current projects under development; and the addition of any new projects. Moreover, we are generally increasing the capital efficiency of our projects with experience, and we may find that our actual capital expenditures on new projects are different than previously expected.

Subject to the above, considering the expected pace of the manufacturing ramps for our products, construction and expansion of our factories, and pipeline of announced projects under development, and consistent with our current strategy of using partners to manufacture battery cells, as well as considering all other infrastructure growth, we currently expect our average annual capital expenditures in 2020 and the two succeeding fiscal years to be \$2.5 billion to \$3.5 billion.

We expect operating expenses as a percentage of revenue to continue to decrease in the future as we focus on increasing operational efficiency and process automation, and as long as macroeconomic factors facilitate the achievement of increases in overall revenues from expanding sales.

In March 2018, our stockholders approved the 2018 CEO Performance Award, with vesting contingent on our Board of Directors' certification of the achievement of specified market capitalization and operational milestones. We will incur significant non-cash stock-based compensation expense for each tranche under this award after the related operational milestone initially becomes probable of being met, and if later than the grant date, we will also have to record a cumulative catch-up expense at such time. Such catch-up expense may be material depending on the length of time elapsed from the grant date. Moreover, as the expense for a tranche is recorded over the longer of (i) the expected achievement period of the relevant operational milestone and (ii) only if the related market capitalization milestone has not been achieved, its expected achievement period, the achievement of a market capitalization milestone earlier than expected may accelerate the rate at which such expense is recognized. Upon vesting of a tranche, all remaining associated expense will be recognized immediately. As of March 31, 2020, two operational milestones have been achieved and no market capitalization milestones have been achieved and consequently, no shares subject to the 2018 CEO Performance Award have vested as of the date of this filing. However, if the value of Tesla's closing stock price continues near or higher than the levels seen in late April 2020, the first market capitalization milestone of \$100 billion is expected to be met during the second quarter of 2020. If the first tranche under the 2018 CEO Performance Award vests during the second quarter of 2020 as currently expected, the remaining unamortized expense of \$22 million for that tranche, which was expected to be recognized in the third quarter of 2020 as determined on the grant date, would be accelerated into the second quarter of 2020. See Note 11, *Equity Incentive Plans—2018 CEO Performance Award*, to the consolidated financial statements included elsewhere in this Quarterly Report on Form 10-Q for further details regarding the stock-based compensation relating to the 2018 CEO Performance Award.

Critical Accounting Policies and Estimates

The consolidated financial statements are prepared in accordance with accounting principles generally accepted in the U.S. ("GAAP"). The preparation of the consolidated financial statements requires us to make estimates and assumptions that affect the reported amounts of assets, liabilities, revenues, costs and expenses and related disclosures. We base our estimates on historical experience, as appropriate, and on various other assumptions that we believe to be reasonable under the circumstances. Changes in the accounting estimates are reasonably likely to occur from period to period. Accordingly, actual results could differ significantly from the estimates made by our management. We evaluate our estimates and assumptions on an ongoing basis. To the extent that there are material differences between these estimates and actual results, our future financial statement presentation, financial condition, results of operations and cash flows will be affected.

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

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

Recent Accounting Pronouncements

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

Results of Operations

Revenues

(Dollars in millions)	Three Months Ended March 31,		Change	
	2020	2019	\$	%
Automotive sales	\$ 4,893	\$ 3,509	\$ 1,384	39%
Automotive leasing	239	215	24	11%
Total automotive revenues	5,132	3,724	1,408	38%
Services and other	560	493	67	14%
Total automotive & services and other segment revenue	5,692	4,217	1,475	35%
Energy generation and storage segment revenue	293	324	(31)	-10%
Total revenues	\$ 5,985	\$ 4,541	\$ 1,444	32%

Automotive & Services and Other Segment

Automotive sales revenue includes revenues related to cash deliveries of new Model S, Model X, Model 3 and Model Y vehicles, including access to our Supercharger network, internet connectivity, Autopilot and FSD features and over-the-air software updates, as well as sales of regulatory credits to other automotive manufacturers. Cash deliveries are vehicles that are not subject to lease accounting. Our revenue from regulatory credits fluctuates by quarter depending on when a contract is executed with a buyer and when the credits are delivered. However, we generally expect higher revenue from regulatory credit sales as our production and deliveries increase. For example, our revenue from regulatory credit sales in the three months ended June 30, 2019 was \$111 million while it was \$354 million in the three months ended March 31, 2020.

Automotive leasing revenue includes the amortization of revenue for Model S, Model X and Model 3 vehicles under direct lease agreements as well as those sold with resale value guarantees accounted for as operating leases under lease accounting. We began offering direct leasing for Model 3 vehicles in the second quarter of 2019. We do not yet offer leasing for Model Y vehicles.

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

Automotive sales revenue increased \$1.38 billion, or 39% , in the three months ended March 31, 2020 as compared to the three months ended March 31, 2019 , primarily due to an increase of 21,174 Model 3 and Model Y cash deliveries from additional production capacity at Gigafactory Shanghai and the commencement of Model Y deliveries in the first quarter of 2020. Additionally, due to pricing adjustments we made to our vehicle offerings in the three months ended March 31, 2019, we estimated that there was a greater likelihood that customers would exercise their buyback options and adjusted our sales return reserve on vehicles previously sold under our buyback options program which resulted in a reduction of automotive sales revenue of \$501 million that did not similarly occur this period. There was also an increase of \$139 million from additional sales of regulatory credits to \$354 million in the three months ended March 31, 2020. The increase s in automotive sales revenue were partially offset by a decrease in the average selling price of our Model 3 cash deliveries primarily due to Gigafactory Shanghai producing only Standard Range Plus Model 3 in the first quarter of 2020.

Automotive leasing revenue increased \$24 million, or 11%, in the three months ended March 31, 2020 as compared to the three months ended March 31, 2019. The increase was primarily due to an increase in cumulative vehicles under our direct vehicle leasing program, partially due to the introduction of Model 3 direct leasing in the second quarter of 2019, partially offset by a decrease in cumulative vehicles under our resale value guarantee leasing programs which are accounted for as operating leases.

Services and other revenue increased \$67 million, or 14%, in the three months ended March 31, 2020 as compared to the three months ended March 31, 2019. The increase was primarily due to an increase in non-warranty maintenance services revenue as our fleet continues to grow and an increase in sales by our acquired subsidiaries to third party customers, partially offset by a decrease in volume of used vehicle sales.

Energy Generation and Storage Segment

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

Energy generation and storage revenue decreased by \$31 million, or 10%, in the three months ended March 31, 2020 as compared to the three months ended March 31, 2019, primarily due to decreases in deployments of solar cash and loan jobs.

Cost of Revenues and Gross Margin

(Dollars in millions)	Three Months Ended March 31,		Change	
	2020	2019	\$	%
Cost of revenues				
Automotive sales	\$ 3,699	\$ 2,856	\$ 843	30%
Automotive leasing	122	117	5	4%
Total automotive cost of revenues	3,821	2,973	848	29%
Services and other	648	686	(38)	-6%
Total automotive & services and other segment cost of revenues	4,469	3,659	810	22%
Energy generation and storage segment	282	316	(34)	-11%
Total cost of revenues	\$ 4,751	\$ 3,975	\$ 776	20%
Gross profit total automotive	\$ 1,311	\$ 751		
Gross margin total automotive	26%	20%		
Gross profit total automotive & services and other segment	\$ 1,223	\$ 558		
Gross margin total automotive & services and other segment	21%	13%		
Gross profit energy generation and storage segment	\$ 11	\$ 8		
Gross margin energy generation and storage segment	4%	2%		
Total gross profit	\$ 1,234	\$ 566		
Total gross margin	21%	12%		

Automotive & Services and Other Segment

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

Cost of automotive leasing revenue includes the amortization of operating lease vehicles over the lease term, as well as warranty expenses recognized as incurred. Cost of automotive leasing revenue also includes vehicle connectivity costs and allocations of electricity and infrastructure costs related to our Supercharger network for vehicles under our leasing programs.

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

Cost of automotive sales revenue increased \$843 million, or 30%, in the three months ended March 31, 2020 as compared to the three months ended March 31, 2019, primarily due to an increase of 21,174 Model 3 and Model Y cash deliveries. Due to pricing adjustments we made to our vehicle offerings in the three months ended March 31, 2019, we estimated that there was a greater likelihood that customers would exercise their buyback options and if customers elect to exercise the buyback option, we expect to be able to subsequently resell the returned vehicles, which resulted in a reduction of automotive cost of sales of \$409 million that did not similarly occur this period. The increase in cost of automotive sales revenue was partially offset by a decrease in average Model 3 costs per unit due to Gigafactory Shanghai producing only Standard Range Plus Model 3 in the first quarter of 2020, lower freight and duty costs from local production in China, and additional manufacturing efficiencies in the production of Model 3 in our Fremont Factory. Additionally, as a result of temporary suspension of production at the Fremont Factory, we incurred idle capacity charges of \$24 million in the three months ended March 31, 2020.

Cost of automotive leasing revenue increased \$5 million, or 4%, in the year ended March 31, 2020 compared to the year ended March 31, 2019. The increase was primarily due to an increase in cumulative vehicles under our direct vehicle leasing program, partially due to the introduction of Model 3 direct leasing in the second quarter of 2019, partially offset by a decrease in cumulative vehicles under our resale value guarantee leasing programs which are accounted for as operating leases.

Cost of services and other revenue decreased \$38 million, or 6%, in the three months ended March 31, 2020 as compared to the three months ended March 31, 2019. The decrease was primarily due to decreased costs of used vehicle sales from lower sales volume, offset by an increase in cost of sales by our acquired subsidiaries to third party customers in line with the increase in revenue and a slight increase in costs of our new service centers, additional service personnel in existing and new service centers, Mobile Service capabilities, parts distribution centers and investment in new body shops to provide maintenance services to our rapidly growing fleet of vehicles.

Gross margin for total automotive increased from 20% to 26% in the three months ended March 31, 2020 as compared to the three months ended March 31, 2019, primarily due an increase of \$139 million in sales of regulatory credits and an improvement of Model 3 gross margin primarily from lower freight and duty costs from local production in China and additional manufacturing efficiencies in the production of Model 3 in our Fremont Factory. Additionally, there was an improvement of Model S and Model X gross margin from lower freight and duties from regional sales mix. While Model Y gross margin was positive in the first quarter of deliveries, it partially offset the increases in total automotive gross margin as it is lower than the margins of our existing automotive products.

Gross margin for total automotive & services and other segment increased from 13% to 21% in the three months ended March 31, 2020 as compared to the three months ended March 31, 2019, primarily due to the automotive gross margin impacts discussed above and improved services and other gross margin from increased operational efficiencies. Additionally, there was an increase due to a lower proportion of services and other within the segment in the three months ended March 31, 2020, which operates at a lower gross margin than our automotive business.

Energy Generation and Storage Segment

Cost of energy generation and storage revenue includes direct and indirect material and labor costs, warehouse rent, freight, warranty expense, other overhead costs and amortization of certain acquired intangible assets. In addition, where arrangements are accounted for as operating leases, the cost of revenue is primarily comprised of depreciation of the cost of leased solar energy systems, maintenance costs associated with those systems and amortization of any initial direct costs.

Cost of energy generation and storage revenue decreased by \$34 million, or 11%, in the three months ended March 31, 2020 as compared to the three months ended December 31, 2019. The decrease was primarily due to decreases in deployments of solar cash and loan jobs and lower costs per unit for both Powerpack and Powerwall, partially offset by higher costs from temporary manufacturing under-utilization of our Solar Roof ramp.

Gross margin for energy generation and storage increased from 2% to 4% in the three months ended March 31, 2020 as compared to the three months ended March 31, 2019. Energy storage gross margin improved in the current year as a result of lower materials costs, partially offset by a lower gross margin in our cash and loan solar business driven by higher costs from temporary manufacturing under-utilization of our Solar Roof ramp.

