TESLA ANNOUNCES UPDATES TO 2020 ANNUAL MEETING OF STOCKHOLDERS AND BATTERY DAY EVENT

PALO ALTO, Calif., August 21, 2020 – Tesla, Inc. today announced updates to the time, format and location of its 2020 Annual Meeting of Stockholders (the "2020 Annual Meeting"). Tesla also announced information regarding its separate Battery Day event.

Although Tesla believes that the best stockholder experience is a fully in-person annual meeting open to all stockholders, continuing public health and travel-related requirements and advisories have necessitated a unique format for the 2020 Annual Meeting. The following updates supersede anything to the contrary described in Tesla's updated definitive proxy statement filed with the U.S. Securities and Exchange Commission on August 13, 2020.

Date and Time of Events

The 2020 Annual Meeting will be held on Tuesday, September 22, 2020, at 1:30 p.m. Pacific Time.

Tesla's separate Battery Day event will follow immediately after the conclusion of the 2020 Annual Meeting.

Virtual Meeting and Live Video Webcasts

Live video webcasts of the 2020 Annual Meeting and Tesla's Battery Day event will be accessible to the general public at www.tesla.com/2020shareholdermeeting.

To accommodate ongoing public health requirements and travel considerations, Tesla is also providing any stockholder as of July 31, 2020 the means to join the 2020 Annual Meeting virtually at www.meetingcenter.io/234436330. The virtual meeting will feature the same live video webcasts accessible to the general public, plus the option to submit votes and written comments on meeting agenda items. In order to join the virtual meeting, you will need the password, which is **tsla2020**, and a 15-digit secure "control number" unique to you, which you may obtain as follows:

- If you are a "stockholder of record" with shares registered directly in your name with our transfer agent, Computershare Trust Company (a minority of Tesla stockholders), you can find the control number on the Notice of Internet Availability or paper proxy card that was sent to you (please check that it is for the meeting as scheduled for September 22, 2020, NOT as previously scheduled for July 7, 2020).
- If you are a "beneficial owner" and hold shares through a broker, bank or other organization (the vast majority of Tesla stockholders), you will have to register in advance to obtain a control number. Please ask your broker, bank or organization for a "legal proxy" for the 2020 Annual Meeting and submit a copy of it from your e-mail address with "Legal Proxy" in the subject line to legalproxy@computershare.com. If your request is received no later than 2:00 p.m. Pacific Time on September 17, 2020, you will receive a confirmation e-mail with your control number.

Limited In-Person Events

In addition, Tesla expects to accommodate a very limited number of stockholders in-person at the 2020 Annual Meeting and the Battery Day event due to mandated restrictions on the size of in-person gatherings. Both events will be held at:

Tesla, Inc. 901 Page Ave. Fremont, CA 94538 We are excited to be able to host attendees in strict accordance with a format that provides robust health control measures. We will also employ additional safety measures and screening protocols to protect our attendees and personnel.

To maximize fairness, Tesla will conduct a random drawing to determine stockholders' eligibility to attend both events in person. If you were a stockholder on July 31, 2020, you may apply for this drawing at www.tesla.com/2020shareholdermeeting. The drawing will be held strictly in accordance with the rules and terms described at such website, and we will be unable to make any exceptions.

Please note that due to mandated restrictions on the size of in-person gatherings, the total number of people that Tesla may have onsite at the events is very limited. Tesla will not be able to admit anyone to the events except stockholders who have been selected through the drawing and certain Tesla personnel and their guests.

However, Tesla will continue to monitor public health and travel safety protocols required or recommended by federal, state and local governments. Tesla may be required to or choose to further change the date, time, location and/or format of the 2020 Annual Meeting, in which case Tesla will publicly announce any further changes in advance.

Other Information

All stockholders are encouraged to vote and submit their proxies in advance of the 2020 Annual Meeting by one of the methods described in the proxy materials. Proxy cards, voting instruction forms and Notices of Internet Availability for the 2020 Annual Meeting scheduled for September 22, 2020 that were previously distributed will not be updated to reflect the change in meeting time, location or format, and may continue to be used to vote shares in connection with the 2020 Annual Meeting.

Investor Relations Contact:

ir@tesla.com



UPDATED ANNUAL REPORT

2019





UPDATED NOTICE OF 2020 ANNUAL MEETING OF STOCKHOLDERS

TO BE HELD ON SEPTEMBER 22, 2020

Dear Tesla Stockholders:

We are pleased to inform you that our 2020 Annual Meeting of Stockholders (the "2020 Annual Meeting") will be held on Tuesday, September 22, 2020, at 2:30 p.m. Pacific Time, at Tesla's Fremont Factory located at 45500 Fremont Blvd., Fremont, CA 94538. For your convenience, we will also webcast the 2020 Annual Meeting live via the Internet at www.tesla.com/2020shareholdermeeting. The agenda of the 2020 Annual Meeting will be the following items of business, which are more fully described in this updated proxy statement:

Ag	enda Item	Board Vote Recommendation
1.	A Tesla proposal to elect three Class I directors to serve for a term of three years or until their respective successors are duly elected and qualified (" <u>Proposal One</u> ").	"FOR"
2.	A Tesla proposal to approve executive compensation on a non-binding advisory basis (" <u>Proposal Two</u> ").	"FOR"
3.	A Tesla proposal to ratify the appointment of PricewaterhouseCoopers LLP as Tesla's independent registered public accounting firm for the fiscal year ending December 31, 2020 (" <u>Proposal Three</u> ").	"FOR"
4.	A stockholder proposal regarding paid advertising, if properly presented (" <u>Proposal Four</u> ").	"AGAINST"
5.	A stockholder proposal regarding simple majority voting provisions in our governing documents, if properly presented (" <u>Proposal Five</u> ").	"AGAINST"
6.	A stockholder proposal regarding reporting on employee arbitration, if properly presented (" <u>Proposal Six</u> ").	"AGAINST"
7.	A stockholder proposal regarding additional reporting on human rights, if properly presented (" <u>Proposal Seven</u> ").	"AGAINST"

All stockholders as of close of business on July 31, 2020 are cordially invited to attend the 2020 Annual Meeting in person. Please note that the record date for the 2020 Annual Meeting was changed from May 15, 2020 to July 31, 2020 to accommodate our prior postponement of the 2020 Annual Meeting.