Research and Development Expense

(Dollars in millions)	Three Months Ended March 31,		Change	
	2020	2019	\$	%
Research and development	\$ 324	\$ 340	\$ (16)	-5%
As a percentage of revenues	5%	7%		

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

R&D expenses as a percentage of revenue decreased from 7% to 5% in the three months ended March 31, 2020 as compared to the three months ended March 31, 2019. The decrease was primarily from an increase in overall revenues from our expanding sales, as well as from our focus on increasing operational efficiency and process automation, our efforts to scale down and optimize our cost structure relative to the size of our business.

R&D expenses decreased \$16 million, or 5%, in the three months ended March 31, 2020 compared to the three months ended March 31, 2019. The decrease was primarily due to a \$22 million decrease in employee and labor related expenses from cost efficiency initiatives, partially offset by an increase of \$10 million in facilities, freight, and depreciation expenses.

Selling, General and Administrative Expense

(Dollars in millions)	Three Months Ended March 31,		Change	
	2020	2019	\$	%
Selling, general and administrative	\$ 627	\$ 704	\$ (77)	-11%
As a percentage of revenues	10%	16%		

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

SG&A expenses as a percentage of revenue decreased from 16% to 10% in the three months ended March 31, 2020 as compared to the three months ended March 31, 2019. The decrease was primarily from an increase in overall revenues from our expanding sales, as well as from our focus on increasing operational efficiency and process automation, our efforts to scale down and optimize our cost structure relative to the size of our business.

SG&A expenses decreased \$77 million, or 11%, in the three months ended March 31, 2020 as compared to the three months ended March 31, 2019. The decrease was primarily due to a \$60 million decrease in employee and labor related expenses from cost efficiency initiatives and an \$18 million decrease in office, information technology and facilities-related expenses and sales and marketing activities.

Restructuring and other

(Dollars in millions)	Three Months Ended March 31,		Change	
	2020	2019	\$	%
Restructuring and other	\$ —	\$ 44	\$ (44)	-100%
As a percentage of revenues	0%	1%		

During the first quarter of 2019, we carried out certain restructuring actions in order to reduce costs and improve efficiency. As a result, we recognized \$44 million of costs primarily related to employee termination expenses and losses from closing certain stores. These costs were substantially paid by the end of first quarter of 2019. There were no restructuring actions in the three months ended March 31, 2020.

Interest Expense

(Dollars in millions)	Three Months Ended March 31,		Change	
	2020	2019	\$	%
Interest expense	\$ 169	\$ 158	\$ 11	7%
As a percentage of revenues	3%	3%		

Interest expense increased by \$11 million, or 7%, in the three months ended March 31, 2020 as compared to the three months ended March 31, 2019. The increase was primarily due to an increase in our average outstanding indebtedness as compared to the three months ended March 31, 2019.

Other Income (Expense), Net

(Dollars in millions)	Three Months Ended March 31,		Change	
	2020	2019	\$	%
Other income (expense), net	\$ (54)	\$ 26	\$ (80)	Not meaningful
As a percentage of revenues	-1%	1%		

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

Other income (expense), net, changed unfavorably by \$80 million, in the three months ended March 31, 2020 as compared to the three months ended March 31, 2019. The change was primarily due to unfavorable fluctuations in foreign currency exchange rates and an increase in losses from interest rate swaps related to our debt facilities year-over-year.

Provision for Income Taxes

(Dollars in millions)	Three Months Ended March 31,		Change	
	2020	2019	\$	%
Provision for income taxes	\$ 2	\$ 23	\$ (21)	-91%
Effective tax rate	3%	-4%		

Our provision for income taxes decreased by \$21 million, or 91%, in the three months ended March 31, 2020 as compared to the three months ended March 31, 2019, primarily due to the decrease in income within certain foreign jurisdictions year-over-year.

Net Income Attributable to Noncontrolling Interests and Redeemable Noncontrolling Interests

(Dollars in millions)	Three Months Ended March 31,		Change	
	2020	2019	\$	%
Net income attributable to noncontrolling interests and redeemable noncontrolling interests in subsidiaries	\$ 52	\$ 34	\$ 18	53%

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

Net income attributable to noncontrolling interests and redeemable noncontrolling interests increased by \$18 million, or 53%, in the three months ended March 31, 2020 as compared to the three months ended March 31, 2019. The change was primarily due to lower activities from new financing fund arrangements.

Liquidity and Capital Resources

As of March 31, 2020, we had \$8.08 billion of cash and cash equivalents. Balances held in foreign currencies had a U.S. dollar equivalent of \$2.05 billion and consisted primarily of Chinese yuan, euros and Canadian dollars. Our sources of cash are predominantly from our deliveries of vehicles, sales and installations of our energy storage products and solar energy systems, proceeds from debt facilities, proceeds from financing funds and proceeds from equity offerings.

Our sources of liquidity and cash flows enable us to fund ongoing operations, research and development projects for new products, establishment and/or increases of Model 3 and Model Y production capacity at the Fremont Factory and at Gigafactory Shanghai, the continued expansion of Gigafactory Nevada, the construction of Gigafactory Berlin, the manufacturing ramp of the Solar Roof at Gigafactory New York, and the continued expansion of our retail and service locations, body shops, Mobile Service fleet and Supercharger network.

As discussed in and subject to the considerations referenced in Part I, Item 2, *Management's Discussion and Analysis of Financial Condition and Results of Operations—Management Opportunities, Challenges and Risks—Trends in Cash Flow, Capital Expenditures and Operating Expenses* in this Quarterly Report on Form 10-Q, considering the expected pace of the manufacturing ramps for our products, construction and expansion of our factories, and pipeline of projects under development, and consistent with our current strategy of using a partner to manufacture battery cells, as well as considering all other infrastructure growth, we currently expect our average annual capital expenditures in 2020 and the two succeeding fiscal years to be \$2.5 billion to \$3.5 billion.

We expect that the cash we generate from our core operations will generally be sufficient to cover our future capital expenditures and to pay down our near-term debt obligations, although we may choose to seek alternative financing sources. For example, we expect that much of our investment in Gigafactory Shanghai will continue to be funded through indebtedness arranged through local financial institutions in China, such as the RMB 9.0 billion (or the equivalent amount in U.S. dollars) fixed asset term facility and RMB 2.25 billion (or the equivalent amount in U.S. dollars) working capital revolving facility that our local subsidiary entered into in December 2019, and we expect the same with respect to Gigafactory Berlin. As always, we continually evaluate our capital expenditure needs and may decide it is best to raise additional capital to fund the rapid growth of our business.

We have an agreement to spend or incur \$5.0 billion in combined capital, operational expenses, costs of goods sold and other costs in the State of New York during the 10-year period following full production at Gigafactory New York. In April 2020, the government agency overseeing this agreement issued guidance that all obligations relating to investment and employment targets under certain of its projects, including our obligation to be compliant with our applicable targets under such agreement on April 30, 2020, may be deferred for a one-year period upon such agency's approval of an application for relief by the obligor. As we temporarily suspended most of our manufacturing operations at Gigafactory New York pursuant to a New York State executive order issued in March 2020 as a result of the COVID-19 pandemic, we intend to apply for and expect to be granted such deferral. Moreover, as we had exceeded our investment and employment obligations under this agreement prior to such mandated reduction of operations, we do not currently expect any issues meeting all applicable future obligations under this agreement, and we do not believe that we face a significant risk of default.

We expect that our current sources of liquidity together with our projection of cash flows from operating activities will provide us with adequate liquidity over at least the next 12 months. A large portion of our future expenditures is to fund our growth, and we can adjust our capital and operating expenditures by operating segment, including future expansion of our product offerings, retail and service locations, body shops, Mobile Service fleet, and Supercharger network. For example, if the resumption of our normal U.S. manufacturing operations takes longer than expected, including due to global economic conditions and levels of consumer comfort and spend impacting demand in the worldwide transportation, automotive and energy product industries, the pace of our capital expenditures may be correspondingly slowed. We may need or want to raise additional funds in the future, and these funds may not be available to us when we need or want them, or at all. If we cannot raise additional funds when we need or want them, our operations and prospects could be negatively affected.

In addition, we had \$2.43 billion of unused committed amounts under our credit facilities and financing funds as of March 31, 2020, some of which are subject to satisfying specified conditions prior to draw-down (such as pledging to our lenders sufficient amounts of qualified receivables, inventories, leased vehicles and our interests in those leases, solar energy systems and the associated customer contracts, our interests in financing funds or various other assets; and contributing or selling qualified solar energy systems and the associated customer contracts or qualified leased vehicles and our interests in those leases into the financing funds). Upon the draw-down of any unused committed amounts, there are no restrictions on use of available funds for general corporate purposes. For details regarding our indebtedness and financing funds, refer to Note 10, *Debt*, and Note 13, *Variable Interest Entity Arrangements*, to the consolidated financial statements included elsewhere in this Quarterly Report on Form 10-Q.

Summary of Cash Flows

(Dollars in millions)	Three Months Ended March 31,	
	2020	2019
Net cash used in operating activities	\$ (440)	\$ (640)
Net cash used in investing activities	\$ (480)	\$ (306)
Net cash provided by (used in) financing activities	\$ 2,708	\$ (653)

Cash Flows from Operating Activities

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

Net cash used in operating activities decreased by \$200 million to \$440 million during the three months ended March 31, 2020 from \$640 million during the three months ended March 31, 2019. This favorable change was primarily due to the increase in net income, excluding non-cash expenses and gains, of \$783 million and \$188 million of the repayment of our 0.25% Convertible Senior Notes due in 2019 during the three months ended March 31, 2019 (which was classified as an operating activity, as this represented an interest payment on the discounted convertible notes), partially offset by the increase in working capital of \$771 million. The increase in working capital was mainly driven by a smaller increase in deferred revenue, due to higher deferred regulatory credits in the three months ended March 31, 2019, a larger decrease in accounts payable and accrued liabilities from less sales related tax due as a result of quarter-over-quarter changes in deliveries, an increase in operating lease vehicles in the three months ended March 31, 2020 as compared to a decrease for the same period in 2019, as Model 3 leases were introduced in the second quarter of 2019, and a larger increase in inventory from buildup of finished goods from limited capacity to deliver or install our products at the end of the first quarter of 2020. The increase in working capital was partially offset by an increase in customer deposits in the three months ended March 31, 2020 as compared to a decrease for the same period in 2019.

Cash Flows from Investing Activities

Cash flows from investing activities and their variability across each period related primarily to capital expenditures, which were \$455 million during the three months ended March 31, 2020, mainly for Model Y production at the Fremont Factory and Gigafactory Shanghai construction, and \$280 million during the three months ended March 31, 2019, mainly for Model 3 production. Design, acquisition and installation of solar energy systems amounted to \$26 million and \$25 million for the three months ended March 31, 2020 and 2019, respectively.

Cash Flows from Financing Activities

Cash flows from financing activities during the three months ended March 31, 2020 consisted primarily of \$2.31 billion from our February 2020 public offering of common stock, net of issuance costs, \$359 million of net borrowings under our vehicle lease-backed loan and security agreements (the “Warehouse Agreements”), \$292 million of net borrowings under the senior secured asset-based revolving credit agreement (the “Credit Agreement”) and \$160 million of proceeds from exercise of stock options and other stock issuances. These cash inflows were partially offset by \$129 million of payments of the automotive asset-backed notes and \$100 million principal repayments of our finance leases.

Cash flows used in financing activities during the three months ended March 31, 2019 consisted primarily of a \$732 million portion of the repayment of our 0.25% Convertible Senior Notes due in 2019 that was classified as financing activity, collateralized lease repayments of \$134 million, and repayments of \$115 million of the automotive asset-backed notes. These cash outflows were partially offset by \$316 million of net borrowings under the Credit Agreement and \$82 million of net borrowings under the Warehouse Agreements.

Contractual Obligations

Contractual obligations did not materially change during the three months ended March 31, 2020 except for debt activity, as discussed in more detail in Note 10, *Debt*, and the aggregate impact of new and updated supplier arrangements for Gigafactory Shanghai and Gigafactory Berlin during the quarter ended March 31, 2020. The following tables sets forth the aggregate impact from these supplier arrangements on our purchase obligations as of March 31, 2020 (in millions):

Nine months ending December 31, 2020	\$	912
		2021
		86
	Total	\$ 998

Off-Balance Sheet Arrangements

During the periods presented, we did not have relationships with unconsolidated entities or financial partnerships, such as entities often referred to as structured finance or special purpose entities, which were established for the purpose of facilitating off-balance sheet arrangements or other contractually narrow or limited purposes.

ITEM 3. QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISK

Foreign Currency Risk

We transact business globally in multiple currencies and hence have foreign currency risks related to our revenue, costs of revenue, operating expenses and localized subsidiary debt denominated in currencies other than the U.S. dollar (primarily the Chinese yuan, euro, British pound, 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 and, in particular, a strengthening of the U.S. dollar have in the past, and may in the future, negatively affect our revenue and other operating results as expressed in U.S. dollars as we do not typically hedge foreign currency risk.

We have also experienced, and will continue to experience, fluctuations in our net income (loss) as a result of gains (losses) on the settlement and the re-measurement of monetary assets and liabilities denominated in currencies that are not the local currency (primarily consisting of our intercompany and cash and cash equivalents balances). For the three months ended March 31, 2020, we recognized a net foreign currency loss of \$19 million in other (expense) income, net, with our largest re-measurement exposures from the U.S. dollar, Australian dollar and South Korean won as our subsidiaries' monetary assets and liabilities are denominated in various local currencies. For the three months ended March 31, 2019, we recognized a net foreign currency gain of \$39 million in other (expense) income, net, with our largest re-measurement exposures from the U.S. dollar, euro and Chinese yuan.

We considered the historical trends in foreign currency exchange rates and determined that it is reasonably possible that adverse changes in foreign currency exchange rates of 10% for all currencies could be experienced in the near-term. These changes were applied to our total monetary assets and liabilities denominated in currencies other than our local currencies at the balance sheet date to compute the impact these changes would have had on our net income (loss) before income taxes. These changes would have resulted in an adverse impact of \$296 million at March 31, 2020 and \$362 million at December 31, 2019 assuming no foreign currency hedging.

Interest Rate Risk

We are exposed to interest rate risk on our borrowings that bear interest at floating rates. Pursuant to our risk management policies, in certain cases, we utilize derivative instruments to manage some of this risk. We do not enter into derivative instruments for trading or speculative purposes. A hypothetical 10% change in interest rates on our floating rate debt would have increased or decreased our interest expense for the three months ended March 31, 2020 and 2019 by \$1 million and \$2 million, respectively.

ITEM 4. CONTROLS AND PROCEDURES

Evaluation of Disclosure Controls and Procedures

Our management, with the participation of our Chief Executive Officer and our Chief Financial Officer, evaluated the effectiveness of our disclosure controls and procedures pursuant to Rule 13a-15 under the Securities Exchange Act of 1934, as amended (the "Exchange Act"). In designing and evaluating the disclosure controls and procedures, our management recognizes that any controls and procedures, no matter how well designed and operated, can provide only reasonable assurance of achieving the desired control objectives. In addition, the design of disclosure controls and procedures must reflect the fact that there are resource constraints and that our management is required to apply its judgment in evaluating the benefits of possible controls and procedures relative to their costs.

Based on this evaluation, our Chief Executive Officer and our Chief Financial Officer concluded that, as of March 31, 2020, our disclosure controls and procedures were designed at a reasonable assurance level and were effective to provide reasonable assurance that the information we are required to disclose in reports that we file or submit under the Exchange Act is recorded, processed, summarized and reported within the time periods specified in the Securities and Exchange Commission rules and forms, and that such information is accumulated and communicated to our management, including our Chief Executive Officer and our Chief Financial Officer, as appropriate, to allow timely decisions regarding required disclosures.

Changes in Internal Control over Financial Reporting

There were no changes in our internal control over financial reporting, as identified in connection with the evaluation required by Rule 13a-15(d) and Rule 15d-15(d) of the Exchange Act, that occurred during the three months ended March 31, 2020 that have materially affected, or are reasonably likely to materially affect, our internal control over financial reporting.

PART II. OTHER INFORMATION

ITEM 1. LEGAL PROCEEDINGS

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

In addition, the following matter is being disclosed pursuant to Item 103 of Regulation S-K because it relates to environmental regulations and aggregate civil penalties could potentially exceed \$100,000.

The Bay Area Air Quality Management District (the “BAAQMD”) has issued notices of violation to us relating to air permitting for the Tesla Factory, but has not initiated formal proceedings. We dispute certain of these allegations and are working to resolve them with the BAAQMD. Further, we assert that there has been no related adverse community or environmental impact. While we cannot predict the outcome of this matter, including the final amount of any penalties, it is not expected to have a material adverse impact on our business.

ITEM 1A. RI SK FACTORS

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

Risks Related to Our Business and Industry

We have been, and may in the future be, adversely affected by the global COVID-19 pandemic, the duration and economic, governmental and social impact of which is difficult to predict, which may significantly harm our business, prospects, financial condition and operating results.

During and following the first quarter of 2020, there has been a widespread worldwide impact from the COVID-19 pandemic, and we have been, and may in the future be, adversely affected as a result. Numerous government regulations and public advisories, as well as shifting social behaviors, have temporarily limited or closed non-essential transportation, government functions, business activities, and person-to-person interactions, and the duration of such trends is difficult to predict. For example, we experienced a government-imposed suspension of operations for 10 days at Gigafactory Shanghai immediately following a scheduled 7-day closure for the Lunar New Year holiday, after which we resumed operations on February 10, 2020. Panasonic, our partner that manufactures lithium-ion battery cells for our products at our Gigafactory Nevada, suspended its operations there for 14 days before resuming certain operations starting on April 11, 2020. Finally, we temporarily suspended most production at Gigafactory New York starting on March 14, 2020 pursuant to a New York State executive order, and we decided to temporarily suspend all production at the Fremont Factory starting on March 23, 2020 and most production at Gigafactory Nevada starting on April 12, 2020 in order to accommodate the related challenges for our employees and their families and our suppliers. We also instituted certain temporary cost reduction measures by furloughing certain of our hourly employees and reducing most salaried employees' base salaries globally while our U.S. operations are scaled back. Social distancing measures and reduced operations or closures at government offices and businesses, including motor vehicle departments, vehicle auction houses and municipal and utility company inspectors, also resulted in challenges in or postponements past the first quarter of 2020 for our new vehicle deliveries, used vehicle sales, and energy product deployments, and such conditions have generally continued.

The specific timing and pace of our resumption of normal U.S. manufacturing operations will depend on the status of various government regulations and the readiness of our suppliers, vendors and currently inactive production workforce. Although we are working with each of our suppliers and government agencies on how best to resume and sustain production, it ultimately remains uncertain how quickly we and our suppliers will be able to return to prior levels of production and maintain such levels. Likewise, it is possible that the contingencies generally inherent in our ongoing construction of and ramp at Gigafactory Shanghai and Gigafactory Berlin may be exacerbated by such conditions.

Even after we restore operations at our U.S. production facilities, our manufacturing rates and timelines may also be affected by global economic markets and levels of consumer comfort and spend, which could impact demand in the worldwide transportation and automotive industries and for construction projects such as the addition of solar energy systems. We have always monitored macroeconomic conditions to remain flexible and optimize and evolve our business as appropriate, and we will continue to do so. Because the impact of current conditions on an ongoing basis is yet largely unknown, is rapidly evolving, and has been varied across geographic regions, this ongoing assessment will be particularly critical to allow us to accurately project demand and infrastructure requirements globally and deploy our production, workforce, and other resources accordingly. Moreover, as we have offered and continue to offer various financing options for our vehicles and energy products, we bear the credit risk on such transactions. To the extent that market conditions, unemployment rates and/or government-mandated moratoriums on periodic payments result in significant rates of default by our customers, our business would be adversely impacted.

If current global market conditions continue or worsen, or if we cannot or do not resume suspended operations at a rate commensurate with such conditions or resume suspended operations and are later required to or choose to suspend such operations again, our business, prospects, financial condition, and operating results could be materially harmed.

We have experienced in the past, and may experience in the future, delays or other complications in the design, manufacture, launch, and production ramp of our vehicles, energy products, and product features, or may not realize our manufacturing cost targets, which could harm our brand, business, prospects, financial condition and operating results.

We have previously experienced launch and production ramp delays or other complications in connection with the introduction of new vehicle models and vehicle features. For example, we encountered unanticipated supply chain constraints that led to initial delays in producing Model X and an isolated supplier limitation in the manufacture of Model 3. Similarly, during our initial Model 3 production ramp, we had challenges ramping fully automated processes, such as portions of the battery module assembly line, material flow system and the general assembly line, which we addressed by reducing the levels of automation and introducing semi-automated or manual processes. In addition, we have introduced in the past and may introduce in the future new manufacturing technologies, techniques and processes for our vehicles, such as aluminum spot welding systems and high-speed blow forming of certain difficult to stamp vehicle parts, and unique design features with different manufacturing challenges, such as large display screens, dual motor drivetrain, hardware for our Autopilot and FSD features, falcon-wing doors, and a heat pump and octovalve system for increased power efficiency. There is no guarantee that we will be able to successfully and timely introduce and scale any such new processes or features.

In particular, our future business depends in large part on the high-volume production of Model 3 and Model Y, which we believe are our vehicles with the largest markets. We have limited experience to date in manufacturing Model 3 at high volumes and continuously increasing its production rates, particularly across multiple vehicle manufacturing facilities, which we commenced in the fourth quarter of 2019 with Gigafactory Shanghai coming online. In order to be successful, we will need to implement, maintain and/or ramp efficient and cost-effective manufacturing capabilities, processes and supply chains and achieve the design tolerances, high quality and maximum output rates we have planned, including at Gigafactory Shanghai, and for Model Y, which we commenced manufacturing at the Fremont Factory in the first quarter of 2020. Bottlenecks such as those we have experienced in the past with new product ramps and other unexpected challenges may also arise as we ramp production, and it will be important that we address them promptly while continuing to reduce our manufacturing costs. If we are not successful in doing so, or if we experience issues with our ongoing manufacturing process improvements and cost-down efforts, we could face delays in establishing and/or sustaining our Model 3 and Model Y ramps or be unable to meet our related cost and profitability targets.

Moreover, we will need to hire, train and compensate skilled employees to operate high-volume production facilities to support our vehicle ramp at the Fremont Factory and Gigafactory Shanghai, as well as at Gigafactory Nevada to support the manufacture of battery packs and drive units for certain of our vehicles. Finally, because our vehicle models, in particular Model 3 and Model Y, may share certain parts, suppliers or production facilities with each other, the volume or efficiency of production with respect to one model may impact also the production of other models or lead to bottlenecks that impact the production of all models.

We may also experience similar future delays or other complications in launching and/or ramping production of new vehicles, such as Tesla Semi, Cybertruck and the new Tesla Roadster, our energy storage products and the Solar Roof, as well as future features and services such as new Autopilot or FSD features and the autonomous Tesla ride-hailing network. Likewise, we may encounter delays with the design, construction and regulatory or other approvals necessary to build and bring online future manufacturing facilities, including our planned Gigafactory Berlin in Germany.

Any significant delay or other complication in cost-effectively ramping the production of our current products, including resuming any currently suspended manufacturing, or the development, manufacture, launch and production ramp of our future products, features and services, including complications associated with expanding our production capacity and supply chain or obtaining or maintaining related regulatory approvals, could materially damage our brand, business, prospects, financial condition and operating results.

We may be unable to meet our growing product sales, delivery , installation , vehicle servicing and charging plans, or accurately project and manage this growth internationally, which could harm our business and prospects.

Concurrent with developing, launching and ramping our products, our success will depend on our ability to continue to significantly increase their sales, deliveries, installations and servicing worldwide, while allocating our available resources among multiple products simultaneously. As we expand globally, we will also need to ensure we are in compliance with any regulatory requirements applicable to the sale, installation and service of our products, the sale of electricity generated through our solar energy systems and operation of Superchargers in various jurisdictions, which could take considerable time and expense. These plans require significant cash investments and management resources and there is no guarantee that they will ultimately generate additional sales or installations of our products.