Due to evolving regulations regarding travel and gatherings, we will announce more specific details regarding check-in procedures for the 2020 Annual Meeting closer to the date of the 2020 Annual Meeting. While not part of the 2020 Annual Meeting, we also expect to announce at such time additional information about the procedures for attending our separate Battery Day presentation.

Your vote is very important. Even if you earlier received proxy materials relating to the 2020 Annual Meeting as previously scheduled on July 7, 2020 and voted pursuant to those materials, such prior vote will be disregarded and you will need to re-submit your vote in accordance with this updated proxy statement.

Whether or not you plan to attend the 2020 Annual Meeting, we encourage you to read the updated proxy statement and vote as soon as possible. For specific instructions on how to vote your shares, please refer to the section entitled "Questions and Answers About the 2020 Annual Meeting and Procedural Matters" and the instructions on the Notice of Internet Availability or the notice you receive from your broker, bank or other intermediary.

We are providing our proxy materials to our stockholders over the Internet. This reduces our environmental impact and our costs while ensuring our stockholders have timely access to this important information. Accordingly, stockholders of record at the close of business on July 31, 2020, will receive a Notice of Internet Availability of Proxy Materials (the "Notice of Internet Availability") with details on accessing these materials. Beneficial owners of Tesla common stock at the close of business on July 31, 2020 will receive separate notices on behalf of their brokers, banks or other intermediaries through which they hold shares.

Thank you for your ongoing support of Tesla.

NM

Elon Musk

Although we currently intend to hold the 2020 Annual Meeting on September 22, 2020 and in person, we will continue to monitor public health and travel safety protocols required or recommended by federal, state and local governments. If necessary or advisable to protect our personnel and stockholders, we will change the date, time, location and/or format of the 2020 Annual Meeting. If we do so, we will publicly announce any such changes in advance, such as through a press release and/or a filing with the Securities and Exchange Commission.

Robyn Denholm

UPDATED PROXY STATEMENT FOR 2020 ANNUAL MEETING OF STOCKHOLDERS

Table of Contents

IMPORTANT NOTICE REGARDING THE AVAILABILITY OF UPDATED PROXY MATERIALS FOR	
STOCKHOLDER MEETING TO BE HELD ON SEPTEMBER 22, 2020	
PROPOSAL ONE — TESLA PROPOSAL FOR ELECTION OF DIRECTORS	
General	
Nominees for Class I Directors	
Information Regarding the Board and Director Nominees	
PROPOSAL TWO — TESLA PROPOSAL FOR NON-BINDING ADVISORY VOTE ON EXECUTIVE	••••••
COMPENSATION	
General	
Summary of 2019 Executive Compensation Program	
Proposed Resolution	
PROPOSAL THREE — TESLA PROPOSAL FOR RATIFICATION OF APPOINTMENT OF INDEPEND	
REGISTERED PUBLIC ACCOUNTING FIRM	
General	
Principal Accounting Fees and Services	
Pre-Approval of Audit and Non-Audit Services	
PROPOSAL FOUR — STOCKHOLDER PROPOSAL REGARDING PAID ADVERTISING	
Stockholder Proposal and Supporting Statement	
Opposing Statement of the Board	•••••
PROPOSAL FIVE — STOCKHOLDER PROPOSAL REGARDING SIMPLE MAJORITY VOTING PRO	OVISIONS
IN GOVERNING DOCUMENTS	
Stockholder Proposal and Supporting Statement	
Opposing Statement of the Board	
PROPOSAL SIX — STOCKHOLDER PROPOSAL REGARDING REPORTING ON EMPLOYEE ARBIT	
Stockholder Proposal and Supporting Statement	
Opposing Statement of the Board	
PROPOSAL SEVEN — STOCKHOLDER PROPOSAL REGARDING ADDITIONAL REPORTING ON H	IUMAN
RIGHTS	
Stockholder Proposal and Supporting Statement	
Opposing Statement of the Board	
CORPORATE GOVERNANCE	
Investor Outreach	
Code of Business Conduct and Ethics and Corporate Governance Guidelines	
Director Independence	
Board Leadership Structure	
Board Role in Risk Oversight	
Board Meetings and Committees	
Compensation Committee Interlocks and Insider Participation	
Process and Considerations for Nominating Board Candidates	
Attendance at Annual Meetings of Stockholders by the Board	
Stock Transactions	
Contacting the Board	
EXECUTIVE OFFICERS	
EXECUTIVE COMPENSATION	
Compensation Discussion and Analysis	
Compensation Committee Report	
Summary Compensation Table	
Pay Ratio Disclosure	
Grants of Plan-Based Awards in 2019	