We continuously evaluate, and as appropriate evolve, our retail operations and product offerings in order to maximize our reach and optimize our costs, vehicle line-up and model differentiation, and purchasing experience. However, there is no guarantee that each step in our evolving strategy will be perceived as intended by prospective customers accustomed to more traditional sales models. Likewise, while we are pioneering touchless vehicle deliveries and test drives in certain regions to allow prospective customers to experience our vehicles while promoting their comfort and convenience, there is no guarantee that such measures will be effective large-scale substitutes for traditional transactions. In particular, we are targeting with Model 3 and Model Y a global mass demographic with a broad range of potential customers, in which we have limited experience projecting demand and pricing our products. We currently produce numerous international variants at a limited number of factories, and if our specific demand expectations for these variants prove inaccurate, we may not be able to timely generate sales matched to the specific vehicles that we produce in the same timeframe or that are commensurate with our operations in a given region, which may negatively impact our deliveries and operating results in a particular period. Likewise, as we develop and grow our energy storage product and solar business worldwide, our success will depend on our ability to correctly forecast demand for our products in different markets.

Moreover, because we do not have independent dealer networks, we are responsible for delivering all of our vehicles to our customers and meeting their vehicle servicing needs. While we have substantially implemented and improved many aspects of our delivery and service operations, we still have relatively limited experience with, and may face difficulties in, such deliveries and servicing at high volumes, particularly in international markets as we expand. For example, significant transit time may be required to transport vehicles in volume into international markets, and we also saw challenges in initially ramping our logistical channels in China and Europe as we delivered Model 3 there for the first time in the first quarter of 2019. To accommodate growing volumes, we have deployed a number of delivery models, such as deliveries to customers' homes and workplaces, some of which have not been previously tested at scale and in different geographies and may not ultimately be successful. Likewise, because of our unique expertise with our vehicles, we recommend that our vehicles be serviced by our service centers, Mobile Service technicians or certain authorized professionals that we have specifically trained and equipped. If we experience delays in adding such servicing capacity or experience unforeseen issues with the reliability of our vehicles, particular higher-volume and newer additions to our fleet such as Model 3 and Model Y, it could overburden our servicing capabilities and parts inventory. Finally, the increasing number of Tesla vehicles also requires us to continue to rapidly increase the number of our Supercharger stations and connectors throughout the world.

We are also expanding our installation capabilities for the Solar Roof as we continue its manufacturing ramp by training both our own personnel and third party installers. If we are not successful in growing this overall installation capability to keep pace with our increasing production, or if we experience unforeseen delays in the production ramp or inaccurately forecast demand for the Solar Roof, our operating results may be negatively impacted.

There is no assurance that we will be able to ramp our business to meet our sales, delivery, servicing, charging and installation targets globally, that our projections on which such targets are based will prove accurate, or that the pace of growth or coverage of our customer infrastructure network will meet customer expectations. Moreover, we may not be successful in managing our global operations if we are unable to avoid cost overruns and other unexpected operating costs, adapt our products and conduct our operations to meet local requirements and regulations, implement required local infrastructure, systems and processes, and find and hire a s needed additional sales, service , electrical installation, construction and administrative personnel. If we fail to manage our growth effectively, it could result in negative publicity and damage to our brand and have a material adverse effect on our business, prospects, financial condition and operating results.

Our future growth and success is dependent upon consumers' willingness to adopt electric vehicles and specifically our vehicles. We operate in the automotive industry, which is generally susceptible to cyclical and volatility.

Our growth is highly dependent upon the worldwide adoption by consumers of alternative fuel vehicles in general and electric vehicles in particular. Although we have successfully grown demand for our vehicles thus far, there is no guarantee of such future demand, or that our vehicles will not compete with one another in the market. Moreover, the target demographics for our vehicles, in particular the mass market demographic for Model 3 and Model Y, are highly competitive. If the market for electric vehicles in general and Tesla vehicles in particular does not develop as we expect, develops more slowly than we expect, or if demand for our vehicles decreases in our markets, our business, prospects, financial condition and operating results could be harmed.

We have only relatively recently achieved high-volume production of vehicles, and are still at an earlier stage and have limited resources relative to our competitors. Moreover, the market for alternative fuel vehicles is rapidly evolving. As a result, the market for our vehicles could be affected by numerous factors, such as:

- perceptions about electric vehicle features, quality, safety, performance and cost;
- perceptions about the limited range over which electric vehicles may be driven on a single battery charge;
- competition, including from other types of alternative fuel vehicles, plug-in hybrid electric vehicles and high fuel-economy internal combustion engine vehicles;
- volatility in the cost of oil and gasoline;
- government regulations and economic incentives;
- access to charging facilities; and
- concerns about our future viability.

For example, the market price of crude oil has dropped since March 2020, and it is unknown to what extent any corresponding decreases in the cost of gasoline may impact the market for electric vehicles. In addition, sales of vehicles in the automotive industry tend to be cyclical in many markets, which may expose us to increased volatility, especially as we expand and adjust our operations and retail strategies. Moreover, travel restrictions and social distancing efforts in response to the COVID-19 pandemic may negatively impact the transportation and automotive industries for an unknown, but potentially lengthy, period of time. Specifically, it is uncertain as to how such macroeconomic factors will impact us as a company that has been experiencing growth and increasing market share in an industry that has globally been experiencing a recent decline in sales.

We are dependent on our suppliers, the majority of which are single-source suppliers, and the inability of these suppliers to deliver necessary components of our products according to our schedule and at prices, quality levels and volumes acceptable to us, or our inability to efficiently manage these components, could have a material adverse effect on our financial condition and operating results.

Our products contain thousands of purchased parts that we source globally from hundreds of direct suppliers. We attempt to mitigate our supply chain risk by entering into long-term agreements where it is practical and beneficial to do so, qualifying and obtaining components from multiple sources where sensible, and maintaining safety stock for key parts and assemblies and die banks for components with lengthy procurement lead times. However, our limited, and in most cases single-source, supply chain exposes us to multiple potential sources of delivery failure or component shortages for our production, such as those which we experienced in 2012 and 2016 in connection with our slower-than-planned Model S and Model X ramps. Furthermore, unexpected changes in business conditions, materials pricing, labor issues, wars, governmental changes, tariffs, natural disasters such as the March 2011 earthquakes in Japan, health epidemics such as the global COVID-19 pandemic, and other factors beyond our and our suppliers' control could also affect these suppliers' ability to deliver components to us on a timely basis. The loss of any supplier, particularly a single- or limited-source supplier, or the disruption in the supply of components from our suppliers, could lead to product design changes, production delays of key revenue-generating products, idle manufacturing facilities, and potential loss of access to important technology and parts for producing, servicing and supporting our products, any of which could result in negative publicity, damage to our brand and a material and adverse effect on our business, prospects, financial condition and operating results.

We may also be impacted by changes in our supply chain or production needs. We have experienced in the past, and may experience in the future, cost increases from certain of our suppliers in order to meet our quality targets and development timelines as well as due to our design changes. Likewise, any significant increases in our production, such as for Model 3 and our expectations for Model Y, has required and/or may in the future require us to procure additional components in a short amount of time. Our suppliers may not ultimately be able to sustainably and timely meet our cost, quality and volume needs, requiring us to replace them with other sources. While we believe that we will be able to secure additional or alternate sources of supply for most of our components in a relatively short time frame, there is no assurance that we will be able to do so or develop our own replacements for certain highly customized components. Additionally, we continuously negotiate with existing suppliers to obtain cost reductions and avoid unfavorable changes to terms, seek new and less expensive suppliers for certain parts, and attempt to redesign certain parts to make them less expensive to produce. If we are unsuccessful in our efforts to control and reduce supplier costs, our operating results will suffer.

Outside of the U.S., we have limited manufacturing experience and we may experience issues or delays increasing the level of localized procurement at our Gigafactory Shanghai and in the future at our Gigafactory Berlin. Furthermore, as the scale of our vehicle production increases, we will need to accurately forecast, purchase, warehouse and transport components to our manufacturing facilities and servicing locations internationally and at much higher volumes. If we are unable to accurately match the timing and quantities of component purchases to our actual needs or successfully implement automation, inventory management and other systems to accommodate the increased complexity in our supply chain, we may incur unexpected production disruption, storage, transportation and write-off costs, which could have a material adverse effect on our financial condition and operating results.

Any problems or delays in expanding Gigafactory Nevada or ramping and maintaining operations there could negatively affect the production and profitability of our products, such as Model 3, Model Y and our energy storage products. In addition, the battery cells produced there store large amounts of energy.

To lower the cost of cell production and produce cells in high volume, we have vertically integrated the production of lithium-ion cells at Gigafactory Nevada, where we also manufacture battery packs and drive units for certain vehicles and energy storage products and assemble our Megapack product. Production of lithium-ion cells at Gigafactory Nevada began in 2017, and we have no other direct experience in the production of lithium-ion cells. Given the size and complexity of this undertaking, it is possible that future events could result in issues or delays in further ramping our products and expanding production output at Gigafactory Nevada.

In order to achieve our volume and gross margin targets for our vehicles and energy storage products, we must continue to sustain and ramp significant cell production at Gigafactory Nevada, which, among other things, requires Panasonic to successfully operate and further ramp its cell production lines at significant volumes. Although Panasonic has a long track record of producing high-quality cells at significant volume at its factories in Japan, it has relatively limited experience with cell production at Gigafactory Nevada. Moreover, although Panasonic is co-located with us at Gigafactory Nevada, it is free to make its own operational decisions, such as its determination to temporarily suspend its manufacturing there in response to the COVID-19 pandemic. In addition, we produce several components for Model 3 and Model Y, such as battery modules incorporating the lithium-ion cells produced by Panasonic and drive units (including to support Gigafactory Shanghai production), at Gigafactory Nevada. Some of the manufacturing lines for such components took longer than anticipated to ramp to their full capacity. While we have largely overcome this bottleneck after deploying multiple semi-automated lines and improving our original lines, additional bottlenecks may arise as we continue to increase the production rate and introduce new lines. If we or Panasonic are unable to or otherwise do not maintain Gigafactory Nevada production, or if we are unable to cost-effectively ramp output additionally over time as needed or hire and retain a substantial number of highly skilled personnel, our ability to supply battery packs or other components for Model 3, Model Y and our other products could be negatively impacted, which could negatively affect our brand and harm our business, prospects, financial condition and operating results.

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

Any issues or delays in meeting our projected timelines, costs and production at or funding the ramp of Gigafactory Shanghai, or any difficulties in generating and maintaining local demand for vehicles manufactured there, could adversely impact our business, prospects, operating results and financial condition.

As part of our continuing work to increase production of our vehicles on a sustained basis, and in order to make them affordable in international markets by accessing local supply chains and workforces, we have established Gigafactory Shanghai in China. Currently, we have installed annual production capacity for 200,000 Model 3 vehicles there that we believe we will eventually be able to push to actual rates of production in excess of such number, and we have commenced construction of the next phase of Gigafactory Shanghai to add Model Y manufacturing capacity at least equivalent to that for Model 3. The ramp and further expansion of Gigafactory Shanghai are subject to a number of uncertainties inherent in all new manufacturing operations, including ongoing compliance with regulatory requirements, maintenance of operational licenses and approvals for additional expansion, potential supply chain constraints, hiring, training and retention of qualified employees, and the pace of bringing production equipment and processes online with the capability to manufacture high-quality units at scale. We have limited experience to date with operating manufacturing facilities abroad, and only recently began to sell Model 3 in China. If we experience any issues or delays in meeting our projected timelines, costs, capital efficiency and production capacity for Gigafactory Shanghai, or in maintaining and complying with the terms of local debt financing that we intend will largely fund it, or in generating and maintaining demand locally for the vehicles we manufacture at Gigafactory Shanghai, our business, prospects, operating results and financial condition could be adversely impacted.