Outstanding Equity Awards at 2019 Fiscal Year-End	. 50
2019 Option Exercises and Stock Vested	
Potential Payments Upon Termination or Change in Control	
Compensation of Directors	
Equity Compensation Plan Information	
CERTAIN RELATIONSHIPS AND RELATED PARTY TRANSACTIONS	. 57
Review of Related Party Transactions	. 57
Related Party Transactions	
DELINQUENT SECTION 16(A) REPORTS	
OWNERSHIP OF SECURITIES	
AUDIT COMMITTEE REPORT	
OTHER MATTERS	

TESLA, INC. 3500 Deer Creek Road Palo Alto, California 94304

UPDATED PROXY STATEMENT FOR 2020 ANNUAL MEETING OF STOCKHOLDERS

IMPORTANT NOTICE REGARDING THE AVAILABILITY OF UPDATED PROXY MATERIALS FOR THE STOCKHOLDER MEETING TO BE HELD ON SEPTEMBER 22, 2020

The updated proxy statement and annual report are available at www.envisionreports.com/TSLA.

In accordance with U.S. Securities and Exchange Commission (the "<u>SEC</u>") rules, we are providing access to our proxy materials over the Internet to our stockholders rather than in paper form, which reduces the environmental impact of our annual meeting and our costs.

Accordingly, if you are a stockholder of record, a one-page Notice of Internet Availability of Proxy Materials relating to the annual meeting to be held on September 22, 2020 (the "Notice of Internet Availability") has been mailed to you on or about August 13, 2020. Stockholders of record may access the proxy materials on the website listed above or request a printed set of the proxy materials be sent to them by following the instructions in the Notice of Internet Availability. The Notice of Internet Availability also explains how you may request that we send future proxy materials to you by e-mail or in printed form by mail. If you choose the e-mail option, you will receive an e-mail next year with links to those materials and to the proxy voting site. We encourage you to choose this e-mail option, which will allow us to provide you with the information you need in a timelier manner, will save us the cost of printing and mailing documents to you and will conserve natural resources. Your election to receive proxy materials by e-mail or in printed form by mail will remain in effect until you terminate it.

If you are a beneficial owner, you will not receive a Notice of Internet Availability directly from us, but your broker, bank or other intermediary will forward you a notice with instructions on accessing our proxy materials and directing that organization how to vote your shares, as well as other options that may be available to you for receiving our proxy materials.

Please refer to the question entitled "What is the difference between holding shares as a stockholder of record or as a beneficial owner?" below for important details regarding different forms of stock ownership.

You may disregard any proxy materials you may have earlier received relating to the 2020 Annual Meeting as previously scheduled on July 7, 2020. If you already voted pursuant to such materials, such prior vote will be disregarded and you will need to re-submit your vote in accordance with this updated proxy statement.

QUESTIONS AND ANSWERS ABOUT THE 2020 ANNUAL MEETING AND PROCEDURAL MATTERS

* Although we currently intend to hold the 2020 Annual Meeting on September 22, 2020 and in person, we will continue to monitor public health and travel safety protocols required or recommended by federal, state and local governments. If necessary or advisable to protect our personnel and stockholders, we will change the date, time, location and/or format of the 2020 Annual Meeting. If we do so, we will publicly announce any such changes in advance, such as through a press release and/or a filing with the SEC.

Q: Why am I receiving these proxy materials?

A: The Board of Directors (the "Board") of Tesla, Inc. (the "Company," "Tesla," "we," "us" or "our") has made available on the Internet or is providing to you in printed form these proxy materials. We do this in order to solicit voting proxies for use at Tesla's 2020 Annual Meeting of Stockholders (the "2020 Annual Meeting"), to be held Tuesday, September 22, 2020, at 2:30 p.m., Pacific Time, and at any adjournment or postponement thereof. If you are a stockholder of record and you submit your proxy to us, you direct certain of our officers to vote your shares of Tesla common stock in accordance with the voting instructions in your proxy. If you are a beneficial owner and you follow the voting instructions provided in the notice you receive from your broker, bank or other intermediary, you direct such organization to vote your shares in accordance with your instructions. These proxy materials are being made available or distributed to you on or about August 13, 2020. As a stockholder, you are invited to attend the 2020 Annual Meeting and we request that you vote on the proposals described in this updated proxy statement.

You may disregard any proxy materials you may have earlier received relating to the 2020 Annual Meeting as previously scheduled on July 7, 2020. If you already voted pursuant to such materials, such prior vote will be disregarded and you will need to re-submit your vote in accordance with this updated proxy statement.

(* Please see also the notice at the top of this section.)

Q: Can I attend the 2020 Annual Meeting?

A: You may attend the 2020 Annual Meeting if, on July 31, 2020 (the "Record Date"), you were a stockholder of record or a beneficial owner. Please note that the 2020 Annual Meeting was previously postponed from July 7, 2020 to September 22, 2020, and the Record Date was accordingly changed from May 15, 2020 to July 31, 2020. Therefore, stock ownership as of May 15, 2020 will not be sufficient for admission to the 2020 Annual Meeting.

Due to evolving regulations regarding travel and gatherings, we will announce more specific details regarding check-in procedures for the 2020 Annual Meeting closer to the date of the 2020 Annual Meeting. While not part of the 2020 Annual Meeting, we also expect to announce at such time additional information about the procedures for attending our separate Battery Day presentation.

(* Please see also the notice at the top of this section.)

Q: Where is the 2020 Annual Meeting?

- A: The 2020 Annual Meeting will be held at Tesla's Fremont Factory located at 45500 Fremont Blvd., Fremont, CA 94538. Stockholders may request directions to the 2020 Annual Meeting by calling (650) 681-5000 or by visiting http://ir.tesla.com/contactus.cfm.
 - (* Please see also the notice at the top of this section.)
- O: Will I be able to view the 2020 Annual Meeting via the Internet?

A: Yes. We will webcast the 2020 Annual Meeting live via the Internet at www.tesla.com/2020shareholdermeeting.

(* Please see also the notice at the top of this section.)

Q: Who is entitled to vote at the 2020 Annual Meeting?

A: You may vote your shares of Tesla common stock if you owned your shares at the close of business on the Record Date. You may cast one vote for each share of common stock held by you as of the Record Date on all matters presented. See the questions entitled "How can I vote my shares in person at the 2020 Annual Meeting?" and "How can I vote my shares without attending the 2020 Annual Meeting?" below for additional details.

As of the Record Date, holders of common stock were eligible to cast an aggregate of 186,458,621 votes at the 2020 Annual Meeting.

Q: What is the difference between holding shares as a stockholder of record or as a beneficial owner?

A: You are the "stockholder of record" of any shares that are registered directly in your name with Tesla's transfer agent, Computershare Trust Company, N.A. A minority of our stockholders are stockholders of record. We have sent the Notice of Internet Availability directly to you if you are a stockholder of record. As a stockholder of record, you may grant your voting proxy directly to Tesla or to a third party or vote in person at the 2020 Annual Meeting.

You are the "beneficial owner" of any shares (which are considered to be held in "street name") that are held on your behalf by a brokerage account or by a bank or another intermediary that is the stockholder of record for those shares. The vast majority of our stockholders are beneficial owners. If you are a beneficial owner, you did not receive a Notice of Internet Availability directly from Tesla, but your broker, bank or other intermediary forwarded you a notice together with voting instructions for directing that organization how to vote your shares. You may also attend the 2020 Annual Meeting, but because a beneficial owner is not a stockholder of record, you may not vote in person at the 2020 Annual Meeting unless you obtain a "legal proxy" from the organization that holds your shares, giving you the right to vote the shares at the 2020 Annual Meeting.

(* Please see also the notice at the top of this section.)

Q: How can I vote my shares in person at the 2020 Annual Meeting?

A: You may vote shares for which you are the stockholder of record in person at the 2020 Annual Meeting. You may vote shares for which you are the beneficial owner in person at the 2020 Annual Meeting only if you obtain a "legal proxy" from the broker, bank or other intermediary that holds your shares, giving you the right to vote the shares. Even if you plan to attend the 2020 Annual Meeting, we recommend that you also direct the voting of your shares as described below in the question entitled "How can I vote my shares without attending the 2020 Annual Meeting?" so that your vote will be counted even if you later decide not to attend the 2020 Annual Meeting.

(* Please see also the notice at the top of this section.)

Q: How can I vote my shares without attending the 2020 Annual Meeting?

A: Whether you hold shares as a stockholder of record or a beneficial owner, you may direct how your shares are voted without attending the 2020 Annual Meeting, by the following means:

By Internet—Stockholders of record with Internet access may submit proxies by following the voting instructions on the Notice of Internet Availability until 1:00 a.m., Central time on September 22, 2020. If you are a beneficial owner of shares held in street name, please check the voting instructions in the notice provided by your broker, bank or other intermediary for Internet voting availability.

By telephone—Stockholders of record who live in the United States (or its territories) or Canada may request a paper proxy card from Tesla by following the procedures in the Notice of Internet Availability, and submit proxies by following the applicable "Phone" instructions on the proxy card. If you are a beneficial owner of shares held in street name, please check the voting instructions in the notice provided by your broker, bank or other intermediary for telephone voting availability.

By mail—Stockholders of record may request a paper proxy card from Tesla by following the procedures in the Notice of Internet Availability. If you elect to vote by mail, please complete, sign and date the proxy card where indicated and return it in the prepaid envelope included with the proxy card. Proxy cards submitted by mail must be received by the time of the meeting in order for your shares to be voted. If you are a beneficial owner of shares held in street name, you may vote by mail by completing, signing and dating the voting instructions in the notice provided by your broker, bank or other intermediary and mailing it in the accompanying pre-addressed envelope.

Even if you earlier received proxy materials relating to the 2020 Annual Meeting as previously scheduled on July 7, 2020 and voted pursuant to those materials, such prior vote will be disregarded and you will need to re-submit your vote in accordance with this updated proxy statement.

Q: How many shares must be present or represented to conduct business at the 2020 Annual Meeting?

A: The stockholders of record of a majority of the shares entitled to vote at the 2020 Annual Meeting must either (1) be present in person at the 2020 Annual Meeting or (2) have properly submitted a proxy in order to constitute a quorum at the 2020 Annual Meeting.

Under the General Corporation Law of the State of Delaware, abstentions and broker "non-votes" are counted as present, and therefore are included for the purposes of determining whether a quorum is present at the 2020 Annual Meeting. A broker "non-vote" occurs when an organization that is the stockholder of record that holds shares for a beneficial owner, and which is otherwise counted as present or represented by proxy, does not vote on a particular proposal because that organization does not have discretionary voting power under applicable regulations to vote on that item and has not received specific voting instructions from the beneficial owner.

O: What proposals will be voted on at the 2020 Annual Meeting?