In particular, local manufacturing is critical to our expansion and sales in China, which is the largest market for electric vehicles in the world. Our vehicle sales in China have been negatively impacted in the past by certain tariffs on automobiles manufactured in the U.S., such as our vehicles, and our costs for producing our vehicles in the U.S. have also been affected by import duties on certain components sourced from China. If we are not able to successfully and timely ramp Gigafactory Shanghai, we may continue to be exposed to the impact of such unfavorable tariffs, duties or costs to our detriment compared to locally-based competitors.

We face risks associated with our international operations, including unfavorable and uncertain regulatory, political, economic, tax and labor conditions, and with establishing ourselves in new markets, all of which could harm our business.

We have a global footprint with domestic and international operations and subsidiaries. Accordingly, we are subject to a variety of legal, political and regulatory requirements and social, environmental and economic conditions over which we have little control. For example, we may be impacted by trade policies, environmental conditions, political uncertainty and economic cycles involving geographic regions where we have significant operations, which are inherently unpredictable. We are subject to a number of risks associated in particular with international business activities that may increase our costs, impact our ability to sell our products and require significant management attention. These risks include conforming our products to various international regulatory and safety requirements as well as charging and other electric infrastructures, organizing local operating entities, difficulty in establishing, staffing and managing foreign operations, challenges in attracting customers, foreign government taxes, regulations and permit requirements, our ability to enforce our contractual rights, trade restrictions, customs regulations, tariffs and price or exchange controls, and preferences of foreign nations for domestically manufactured products.

Increases in costs, disruption of supply or shortage of materials, in particular for lithium-ion cells, could harm our business.

We may experience increases in the cost of or a sustained interruption in the supply or shortage of materials. Any such increase, supply interruption or shortage could materially and negatively impact our business, prospects, financial condition and operating results. We use various materials in our business including aluminum, steel, lithium, nickel, copper and cobalt, as well as lithium-ion cells from suppliers. The prices for these materials fluctuate, and their available supply may be unstable, depending on market conditions and global demand for these materials, including as a result of increased production of electric vehicles and energy storage products by our competitors, and could adversely affect our business and operating results. For instance, we are exposed to multiple risks relating to lithium-ion cells. These risks include:

- an increase in the cost, or decrease in the available supply, of materials used in the cells;
- disruption in the supply of cells due to quality issues or recalls by battery cell manufacturers or any issues that may arise with respect to cells manufactured at our own facilities; and
- fluctuations in the value of any foreign currencies in which battery cell and related raw material purchases are or may be denominated, such as the Japanese yen, against the U.S. dollar.

Our business is dependent on the continued supply of battery cells for the battery packs used in our vehicles and energy storage products. While we believe several sources of the battery cells are available for such battery packs, and expect to eventually rely substantially on battery cells manufactured at our own facilities, we have to date fully qualified only a very limited number of suppliers for the cells used in such battery packs and have very limited flexibility in changing cell suppliers. Any disruption in the supply of battery cells from such suppliers could disrupt production of our vehicles and of the battery packs we produce for energy products until such time as a different supplier is fully qualified. Furthermore, fluctuations or shortages in petroleum and other economic conditions may cause us to experience significant increases in freight charges and material costs. Substantial increases in the prices for our materials or prices charged to us, such as those charged by battery cell suppliers, would increase our operating costs, and could reduce our margins if we cannot recoup the increased costs through increased vehicle prices. Any attempts to increase product prices in response to increased material costs could result in cancellations of orders and reservations and therefore materially and adversely affect our brand, image, business, prospects and operating results.

If our vehicles or other products that we sell or install fail to perform as expected, our ability to develop, market and sell our products and services could be harmed.

If our vehicles or our energy products contain defects in design and manufacture that cause them not to perform as expected or that require repair, or certain features of our vehicles such as new Autopilot or FSD features take longer than expected to become enabled, are legally restricted or become subject to onerous regulation, our ability to develop, market and sell our products and services could be harmed. For example, the operation of our vehicles is highly dependent on software, which is inherently complex and may contain latent defects and errors or be subject to external attacks. Issues experienced by vehicle customers have included those related to the software for the 17 inch display screen, as well as the panoramic roof and the 12-volt battery in the Model S and the seats and doors in the Model X. Although we attempt to remedy any issues we observe in our products as effectively and rapidly as possible, such efforts may not be timely, may hamper production or may not be to the satisfaction of our customers. While we have performed extensive internal testing on the products we manufacture, we currently have a limited frame of reference by which to evaluate detailed long-term quality, reliability, durability and performance characteristics of our battery packs, powertrains, vehicles and energy storage products. There can be no assurance that we will be able to detect and fix any defects in our products prior to their sale to or installation for customers.

Any product defects, delays or legal restrictions on product features, or other failure of our products to perform as expected, could harm our reputation and result in delivery delays, product recalls, product liability claims, breach of warranty claims, and significant warranty and other expenses, and could have a material adverse impact on our business, financial condition, operating results and prospects.

We may become subject to product liability claims, which could harm our financial condition and liquidity if we are not able to successfully defend or insure against such claims.

Although we design our vehicles to be the safest vehicles on the road, product liability claims, even those without merit, could harm our business, prospects, operating results and financial condition. The automobile industry in particular experiences significant product liability claims and we face inherent risk of exposure to claims in the event our vehicles do not perform or are claimed to not have performed as expected. As is true for other automakers, our vehicles have been involved and we expect in the future will be involved in crashes resulting in death or personal injury, and such crashes where Autopilot or FSD features are engaged are the subject of significant public attention. We have experienced and we expect to continue to face claims arising from or related to misuse or claimed failures of new technologies that we are pioneering, including Autopilot and FSD features in our vehicles. In addition, the battery packs that we produce make use of lithium-ion cells. On rare occasions, lithium-ion cells can rapidly release the energy they contain by venting smoke and flames in a manner that can ignite nearby materials as well as other lithium-ion cells. While we have designed the battery pack to passively contain any single cell's release of energy without spreading to neighboring cells, there can be no assurance that a field or testing failure of our vehicles or other battery packs that we produce will not occur, in particular due to a high-speed crash, which could subject us to lawsuits, product recalls or redesign efforts, all of which would be time consuming and expensive.

Moreover, as our solar energy systems and energy storage products generate and store electricity, they have the potential to cause injury to people or property. A successful product liability claim against us could require us to pay a substantial monetary award. Moreover, a product liability claim could generate substantial negative publicity about our products and business and could have a material adverse effect on our brand, business, prospects and operating results. In most jurisdictions, we generally self-insure against the risk of product liability claims for vehicle exposure, meaning that any product liability claims will likely have to be paid from company funds, not by insurance.

The markets in which we operate are highly competitive, and we may not be successful in competing in these industries. We currently face competition from new and established domestic and international competitors and expect to face competition from others in the future, including competition from companies with new technology.

The worldwide automotive market, particularly for alternative fuel vehicles, is highly competitive today and we expect it will become even more so in the future. There is no assurance that our vehicles will be successful in the respective markets in which they compete. A significant and growing number of established and new automobile manufacturers, as well as other companies, have entered or are reported to have plans to enter the alternative fuel vehicle market, including hybrid, plug-in hybrid and fully electric vehicles, as well as the market for self-driving technology and applications. In some cases, such competitors have announced an intention to produce electric vehicles exclusively at some point in the future. Most of our current and potential competitors have significantly greater financial, technical, manufacturing, marketing, vehicle sales resources and networks than we do and may be able to devote greater resources to the design, development, manufacturing, distribution, promotion, sale and support of their products. In particular, some competitors have also announced plans to compete with us in important and large markets for electric vehicles, such as China and in Europe. Increased competition could result in lower vehicle unit sales, price reductions, revenue shortfalls, loss of customers and loss of market share, which could harm our business, prospects, financial condition and operating results. In addition, Model 3 and Model Y face competition from existing and future automobile manufacturers in the extremely competitive entry-level premium sedan and compact SUV market, including BMW, Ford, Lexus, Mercedes and Volkswagen Group.

The solar and energy storage industries are highly competitive. We face competition from other manufacturers, developers and installers of solar and energy storage systems, as well as from large utilities. Decreases in the retail prices of electricity from utilities or other renewable energy sources could make our products less attractive to customers and lead to an increased rate of customer defaults under our existing long-term leases and PPAs. Moreover, prices for solar product components and prices per kWh for lithium-ion battery cells have declined and may continue to decline, which may adversely impact our ability to cost-effectively manufacture such components ourselves.

If we are unable to establish and maintain confidence in our long-term business prospects among consumers, analysts and within our industries, or are subject to negative publicity, then our financial condition, operating results, business prospects and access to capital may suffer materially.

Consumers may be less likely to purchase our products if they are not convinced that our business will succeed or that our service and support and other operations will continue in the long term. Similarly, suppliers and other third parties will be less likely to invest time and resources in developing business relationships with us if they are not convinced that our business will succeed. Accordingly, in order to build and maintain our business, we must maintain confidence among customers, suppliers, analysts, ratings agencies and other parties in our long-term financial viability and business prospects. Maintaining such confidence may be particularly complicated by certain factors including those that are largely outside of our control, such as our limited operating history, customer unfamiliarity with our products, any delays in scaling manufacturing, delivery and service operations to meet demand, competition and uncertainty regarding the future of electric vehicles or our other products and services, and our quarterly production and sales performance compared with market expectations.

In particular, Tesla's products, business, results of operations, statements and actions are well-publicized by a range of third parties. Such attention includes frequent criticism, which is often exaggerated or unfounded, such as speculation regarding the sufficiency or stability of our management team. Any such negative perceptions, whether caused by us or not, could harm our business and make it more difficult to raise additional funds if needed.

If we fail to effectively grow and manage the compliance, residual, financing , and credit risks related to our various financing programs, our business may suffer.

We offer financing arrangements for our vehicles in North America, Europe, and Asia primarily through various financial institutions. We also currently offer leasing directly through our local subsidiaries for Model S, Model X, and Model 3 in the U.S. and for Model S and Model X in Canada. Under a lease held directly by us, we typically receive only a very small portion of the total vehicle purchase price at the time of lease, followed by a stream of payments over the term of the lease. We have also offered various arrangements for customers of our solar energy systems, whereby they pay us a fixed payment to lease or finance the purchase of solar energy systems, or purchase electricity generated by our systems. If we do not successfully monitor and comply with applicable national, state, and/or local financial regulations and consumer protection laws governing these transactions, we may become subject to enforcement actions or penalties, either of which may harm our business.

Also, the profitability of any vehicles returned to us at the end of their leases depends on our ability to accurately project our vehicles' residual values at the outset of the leases, and such values may fluctuate prior to the end of their terms depending on various factors such as supply and demand of our used vehicles, economic cycles, and the pricing of new vehicles. For example, we made certain adjustments to our vehicle prices during 2019 to reflect anticipated changes to our cost structure from periodically optimizing our retail strategy, and as a limited accommodation to customers in consideration of a reduction in the then-applicable U.S. electric vehicle federal tax credit. Such pricing changes may impact the residual values of our vehicles. The vehicle leasing program also relies on our ability to secure adequate financing and/or business partners to fund and grow this program. We expect the availability of leasing and other vehicle financing options will be important for our vehicle customers. If we are unable to adequately fund our leasing program through internal funds, partners or other external financing sources, and compelling alternative financing programs are not available for our customers, we may be unable to grow our vehicle deliveries. Furthermore, if our vehicle leasing business grows substantially, our business may suffer if we cannot effectively manage the greater levels of residual risk resulting from growth.

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

Finally, our vehicle and solar energy system financing programs also require us to screen for and manage customer credit risk. In the event of a widespread economic downturn or other catastrophic event, our solar energy and/or our vehicle customers may be unable or unwilling to satisfy their payment obligations to us on a timely basis or at all. If a significant number of our customers default, we may incur credit losses and/or have to recognize impairment charges with respect to the underlying assets, which may be substantial. Any such credit losses and/or impairment charges could adversely affect our operating results or financial condition.