- A: The proposals scheduled to be voted on at the 2020 Annual Meeting are:
 - A Tesla proposal to elect three Class I directors listed in this updated proxy statement to serve for a term of three years or until their respective successors are duly elected and qualified (Proposal One);
 - A Tesla proposal to approve executive compensation on a non-binding advisory basis (Proposal Two);
 - A Tesla proposal to ratify the appointment of PricewaterhouseCoopers LLP as Tesla's independent registered public accounting firm for the fiscal year ending December 31, 2020 (Proposal Three);
 - A stockholder proposal regarding paid advertising, if properly presented (Proposal Four);
 - A stockholder proposal regarding simple majority voting provisions in our governing documents, if properly presented (Proposal Five);
 - A stockholder proposal regarding reporting on employee arbitration, if properly presented (Proposal Six); and
 - A stockholder proposal regarding additional reporting on human rights, if properly presented (Proposal Seven).

Q: What is the voting requirement to approve each of the proposals?

A:

Proposal	Vote Required	Broker Discretionary Voting Allowed
Proposal One—Tesla proposal to elect three	Majority of the shares entitled to vote	No
Class I directors	and present in person or represented by proxy	
Proposal Two—Tesla proposal to approve executive compensation on a non-binding advisory basis	Majority of the shares entitled to vote and present in person or represented by proxy	No
Proposal Three— Tesla proposal to ratify the appointment of independent registered public accounting firm	Majority of the shares entitled to vote and present in person or represented by proxy	Yes
Proposal Four—Stockholder proposal regarding paid advertising	Majority of the shares entitled to vote and present in person or represented by proxy	No
Proposal Five—Stockholder proposal regarding simple majority voting provisions in governing documents	Majority of the shares entitled to vote and present in person or represented by proxy	No
Proposal Six—Stockholder proposal regarding reporting on employee arbitration	Majority of the shares entitled to vote and present in person or represented by proxy	No
Proposal Seven—Stockholder proposal regarding additional reporting on human rights	Majority of the shares entitled to vote and present in person or represented by proxy	No

Dualran

Q: How are votes counted?

A: All shares entitled to vote and that are voted in person at the 2020 Annual Meeting will be counted, and all shares represented by properly executed and unrevoked proxies received prior to the 2020 Annual Meeting will be voted at the 2020 Annual Meeting as indicated in such proxies. You may vote "FOR," "AGAINST" or "ABSTAIN" on each of the nominees for election as director (Proposal One), and on each of Proposals Two, Three, Four, Five, Six, and Seven.

With respect to the election of directors, Tesla's bylaws provide that in an uncontested election, the affirmative vote of a majority of the shares entitled to vote and present in person or represented by proxy at the meeting of stockholders is required to elect a director. Abstentions with respect to any director nominee (Proposal One) or any of Proposals Two, Three, Four, Five, Six, and Seven will have the same effect as a vote against such nominee or Proposal. Consequently, each director nominee will be elected, and each of Proposals Two, Three, Four, Five, Six, and Seven will be approved or ratified, as applicable, only if the number of shares voted "FOR" such nominee or Proposal exceeds the total number of shares voted "AGAINST" or to "ABSTAIN" with respect to such nominee or Proposal.

Q: What is the effect of not casting a vote or if I submit a proxy but do not specify how my shares are to be voted?

A: If you are the stockholder of record and you do not vote by proxy card, by telephone, via the Internet or in person at the 2020 Annual Meeting, your shares will not be voted at the 2020 Annual Meeting. If you submit a proxy, but you do not provide voting instructions, your shares will be voted in accordance with the recommendation of the Board.

If you are a beneficial owner and you do not provide the organization that is the stockholder of record for your shares with voting instructions, the organization will determine if it has the discretionary authority to vote on the particular matter. Under applicable regulations, brokers and other intermediaries have the discretion to vote on routine matters such as Proposal Three but do not have discretion to vote on non-routine matters such as Proposals One, Two, Four, Five, Six, or Seven. Therefore, if you do not provide voting instructions to that organization, it may vote your shares only on Proposal Three and any other routine matters properly presented for a vote at the 2020 Annual Meeting.

Even if you earlier received proxy materials relating to the 2020 Annual Meeting as previously scheduled on July 7, 2020 and voted pursuant to those materials, such prior vote will be disregarded and you will need to re-submit your vote in accordance with this updated proxy statement.

O: What is the effect of a broker "non-vote"?

A: An organization that holds shares of Tesla's common stock for a beneficial owner will have the discretion to vote on routine proposals if it has not received voting instructions from the beneficial owner at least ten days prior to the 2020 Annual Meeting. A broker "non-vote" occurs when a broker, bank or other intermediary that is otherwise counted as present or represented by proxy does not receive voting instructions from the beneficial owner and does not have the discretion to vote the shares. A broker "non-vote" will be counted for purposes of calculating whether a quorum is present at the 2020 Annual Meeting, but will not be counted for purposes of determining the number of votes present in person or represented by proxy and entitled to vote with respect to a particular proposal as to which that broker "non-vote" occurs. Thus, a broker "non-vote" will not impact our ability to obtain a quorum for the 2020 Annual Meeting and will not otherwise affect the approval by a majority of the votes present in person or represented by proxy and entitled to vote of any of the Proposals.

Q: How does the Board recommend that I vote?

- A: The Board recommends that you vote your shares:
 - "FOR" the three nominees for election as Class I directors (Proposal One);
 - "FOR" the approval, by non-binding advisory vote, of executive compensation (Proposal Two);
 - "FOR" the ratification of the appointment of PricewaterhouseCoopers LLP as Tesla's independent registered public accounting firm for the fiscal year ending December 31, 2020 (Proposal Three);
 - "AGAINST" the approval of the stockholder proposal regarding paid advertising (Proposal Four);
 - "AGAINST" the approval of the stockholder proposal regarding simple majority voting provisions in our governing documents (Proposal Five);
 - "AGAINST" the approval of the stockholder proposal regarding reporting on employee arbitration (Proposal Six); and
 - "AGAINST" the approval of the stockholder proposal regarding additional reporting on human rights (Proposal Seven).