The unavailability, reduction or elimination of, or unfavorable determinations with respect to, government and economic incentives in the U.S. and abroad supporting the development and adoption of electric vehicles, energy storage products or solar energy could have some impact on demand for our products and services.

We and our customers currently benefit from certain government and economic incentives supporting the development and adoption of electric vehicles. In the U.S. and abroad, such incentives include tax credits or rebates that encourage the purchase of electric vehicles. Specific policies in place around the world include exempting the purchase of electric vehicles from import taxes, value added taxes, or carbon dioxide and weight-based purchase taxes. Such programs could be reduced, eliminated or exhausted. For example, under current regulations, a \$7,500 federal tax credit that was available in the U.S. for the purchase of our vehicles was reduced in phases during 2019 and ended on December 31, 2019. We believe that this sequential phase-out likely pulled forward some vehicle demand into the periods preceding each reduction. Moreover, in July 2018, a previously available incentive for purchases of Model 3 in Ontario, Canada was cancelled and Tesla buyers in Germany lost access to electric vehicle incentives for a short period of time beginning late 2017. In April 2017 and January 2016, respectively, previously available incentives in Hong Kong and Denmark that favored the purchase of electric vehicles expired, negatively impacting sales. Effective March 2016, California implemented regulations phasing out a \$2,500 cash rebate on qualified electric vehicles for high-income consumers. Such developments could have some negative impact on demand for our vehicles, and we and our customers may have to adjust to them.

In addition, certain governmental rebates, tax credits and other financial incentives that are currently available with respect to our solar and energy storage product businesses allow us to lower our costs and encourage customers to buy our products and investors to invest in our solar financing funds. However, these incentives may expire on a particular date when the allocated funding is exhausted, reduced or terminated as renewable energy adoption rates increase, sometimes without warning. For example, the U.S. federal government currently offers an investment tax credit (ITC) for the installation of solar power facilities and energy storage systems that are charged from a co-sited solar power facility; however, the ITC is currently scheduled to decline in phases, from 26% for qualifying solar systems for which construction began by December 31, 2020, to 10% for commercial and utility systems and to 0% for customer-owned residential systems for which construction begins after December 31, 2021. Likewise, in jurisdictions where net energy metering is currently available, our customers receive bill credits from utilities for energy that their solar energy systems generate and export to the grid in excess of the electric load they use. Several jurisdictions have reduced, altered or eliminated the benefit available under net energy metering, or have proposed to do so. Such reductions in or termination of governmental incentives could adversely impact our results by making our products less competitive for potential customers, increasing our cost of capital and adversely impacting our ability to attract investment partners and to form new financing funds for our solar and energy storage assets.

Moreover, we and our fund investors claim the ITC and certain state incentives in amounts based on the fair market value of our solar and energy storage systems. Although we obtain independent appraisals to support the claimed fair market values, the relevant governmental authorities have audited such values and in certain cases have determined that they should be lower, and they may do so again in the future. Such determinations may result in adverse tax consequences and/or our obligation to make indemnification or other payments to our funds or fund investors.

Any failure by us to comply with the terms of our agreement with the Research Foundation for the State University of New York relating to our Gigafactory New York, could result in negative consequences for our business.

We are party to an operating lease and a research and development agreement through the SUNY Foundation. These agreements provide for the construction and use of our Gigafactory in Buffalo, New York, which we have primarily used for the development and production of our Solar Roof and other solar products and components, energy storage components, and Supercharger components, and for other lessor-approved functions. Under this agreement, we are obligated to, among other things, directly employ specified minimum numbers of personnel in the State of New York and spend or incur \$5.0 billion in combined capital, operational expenses, costs of goods sold and other costs in the State of New York during the 10-year period beginning April 30, 2018. In April 2020, the government agency overseeing this agreement issued guidance that all obligations relating to investment and employment targets under certain of its projects, including our obligation to be compliant with our applicable targets under such agreement on April 30, 2020, may be deferred for a one-year period upon such agency's approval of an application for relief by the obligor. As we temporarily suspended most of our manufacturing operations at Gigafactory New York pursuant to a New York State executive order issued in March 2020 as a result of the COVID-19 pandemic, we intend to apply for and expect to be granted such deferral. While we expect significant operations at Gigafactory New York and the surrounding Buffalo area to eventually resume and continue, including with our ramp and manufacture of the Solar Roof, if we fail in any year over the course of the term of the agreement to meet all applicable future obligations, we would be obligated to pay a "program payment" of \$41.2 million to the SUNY Foundation for such year. Any inability on our part to comply with applicable future requirements of this agreement may result in the payment of significant amounts to the SUNY Foundation, the termination of our lease at Gigafactory New York, and/or the need to adjust certain of our operations, in particular our production ramp of the Solar Roof or Supercharger components. Any of the foregoing events could have a material adverse effect on our business, prospects, financial condition and operating results.

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

The loss of the services of any of our key employees could disrupt our operations, delay the development and introduction of our vehicles and services, and negatively impact our business, prospects and operating results. In particular, we are highly dependent on the services of Elon Musk, our Chief Executive Officer.

None of our key employees is bound by an employment agreement for any specific term and we may not be able to successfully attract and retain senior leadership necessary to grow our business. Our future success depends upon our ability to attract and retain executive officers and other key technology, sales, marketing, engineering, manufacturing and support personnel, especially to support our high-volume manufacture of vehicles, expansion plans and technological innovation, and any failure or delay in doing so could adversely impact our business, prospects, financial condition and operating results.

Key talent may leave Tesla due to various factors, such as a very competitive labor market for talented individuals with automotive or technology experience, or any negative publicity related to us. In California, Nevada and other regions where we have operations, including outside of the U.S., there is increasing competition for individuals with skillsets needed for our business, including specialized knowledge of electric vehicles, software engineering, manufacturing engineering, and other skills such as electrical and building construction expertise. This competition affects our ability to retain and hire key employees. Moreover, we have in the past conducted reductions in force in order to optimize our organizational structure and reduce costs, and certain senior personnel have also departed for various reasons. Likewise, as a result of our current suspension of various U.S. manufacturing operations, in April 2020 we temporarily furloughed certain hourly employees and reduced most salaried employees' base salaries. Our continued success depends upon our continued ability to hire new employees in a timely manner, especially to support our expansion plans, retain current employees, including furloughed employees when our U.S. operations fully resume, and replace departed senior employees with qualified and experienced individuals, which is typically a time-consuming process. Additionally, we compete with both mature and prosperous companies that have far greater financial resources than we do and start-ups and emerging companies that promise short-term growth opportunities. Difficulties in retaining or recruiting employees could have an adverse effect on our performance and results.

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

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

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

We are continuously expanding and improving our information technology systems and use security measures designed to protect our systems against breaches and cyber-attacks. If these efforts are not successful, our business and operations could be disrupted or our intellectual property could be compromised, as a result of which our operating results and reputation could be harmed.

We are continuously expanding and improving our information technology systems, including implementing new internally developed systems and deploying such systems globally, to assist us in the management of our business. In particular, our volume production of multiple vehicles necessitates continued development, maintenance and improvement of our information technology systems in the U.S. and abroad, including at Gigafactory Shanghai, such as systems for product data management, procurement, inventory management, production planning and execution, sales, service and logistics, dealer management, financial, tax and regulatory compliance systems. We also maintain information technology measures designed to protect us against intellectual property theft, data breaches and other cyber-attacks. The implementation, maintenance, segregation and improvement of these systems require significant management time, support and cost. Moreover, there are inherent risks associated with developing, improving and expanding our core systems as well as implementing new systems and updating current systems, including the disruption of our data management, procurement, manufacturing execution, finance, supply chain and sales and service processes. These risks may affect our ability to manage our data and inventory, procure parts or supplies or manufacture, sell, deliver and service vehicles, adequately protect our intellectual property or achieve and maintain compliance with, or realize available benefits under, tax laws and other applicable regulations.

We cannot be sure that these systems or their required functionality will be effectively implemented, maintained or expanded as planned. If we do not successfully implement, maintain or expand these systems as planned, our operations may be disrupted, our ability to accurately and/or timely report our financial results could be impaired, and deficiencies may arise in our internal control over financial reporting, which may impact our ability to certify our financial results. Moreover, our proprietary information or intellectual property could be compromised or misappropriated and our reputation may be adversely affected. If these systems or their functionality do not operate as we expect them to, we may be required to expend significant resources to make corrections or find alternative sources for performing these functions.

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

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

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

We are subject to substantial laws and regulations that could impose substantial costs, legal prohibitions or unfavorable changes upon our operations or products, and any failure to comply with these laws and regulations, including as they evolve, could negatively impact our ability to operate our manufacturing facilities and substantially harm our business and operating results.

As a manufacturing company, including with respect to our current facilities such as the Fremont Factory, Gigafactory Nevada, Gigafactory New York and Gigafactory Shanghai and our future facility at Gigafactory Berlin, we are or will be subject to complex environmental, manufacturing, health and safety laws and regulations at numerous jurisdictional levels in the U.S., China, Germany and other locations abroad, including laws relating to the use, handling, storage, recycling, disposal and human exposure to hazardous materials and with respect to constructing, expanding and maintaining our facilities. The costs of compliance, including remediating contamination if any is found on our properties and any changes to our operations mandated by new or amended laws, may be significant. We may be required to incur additional costs to comply with any changes to such regulations, and any failures to comply could result in significant expenses, delays or fines. We are subject to laws and regulations applicable to the supply, manufacture, import, sale and service of automobiles internationally. For example, in countries outside of the U.S., we are required to meet standards relating to vehicle safety, fuel economy and emissions, among other things, that are often materially different from requirements in the U.S., thus resulting in additional investment into the vehicles and systems to ensure regulatory compliance in those countries. This process may include official review and certification of our vehicles by foreign regulatory agencies prior to market entry, as well as compliance with foreign reporting and recall management systems requirements.

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

Finally, as a manufacturer and installer of solar generation and energy storage systems and a supplier of electricity generated and stored by the solar energy and energy storage systems we install for customers, we are impacted by federal, state and local regulations and policies concerning electricity pricing, the interconnection of electricity generation and storage equipment with the electric grid, and the sale of electricity generated by third-party owned systems. For example, existing or proposed regulations and policies would permit utilities to limit the amount of electricity generated by our customers with their solar energy systems, charge fees and penalties to our customers relating to the purchase of energy other than from the grid, adjust electricity rate designs such that the price of our solar products may not be competitive with that of electricity from the grid, restrict us and our customers from transacting under our PPAs or qualifying for government incentives and benefits that apply to solar power, and limit or eliminate net energy metering. If such regulations and policies are continued or adopted, or if other regulations and policies that adversely impact the interconnection or use of our solar and energy storage systems are introduced, they could deter potential customers from purchasing our solar and energy storage products, threaten the economics of our existing contracts and cause us to cease solar and energy storage system sales and operations in the relevant jurisdictions, which could harm our business, prospects, financial condition and results of operations.

Failure to comply with a variety of U.S. and international privacy and consumer protection laws to which we are subject could harm the Company.

Our privacy notice is posted on our website, and any failure by us or our vendor or other business partners to comply with it or with federal, state or international privacy, data protection or security laws or regulations relating to the processing, collection, use, retention, security and transfer of personally identifiable information could result in regulatory or litigation-related actions against us, legal liability, fines, damages, ongoing audit requirements and other significant costs. Substantial expenses and operational changes may be required in connection with maintaining compliance with such laws, and in particular certain emerging privacy laws are still subject to a high degree of uncertainty as to their interpretation and application. For example, in May 2018, the General Data Protection Regulation began to fully apply to the processing of personal information collected from individuals located in the European Union, and has created new compliance obligations and has significantly increased fines for noncompliance. Similarly, as of January 2020, the California Consumer Privacy Act imposes certain legal obligations on our use and processing of personal information related to California residents. Although we take steps to protect the security and integrity of our customers' personal information, we may be required to expend significant resources to comply with data breach requirements if, for example, third parties improperly obtain and use the personal information of our customers or we otherwise experience a data loss with respect to customers' personal information. A major breach of our network security and systems could have negative consequences for our business and future prospects, including possible fines, penalties and damages, reduced customer demand for our vehicles and harm to our reputation and brand.

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

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

We may choose to or be compelled to undertake product recalls or take other similar actions, which could adversely affect our brand image and financial performance.

Any product recall with respect to our products may result in adverse publicity, damage our brand, and adversely affect our business, prospects, operating results, and financial condition. For example, certain vehicle recalls that we initiated have resulted from various causes, including a component that could prevent the parking brake from releasing once engaged, a concern with the firmware in the restraints control module in certain right-hand-drive vehicles, industry-wide issues with airbags from a particular supplier, Model X seat components that could cause unintended seat movement during a collision, and concerns of corrosion in Model S and Model X power steering assist motor bolts. Furthermore, testing of our products by government regulators or industry groups may require us to initiate product recalls or may result in negative public perceptions about the safety of our products. In the future, we may at various times, voluntarily or involuntarily, initiate a recall if any of our products or our electric vehicle powertrain components that we have provided to other vehicle OEMs, including any systems or parts sourced from our suppliers, prove to be defective or noncompliant with applicable laws and regulations, such as federal motor vehicle safety standards. Such recalls, whether voluntary or involuntary or caused by systems or components engineered or manufactured by us or our suppliers, could involve significant expense and could adversely affect our brand image in our target markets, as well as our business, prospects, financial condition and results of operations.

Our current and future warranty reserves may be insufficient to cover future warranty claims which could adversely affect our financial performance.

We provide a manufacturer's warranty on all new and used Tesla vehicles and production powertrain components and systems we sell. In addition, we also provide a warranty on the installation and maintenance of our systems in addition to the components of the energy generation and storage systems we sell. For components not manufactured by us, we pass through to our customers the inverter and panel manufacturers' warranties. Finally, we offer a performance guarantee with our financed solar energy systems that can compensate a customer on an annual basis if their system does not meet the electricity production guarantees set forth in their PPA or lease. Under these performance guarantees, we bear the risk of electricity production shortfalls resulting from an inverter or panel failure. These risks are exacerbated in the event the panel or inverter manufacturers cease operations or fail to honor their warranties.

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

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

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

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

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

Servicing our indebtedness requires a significant amount of cash, and there is no guarantee that we will have sufficient cash flow from our business to pay our substantial indebtedness.

As of March 31, 2020, we and our subsidiaries had outstanding \$12.97 billion in aggregate principal amount of indebtedness (see Note 10, *Debt*, to the consolidated financial statements included elsewhere in this Quarterly Report on Form 10-Q). Our substantial consolidated indebtedness may increase our vulnerability to any generally adverse economic and industry conditions. We and our subsidiaries may, subject to the limitations in the terms of our existing and future indebtedness, incur additional debt, secure existing, or future debt or recapitalize our debt.

Pursuant to their terms, holders of our 1.25% Convertible Senior Notes due 2021, 2.375% Convertible Senior Notes due 2022, and 2.00% Convertible Senior Notes due 2024 (together, the “Tesla Convertible Notes”) may convert their respective Tesla Convertible Notes at their option prior to the scheduled maturities of the respective Tesla Convertible Notes under certain circumstances. Upon conversion of the applicable Tesla Convertible Notes, we will be obligated to deliver cash and/or shares in respect of the principal amounts thereof and the conversion value in excess of such principal amounts on such Tesla Convertible Notes. Moreover, our subsidiary’s Zero-Coupon Convertible Senior Notes due 2020 (the “Subsidiary Convertible Notes”) are convertible into shares of our common stock at a conversion price of \$300.00 per share. Finally, holders of the Tesla Convertible Notes and the Subsidiary Convertible Notes will have the right to require us to repurchase their notes upon the occurrence of a fundamental change at a purchase price equal to 100% of the principal amount of the notes, plus accrued and unpaid interest, if any, to, but not including, the fundamental change purchase date.

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

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

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

We may need or want to raise additional funds and these funds may not be available to us when we need them. If we cannot raise additional funds when we need or want them, our operations and prospects could be negatively affected.

The design, manufacture, sale, installation, and/or servicing of automobiles, energy storage products, and solar products is a capital-intensive business, and the specific timing of cash inflows and outflows may fluctuate substantially from period to period. Until we are consistently generating positive free cash flows, we may need or want to raise additional funds through the issuance of equity, equity-related, or debt securities or through obtaining credit from financial institutions to fund, together with our principal sources of liquidity, the costs of developing and manufacturing our current or future vehicles, energy storage products, and/or solar products, to pay any significant unplanned or accelerated expenses or for new significant strategic investments, or to refinance our significant consolidated indebtedness, even if not required to do so by the terms of such indebtedness. We need sufficient capital to fund ongoing operations, research, and development projects for new products, establishment, and/or increases of Model 3 and Model Y production capacity at the Fremont Factory and at Gigafactory Shanghai, the continued expansion of Gigafactory Nevada, the construction of Gigafactory Berlin, the manufacturing ramp of the Solar Roof at Gigafactory New York, and the continued expansion of our retail and service locations, body shops, Mobile Service fleet, and Supercharger network. We cannot be certain that additional funds will be available to us on favorable terms when required, or at all. If we cannot raise additional funds when we need them, our financial condition, results of operations, business, and prospects could be materially and adversely affected.

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

We are cooperating with certain government investigations as discussed in Note 12, *Commitments and Contingencies* , to the consolidated financial statements included elsewhere in this Quarterly Report on Form 10-Q. To our knowledge, no government agency in any such ongoing investigation has concluded that any wrongdoing occurred. However, we cannot predict the outcome or impact of any such ongoing matters, and there exists the possibility that we could be subject to liability, penalties, and other restrictive sanctions and adverse consequences if the SEC, the DOJ, or any other government agency were to pursue legal action in the future. Moreover, we expect to incur costs in responding to related requests for information and subpoenas, and if instituted, in defending against any governmental proceedings.

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

If we update or discontinue the use of our manufacturing equipment more quickly than expected, we may have to shorten the useful lives of any equipment to be retired as a result of any such update, and the resulting acceleration in our depreciation could negatively affect our financial results.

We have invested and expect to continue to invest significantly in what we believe is state of the art tooling, machinery, and other manufacturing equipment for our various product lines, and we depreciate the cost of such equipment over their expected useful lives. However, manufacturing technology may evolve rapidly, and we may decide to update our manufacturing process with cutting-edge equipment more quickly than expected. Moreover, we are continually implementing learnings as our engineering and manufacturing expertise and efficiency increase, which may result in our ability to manufacture our products using less of our currently installed equipment. Alternatively, as we ramp and mature the production of our products to higher levels, our learnings may cause us to discontinue the use of already installed equipment in favor of different or additional equipment. The useful life of any equipment that would be retired early as a result would be shortened, causing the depreciation on such equipment to be accelerated, and our results of operations could be negatively impacted.

We are exposed to fluctuations in currency exchange rates, which could negatively affect our financial results.

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

We may face regulatory limitations on our ability to sell vehicles directly , which could materially and adversely affect our ability to sell our electric vehicles.

We sell our vehicles directly to consumers using means that we believe will maximize our reach, currently including through our website and our own stores. While we intend to continue to leverage our most effective sales strategies, we may not be able to sell our vehicles through our own stores in each state in the U.S., as some states have laws that may be interpreted to impose limitations on this direct-to-consumer sales model. In some states, we have also opened galleries to educate and inform customers about our products, but such locations do not actually transact in the sale of vehicles. The application of these state laws to our operations continues to be difficult to predict. Laws in some states have limited our ability to obtain dealer licenses from state motor vehicle regulators and may continue to do so.

In addition, decisions by regulators permitting us to sell vehicles may be challenged by dealer associations and others as to whether such decisions comply with applicable state motor vehicle industry laws. We have prevailed in many of these lawsuits and such results have reinforced our continuing belief that state laws were not designed to prevent our distribution model. In some states, there have also been regulatory and legislative efforts by dealer associations to propose laws that, if enacted, would prevent us from obtaining dealer licenses in their states given our current sales model. A few states have passed legislation that clarifies our ability to operate, but at the same time limits the number of dealer licenses we can obtain or stores that we can operate.

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

We may need to defend ourselves against intellectual property infringement claims, which may be time-consuming and could cause us to incur substantial costs.

Others, including our competitors, may hold or obtain patents, copyrights, trademarks, or other proprietary rights that could prevent, limit, or interfere with our ability to make, use, develop, sell, or market our products and services, which could make it more difficult for us to operate our business. From time to time, the holders of such intellectual property rights may assert their rights and urge us to take licenses, and/or may bring suits alleging infringement or misappropriation of such rights. While we endeavor to obtain and protect the intellectual property rights that we expect will allow us to retain or advance our strategic initiatives, there can be no assurance that we will be able to adequately identify and protect the portions of intellectual property that are strategic to our business, or mitigate the risk of potential suits or other legal demands by our competitors. Accordingly, we may consider the entering into licensing agreements with respect to such rights, although no assurance can be given that such licenses can be obtained on acceptable terms or that litigation will not occur, and such licenses and associated litigation could significantly increase our operating expenses. In addition, if we are determined to have or believe there is a high likelihood that we have infringed upon a third party's intellectual property rights, we may be required to cease making, selling, or incorporating certain components or intellectual property into the goods and services we offer, to pay substantial damages and/or license royalties, to redesign our products and services, and/or to establish and maintain alternative branding for our products and services. In the event that we were required to take one or more such actions, our business, prospects, operating results, and financial condition could be materially adversely affected. In addition, any litigation or claims, whether or not valid, could result in substantial costs, negative publicity, and diversion of resources and management attention.

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

We may be impacted by natural disasters, wars, health epidemics, or other events outside of our control. For example, our corporate headquarters, the Fremont Factory, and Gigafactory Nevada are located in seismically active regions in Northern California and Nevada, and our Gigafactory Shanghai is located in a flood-prone area. If major disasters such as earthquakes, floods, or other events occur, or our information system or communications network breaks down or operates improperly, our headquarters and production facilities may be seriously damaged, or we may have to stop or delay production and shipment of our products. In addition, the global COVID-19 pandemic has impacted economic markets, manufacturing operations, supply chains, employment and consumer behavior in nearly every geographic region and industry across the world, and we have been, and may in the future be, adversely affected as a result. We may incur expenses or delays relating to such events outside of our control, which could have a material adverse impact on our business, operating results and financial condition.

Risks Related to the Ownership of Our Common Stock

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

The trading price of our common stock has been highly volatile and could continue to be subject to wide fluctuations in response to various factors, some of which are beyond our control. Our common stock has experienced an intra-day trading high of \$968.99 per share and a low of \$176.99 per share over the last 52 weeks. The stock market in general, and the market for technology companies in particular, has experienced extreme price and volume fluctuations that have often been unrelated or disproportionate to the operating performance of those companies. In particular, a large proportion of our common stock has been and may continue to be traded by short sellers which may put pressure on the supply and demand for our common stock, further influencing volatility in its market price. Public perception and other factors outside of our control may additionally impact the stock price of companies like us that garner a disproportionate degree of public attention, regardless of actual operating performance. In addition, in the past, following periods of volatility in the overall market and the market price of a particular company's securities, securities class action litigation has often been instituted against these companies. Moreover, stockholder litigation like this has been filed against us in the past. While we defend such actions vigorously, any judgment against us or any future stockholder litigation could result in substantial costs and a diversion of our management's attention and resources.

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

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

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

The conversion of some or all of the Tesla Convertible Notes or the Subsidiary Convertible Notes would dilute the ownership interests of existing stockholders to the extent we deliver shares upon conversion of any of such notes. Our Subsidiary Convertible Notes and Tesla Convertible Notes are convertible at the option of their holders prior to their scheduled terms under certain circumstances. If holders elect to convert their convertible notes, we could be required to deliver to them a significant number of shares of our common stock. Any sales in the public market of the common stock issuable upon such conversion could adversely affect prevailing market prices of our common stock. In addition, the existence of the convertible notes may encourage short selling by market participants because the conversion of such notes could be used to satisfy short positions, or anticipated conversion of such notes into shares of our common stock could depress the price of our common stock.