Q: What happens if additional matters are presented at the 2020 Annual Meeting?

A: If any other matters are properly presented for consideration at the 2020 Annual Meeting, including, among other things, consideration of a motion to adjourn the 2020 Annual Meeting to another time or place, the persons named as proxy holders, Elon Musk and Zachary Kirkhorn, or either of them, will have discretion to vote the proxies held by them on those matters in accordance with their best judgment. Tesla does not currently anticipate that any other matters will be raised at the 2020 Annual Meeting.

Q: Can I change my vote?

A: If you are a stockholder of record, you may change your vote (1) by submitting a new proxy bearing a later date (which automatically revokes the earlier proxy) using any of the voting methods described above in the question entitled "How can I vote my shares without attending the 2020 Annual Meeting?," (2) by providing a written notice of revocation to Tesla, Inc., 3500 Deer Creek Road, Palo Alto, California 94304, Attention: Legal Department, with a copy sent by e-mail to shareholdermail@tesla.com, prior to your shares being voted, or (3) by attending the 2020 Annual Meeting and voting in person, which will supersede any proxy previously submitted by you. However, merely attending the meeting will not cause your previously granted proxy to be revoked unless you specifically request it.

If you are a beneficial owner of shares held in street name, you may generally change your vote by (1) submitting new voting instructions to your broker, bank or other intermediary or (2) if you have obtained a "legal proxy" from the organization that holds your shares giving you the right to vote your shares, by attending the 2020 Annual Meeting and voting in person. However, please consult that organization for any specific rules it may have regarding your ability to change your voting instructions.

Even if you earlier received proxy materials relating to the 2020 Annual Meeting as previously scheduled on July 7, 2020 and voted pursuant to those materials, such prior vote will be disregarded and you will need to re-submit your vote in accordance with this updated proxy statement.

(* Please see also the notice at the top of this section.)

- Q: What should I do if I receive more than one Notice of Internet Availability, notice from my broker, bank or other intermediary, or set of proxy materials?
- A: You may receive more than one Notice of Internet Availability, notice from your broker, bank or other intermediary, or set of proxy materials, including multiple copies of proxy cards or voting instruction cards. For example, if you are a beneficial owner with shares in more than one brokerage account, you may receive a separate notice or voting instruction card for each brokerage account in which you hold shares. If you are a stockholder of record and your shares are registered in more than one name, you will receive more than one Notice of Internet Availability or proxy card. Please complete, sign, date and return each Tesla proxy card or voting instruction card that you receive, and/or follow the voting instructions on each Notice of Internet Availability or other notice you receive, to ensure that all your shares are voted.

You may disregard any proxy materials you may have earlier received relating to the 2020 Annual Meeting as previously scheduled on July 7, 2020. Even if you voted pursuant to those materials, such prior vote will be disregarded and you will need to re-submit your vote in accordance with this updated proxy statement.

Q: Is my vote confidential?

A: Proxy instructions, ballots and voting tabulations that identify individual stockholders are handled in a manner that protects your voting privacy. Your vote will not be disclosed either within Tesla or to third parties, except: (1) as necessary for applicable legal requirements, (2) to allow for the tabulation and certification of the votes and (3) to facilitate a successful proxy solicitation. Occasionally, stockholders provide written comments on their proxy cards, which may be forwarded to Tesla management.

Q: Who will serve as inspector of election?

A: The inspector of election will be Computershare Trust Company, N.A.

Q: Where can I find the voting results of the 2020 Annual Meeting?

A: We will publish final voting results in our Current Report on Form 8-K, which will be filed with the SEC and made available on its website at www.sec.gov within four (4) business days of the 2020 Annual Meeting.

- Q: Who will bear the cost of soliciting votes for the 2020 Annual Meeting?
- A: Tesla will pay the entire cost of preparing, assembling, printing, mailing and distributing these proxy materials and soliciting votes. We may reimburse brokerage firms, custodians, nominees, fiduciaries and other persons representing beneficial owners for their reasonable expenses in forwarding solicitation material to those beneficial owners. Our directors, officers and employees may also solicit proxies in person or by other means. These directors, officers and employees will not be additionally compensated but may be reimbursed for reasonable out-of-pocket expenses incurred in doing so.
- Q: What is the deadline to propose actions for consideration at next year's annual meeting of stockholders or to nominate individuals to serve as directors?
- A: You may submit proposals, including recommendations of director candidates, for consideration at future stockholder meetings.

For inclusion in Tesla's proxy materials—Stockholders may present proper proposals for inclusion in Tesla's proxy statement and for consideration at the next annual meeting of stockholders by submitting their proposals in writing in a timely manner to:

Tesla, Inc. 3500 Deer Creek Road Palo Alto, California 94304 Attention: Legal Department

with a copy sent by e-mail to **shareholdermail@tesla.com**.

Any correspondence that is not addressed precisely in accordance with the foregoing, including any correspondence directed to a specific individual, may not be received timely or at all, and we strongly recommend that you also send such correspondence by e-mail and verify that you receive a confirmation of receipt from Tesla.

In order to be included in the proxy statement for the 2021 annual meeting of stockholders, stockholder proposals must be received in accordance with the above instructions no later than the 120th day preceding the one-year anniversary of the date on which this proxy statement is released to the Company's stockholders, or April 15, 2021, provided that if the date of the 2021 annual meeting of stockholders is more than 30 days from the one-year anniversary of the 2020 Annual Meeting, the deadline will instead be a reasonable time before we begin to print and send our proxy materials for the 2021 annual meeting of stockholders. In addition, stockholder proposals must otherwise comply with the requirements of Rule 14a-8 of the Securities Exchange Act of 1934, as amended (the "Exchange Act").

To be brought at annual meeting—In addition, you can find in Tesla's bylaws an advance notice procedure for stockholders who wish to present certain matters, including nominations for the election of directors, at an annual meeting of stockholders without inclusion in Tesla's proxy materials.

In general, Tesla's bylaws provide that the Board will determine the business to be conducted at an annual meeting, including nominations for the election of directors, as specified in the Board's notice of meeting or as properly brought at the meeting by the Board. However, a stockholder may also present at an annual meeting any business, including nominations for the election of directors, specified in a written notice properly delivered within the Notice Period (as defined below), if the stockholder held shares at the time of the notice and the record date for the meeting. Such notice should be delivered to Tesla, Inc., 3500 Deer Creek Road, Palo Alto, California 94304, Attention: Legal Department, with a copy sent by e-mail to shareholdermail@tesla.com. The notice must contain specified information about the proposed business or nominees and about the proponent stockholder. If a stockholder who has delivered such a notice does not appear to present his or her proposal at the meeting, Tesla will not be required to present the proposal for a vote.

The "Notice Period" is the period not less than 45 days nor more than 75 days prior to the one-year anniversary of the date on which Tesla mailed its proxy materials to stockholders for the previous year's annual meeting of stockholders. As a result, the Notice Period for the 2021 annual meeting of stockholders will start on June 30, 2021 and end on July 29, 2021. However, if the date of the 2021 annual meeting of stockholders is advanced by more than 30 days prior to or delayed by more than 60 days after the one-year anniversary of the date of the 2020 Annual Meeting, the Notice Period will instead start 120 days prior to the 2021 annual meeting of stockholders and end on the later of (i) 90 days prior to such meeting or (ii) the 10th day following our first public announcement of the date of the 2021 annual meeting of stockholders.

This is only a summary of the advance notice procedure. Complete details regarding all requirements that must be met are found in our bylaws. You can obtain a copy of the relevant bylaw provisions by writing to Tesla, Inc., 3500 Deer Creek Road, Palo Alto, California 94304, Attention: Legal Department, or to shareholdermail@tesla.com via e-mail, or by accessing Tesla's filings on the SEC's website at www.sec.gov.

All notices of proposals by stockholders, whether or not requested for inclusion in Tesla's proxy materials, must be addressed precisely as prescribed in this section to be received timely or at all. We strongly recommend that you also send such correspondence by e-mail and verify that you receive a confirmation of receipt from Tesla.

Q: How may I obtain a separate copy of the Notice of Internet Availability or the proxy materials?

A: If you are a stockholder of record and share an address with another stockholder of record, each stockholder may not receive a separate copy of the Notice of Internet Availability or proxy materials. Stockholders may request to receive separate or additional copies of the Notice of Internet Availability or proxy materials by calling our Investor Relations department at (650) 681-5000 or by writing to Tesla, Inc., 3500 Deer Creek Road, Palo Alto, CA 94304, Attention: Investor Relations, or to or ir@tesla.com. Upon such written or oral request, we will deliver promptly a separate copy of the Notice of Internet Availability and, if applicable, our proxy materials, to any stockholder at a shared address to which we delivered a single copy of any of these materials. Stockholders who share an address and receive multiple copies of the Notice of Internet Availability or proxy materials can also request to receive a single copy by following the instructions above.

Q: Who can help answer my questions?

A: Please contact our Investor Relations department by calling (650) 681-5000 or by writing to Tesla, Inc., 3500 Deer Creek Road, Palo Alto, CA 94304, Attention: Investor Relations, or to ir@tesla.com.

PROPOSAL ONE

TESLA PROPOSAL FOR ELECTION OF DIRECTORS

General

Tesla's Board currently consists of ten members who are divided into three classes with staggered three-year terms. Our bylaws permit the Board to establish by resolution the authorized number of directors, and ten directors are currently authorized. Any increase or decrease in the number of directors will be distributed among the three classes so that, as nearly as possible, each class will consist of an equal number of directors.

In April 2019, each of Stephen Jurvetson, a Class I director, and Antonio Gracias, a Class II director, determined collectively with the Nominating and Corporate Governance Committee and the Board that he will not stand for re-election to the Board when his current term ends at the 2020 Annual Meeting and the 2021 annual meeting of stockholders, respectively. In April 2020, the Board increased the number of directors to ten and appointed Hiromichi Mizuno to the Board as a Class I director. The Board currently expects to reduce the number of Board seats to nine following the expiration of Mr. Jurvetson's term at the 2020 Annual Meeting, and therefore votes or proxies may not be submitted for the election of more than three board seats. The Board and the Nominating and Corporate Governance Committee will continue to frequently evaluate the optimal size and composition of the Board to allow it to operate nimbly and efficiently, while maintaining new ideas, expertise and experience among its membership.

Nominees for Class I Directors

Three candidates have been nominated for election as Class I directors at the 2020 Annual Meeting for a three-year term expiring in 2023. Upon recommendation of the Nominating and Corporate Governance Committee, the Board has nominated **Elon Musk**, **Robyn Denholm**, and **Hiromichi Mizuno** for re-election as Class I directors. Biographical information about each of the nominees is contained in the following section. A discussion of the qualifications, attributes and skills of each nominee that led the Board and the Nominating and Corporate Governance Committee to the conclusion that he or she should continue to serve as a director follows each of the director and nominee biographies.