Moreover, in connection with each issuance of the Tesla Convertible Notes, we entered into convertible note hedge transactions, which are expected to reduce the potential dilution and/or offset potential cash payments we are required to make in excess of the principal amount upon conversion of the applicable Tesla Convertible Notes. We also entered into warrant transactions with the hedge counterparties, which could separately have a dilutive effect on our common stock to the extent that the market price per share of our common stock exceeds the applicable strike price of the warrants on the applicable expiration dates. In addition, the hedge counterparties or their affiliates may enter into various transactions with respect to their hedge positions, which could also cause or prevent an increase or a decrease in the market price of our common stock or the convertible notes.

Elon Musk has pledged shares of our common stock to secure certain bank borrowings. If Mr. Musk were forced to sell these shares in order to satisfy his loan obligations, such sales could cause our stock price to decline.

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

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

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

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

None.

ITEM 3. DEFAULT UPON SENIOR SECURITIES

None.

ITEM 4. MINE SAFETY DISCLOSURES

Not applicable.

ITEM 5. OTHER INFORMATION

None.

ITEM 6. EXHIBITS

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

INDEX TO EXHIBITS

Exhibit Number	Exhibit Description	Incorporated by Reference			Filed Herewith
		Form	File No.	Filing Date	
10.1	Letter of Consent, dated February 18, 2020, by and among LML 2018 Warehouse SPV, LLC, Tesla 2014 Warehouse SPV LLC, LLC and Deutsche Bank AG, New York Branch, as Administrative Agent and as Group Agent under the 2018 Loan Agreement and the 2014 Loan Agreement, and the Group Agents party thereto, in respect of (i) the Loan and Security Agreement, dated December 27, 2018 and as amended from time to time, among LML 2018 Warehouse SPV, LLC, Tesla Finance LLC, Deutsche Bank Trust Company Americans, as Paying Agent, Deutsche Bank AG, New York Branch, as Administrative Agent, the lenders parties and agent parties thereto, and (ii) the Amended and Restated Loan and Security Agreement, dated August 17, 2017 and as amended from time to time, among Tesla 2014 Warehouse SPV LLC, Tesla Finance LLC, the lenders and group agents party thereto, Deutsche Bank Trust Company Americas, as Paying Agent, and Deutsche Bank AG, New York Branch, as Administrative Agent.	—	—	—	X
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

Exhibit Number	Exhibit Description	Incorporated by Reference				Filed Herewith
		Form	File No.	Exhibit	Filing Date	
101.LAB	Inline XBRL Taxonomy Extension Label Linkbase Document	—	—	—	—	X
101.PRE	Inline XBRL Taxonomy Extension Presentation Linkbase Document	—	—	—	—	X
104	Cover Page Interactive Data File (formatted as inline XBRL with applicable taxonomy extension information contained in Exhibits 101)					
*	Furnished herewith					

SIGNATURES

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

Date: April 30, 2020

Tesla, Inc.

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

LML 2018 WAREHOUSE SPV, LLC
3500 Deer Creek
Palo Alto, CA 94304

TESLA 2014 WAREHOUSE SPV LLC
3500 Deer Creek
Palo Alto, CA 94304

February 18, 2020

Lenders under the Loan Agreement
referred to below

Ladies and Gentlemen:

Reference is made to (i) the Loan and Security Agreement, dated as of December 27, 2018 (as amended, restated or otherwise modified prior to the date hereof, the “2018 Loan Agreement”), among LML 2018 Warehouse SPV, LLC (the “2018 Borrower”), as borrower, Tesla Finance LLC (“TFL”), Deutsche Bank Trust Company Americas, as paying agent, Deutsche Bank AG, New York Branch (“DBNY”), as administrative agent, the lenders parties thereto from time to time and the agents parties thereto from time to time and (ii) the Amended and Restated Loan and Security Agreement, dated as of August 17, 2017 (as amended, restated, supplemented or otherwise modified in writing from time to time, the “2014 Loan Agreement” and together with the 2018 Loan Agreement, the “Loan Agreements”), among Tesla 2014 Warehouse SPV LLC, a Delaware limited liability company (the “2014 Borrower” and together with the 2018 Borrower, the “Borrowers”), TFL, the Lenders and Group Agents from time to time party thereto, Deutsche Bank Trust Company Americas, as paying agent, and DBNY, as administrative agent. Capitalized terms used but not defined herein shall have the respective meanings assigned to such terms in the 2018 Loan Agreement and/or the 2014 Loan Agreement, as the context requires.

1. Reallocation of Maximum Facility Limit.

On December 31, 2019, the Recommended TFL Borrowing Date occurred. Pursuant to Section 2.12(b) of the 2018 Loan Agreement, on the Recommended TFL Borrowing Date, any excess of the Facility Limit over the aggregate principal amount was automatically reallocated from the Facility Limit to the TFL Facility Limit.

On February 18, 2020, TFL provided a notice to the Administrative Agent and the TFL Administrative Agent, requesting a reallocation of \$190,000,000 of the Maximum Facility Limit from the TFL Facility Limit to the 2018 Facility Limit, such that the TFL Facility Limit would be \$809,000,000 and the Facility Limit would be \$291,000,000 on February 26, 2020 (the “Maximum Facility Limit Reallocation Date”).

2. Consent.

The Borrowers hereby request that the Group Agents under the Loan Agreements, on behalf of the Lenders of their Group under each of the Loan Agreements, consent (i) to the reallocation of \$190,000,000 of the Maximum Facility Limit from the TFL Facility Limit to the 2018 Facility Limit on the Maximum Facility Limit Reallocation Date as required under Section 2.12(a)(iv) and (ii) to the waiver of the requirement that the Maximum Facility Limit Reallocation Date be at least 10 Business Days after the date of the Maximum Facility Limit Reallocation Notice.

Please indicate your consent to the foregoing by countersigning this letter. The foregoing consent and agreement shall become effective (the date of such effectiveness, the “Consent Effective Date”) upon receipt by the Borrowers of this letter countersigned by all the Group Agents under the Loan Agreements.

3. Representations and Warranties.

Each of the 2018 Borrower and 2014 Borrower hereby confirm that each of the representations and warranties made by it in the applicable Loan Agreement is true and correct in all material respects on and as of the date hereof (it being understood and agreed that (x) any representation or warranty which by its terms is made as of a specified date shall be required to be true and correct in all material respects only as of such specified date and (y) any representation or warranty that is qualified by “materiality”, “Material Adverse Effect” or similar language shall be true and correct in all respects). Each of the 2018 Borrower and 2014 Borrower represent and warrant that, as of the date hereof, no Default or Event of Default has occurred and is continuing, and no Default or Event of Default will result after giving effect to the occurrence of the Consent Effective Date.

4. Miscellaneous.

Except as expressly set forth herein, this letter shall not by implication or otherwise limit, impair, constitute a waiver of or otherwise affect the rights and remedies of any Lender or Agent under the applicable Loan Agreement or any other Transaction Document, and shall not alter, modify, amend or in any way affect any of the terms, conditions, obligations, covenants or agreements contained in the applicable Loan Agreement or any other Transaction Document, all of which are ratified and affirmed in all respects and shall continue in full force and effect. Nothing herein shall be deemed to entitle any party to a consent to, or a waiver, amendment, modification or other change of, any of the terms, conditions, obligations, covenants or agreements contained in the applicable Loan Agreement or any other Transaction Document in similar or different circumstances.

This letter agreement shall constitute a Transaction Document for purposes of the applicable Loan Agreement and the Transaction Documents. This letter agreement and the rights and obligations of the parties hereto shall be governed by, and construed in accordance with, the laws of the State of New York.

This letter agreement may be executed by one or more of the parties hereto on any number of separate counterparts, and all of said counterparts taken together shall be deemed to constitute one and the same instrument. This letter agreement may be delivered by facsimile or other electronic transmission of the relevant signature pages hereof.

Very truly yours,

LML 2018 WAREHOUSE SPV, LLC

By: /s/ Yaron Klein _____
Name: Yaron Klein
Title: Treasurer

TESLA 2014 WAREHOUSE SPV LLC , LLC

By: /s/ Yaron Klein _____
Name: Yaron Klein
Title: Treasurer

[*Signature Page- Letter*]

Consented and agreed to as of
the date first above written:

Deutsche Bank AG, New York Branch, as
Administrative Agent, as Group Agent under
the 2018 Loan Agreement and the 2014 Loan
Agreement By: /s/ Timothy P.F. Crowley Name:
Timothy P.F. Crowley Title: Managing Director

By: /s/ David Lee

Name: David Lee

Title: Vice President

[Signature Page- Letter]

Consented and agreed to as of
the date first above written:

CITIBANK, N.A., as a Group Agent under the 2018 Loan Agreement and the 2014 Loan Agreement

By: /s/ Evelyn Havasi
Name: Evelyn Havasi
Title: Vice President

[Signature Page- Letter]

Consented and agreed to as of
the date first above written:

WELLS FARGO BANK, NATIONAL ASSOCIATION, as a Group Agent under the 2018 Loan Agreement and the 2014 Loan Agreement

By: /s/ Kathy Wang
Name: Kathy Wang
Title: Director

[Signature Page- Letter]

Consented and agreed to as of
the date first above written:

CREDIT SUISSE AG, NEW YORK BRANCH , as a Group Agent under the 2018 Loan Agreement and the 2014 Loan Agreement

By: /s/ Erin McCutcheon
Name:Erin McCutcheon
Title:Director

/s/ Steven Schlussler
Steven Schlussler
Director

[*Signature Page- Letter*]

Consented and agreed to as of
the date first above written:

BARCLAYS BANK PLC , as a Group Agent under the 2018 Loan Agreement and the 2014 Loan Agreement

By: /s/ John McCarthy
Name: John McCarthy
Title: Director

[*Signature Page- Letter*]

CERTIFICATIONS

I, Elon Musk, certify that:

1. I have reviewed this Quarterly Report on Form 10-Q of Tesla, Inc.;
2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;
4. The registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:
 - (a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
 - (b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;
 - (c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
 - (d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and
5. The registrant's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's Board of Directors (or persons performing the equivalent functions):
 - (a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and
 - (b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: April 30, 2020

/s/ Elon Musk

Elon Musk
Chief Executive Officer
(Principal Executive Officer)

CERTIFICATIONS

I, Zachary J. Kirkhorn, certify that:

1. I have reviewed this Quarterly Report on Form 10-Q of Tesla, Inc.;
2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;
4. The registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:
 - (a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
 - (b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;
 - (c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
 - (d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and
5. The registrant's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's Board of Directors (or persons performing the equivalent functions):
 - (a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and
 - (b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: April 30, 2020

/s/ Zachary J. Kirkhorn
Zachary J. Kirkhorn
Chief Financial Officer
(Principal Financial Officer)

SECTION 1350 CERTIFICATIONS

I, Elon Musk, certify, pursuant to 18 U.S.C. Section 1350, that, to my knowledge, the Quarterly Report of Tesla, Inc. on Form 10-Q for the quarterly period ended March 31, 2020, (i) fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934 and (ii) that the information contained in such Form 10-Q fairly presents, in all material respects, the financial condition and results of operations of Tesla, Inc.

Date: April 30, 2020

/s/ Elon Musk

Elon Musk
Chief Executive Officer
(Principal Executive Officer)

I, Zachary J. Kirkhorn, certify, pursuant to 18 U.S.C. Section 1350, that, to my knowledge, the Quarterly Report of Tesla, Inc. on Form 10-Q for the quarterly period ended March 31, 2020, (i) fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934 and (ii) that the information contained in such Form 10-Q fairly presents, in all material respects, the financial condition and results of operations of Tesla, Inc.

Date: April 30, 2020

/s/ Zachary J. Kirkhorn

Zachary J. Kirkhorn
Chief Financial Officer
(Principal Financial Officer)