If you are a stockholder of record and you sign your proxy card or vote by telephone or over the Internet but do not give instructions with respect to the voting of directors, your shares will be voted "FOR" the re-election of Mr. Musk, Ms. Denholm, and Mr. Mizuno. Each of Mr. Musk, Ms. Denholm, and Mr. Mizuno has accepted such nomination; however, in the event that a nominee is unable or declines to serve as a director at the time of the 2020 Annual Meeting, the proxies will be voted for any nominee who shall be designated by the Board to fill such vacancy. As discussed above, Stephen Jurvetson will not stand for re-election at the 2020 Annual Meeting. If you wish to give specific instructions with respect to the voting of directors, you may do so by indicating your instructions on your proxy card or when you vote by telephone or over the Internet. If you are a beneficial owner holding your shares in street name and you do not give voting instructions to your broker, bank or other intermediary, that organization will leave your shares unvoted on this matter.

THE BOARD RECOMMENDS A VOTE *FOR* THE TESLA PROPOSAL FOR THE ELECTION OF ELON MUSK, ROBYN DENHOLM, AND HIROMICHI MIZUNO.

Information Regarding the Board and Director Nominees

Background and Qualifications

The names of the members of the Board and Tesla's proposed director nominees, their respective ages, their positions with Tesla and other biographical information as of August 1, 2020, are set forth below. Except for Messrs. Elon Musk, our Chief Executive Officer and a director, and Kimbal Musk, a director, who are brothers, there are no other family relationships among any of our directors or executive officers.

Name	Age	Chair of the Board	Audit Committee	Compensation Committee	and Corporate Governance Committee	Disclosure Controls Committee
Elon Musk	49					
Robyn Denholm	56	X	X	X	X	X
Ira Ehrenpreis	51			X	X	
Lawrence J. Ellison	75					
Antonio Gracias (1)	49		X			
Stephen Jurvetson (2)	53		X			X
Hiromichi Mizuno	54		X			
James Murdoch	47		X		X	X
Kimbal Musk	47					
Kathleen Wilson-Thompson	52			X	X	X

⁽¹⁾ Mr. Gracias will not stand for re-election when his current term expires at the 2021 annual meeting of stockholders.

Elon Musk has served as our Chief Executive Officer since October 2008 and as a member of the Board since April 2004. Mr. Musk has also served as Chief Executive Officer, Chief Technology Officer and Chairman of Space Exploration Technologies Corporation, an advanced rocket and spacecraft manufacturing and services company ("SpaceX"), since May 2002, and served as Chairman of the Board of SolarCity Corporation, a solar installation company ("SolarCity"), from July 2006 until its acquisition by us in November 2016. Mr. Musk is also a founder of The Boring Company, an infrastructure company, and of Neuralink Corp., a company focused on developing brain-machine interfaces. Prior to SpaceX, Mr. Musk co-founded PayPal, an electronic payment system, which was acquired by eBay in October 2002, and Zip2 Corporation, a provider of Internet enterprise software and services, which was acquired by Compaq in March 1999. Mr. Musk holds a B.A. in physics from the University of Pennsylvania and a B.S. in business from the Wharton School of the University of Pennsylvania.

We believe that Mr. Musk possesses specific attributes that qualify him to serve as a member of the Board, including the perspective and experience he brings as our Chief Executive Officer, one of our founders and our largest stockholder, which brings historic knowledge, operational expertise and continuity to the Board.

Robyn Denholm has been a member of the Board since August 2014 and its Chair since November 2018. From October 2018 to June 2019, Ms. Denholm was Chief Financial Officer and Head of Strategy of Telstra Corporation Limited, a telecommunications company, where she also served as its Chief Operations Officer from January 2017 to October 2018. Prior to Telstra, from August 2007 to July 2016, Ms. Denholm was with Juniper Networks, Inc., a manufacturer of networking equipment, serving in executive roles including Executive Vice President, Chief Financial Officer and Chief Operations Officer. Prior to joining Juniper Networks, Ms. Denholm served in various executive roles at Sun Microsystems, Inc. from January 1996 to August 2007. Ms. Denholm also served at Toyota Motor Corporation Australia for seven years and at Arthur Andersen & Company for five years in various finance assignments. Ms. Denholm previously served as a director of ABB Ltd. from 2016 to 2017 and of Echelon Corporation Inc. from 2008 to 2013. Ms. Denholm is a member of the Australian Institute of Company Directors and a Fellow of the Institute of Chartered Accountants of Australia, and holds a Bachelor's degree in Economics from the University of Sydney and a Master's degree in Commerce from the University of New South Wales.

⁽²⁾ Mr. Jurvetson will not stand for re-election when his current term expires at the 2020 Annual Meeting.

We believe that Ms. Denholm possesses specific attributes that qualify her to serve as a member of the Board and as its Chair as well as the chair of each of our Audit Committee and Disclosure Controls Committee, such as her executive leadership experience and her financial and accounting expertise with international companies, including in the technology and automotive industries.

Ira Ehrenpreis has been a member of the Board since May 2007. Mr. Ehrenpreis has been a venture capitalist since 1996. He is founder and managing member of DBL Partners, a leading impact investing venture capital firm formed in 2015, and previously led the Energy Innovation practice at Technology Partners. In the venture capital industry, Mr. Ehrenpreis has served on the Board, Executive Committee, and as Annual Meeting Chairman of the National Venture Capital Association (NVCA). Mr. Ehrenpreis currently serves as the President of the Western Association of Venture Capitalists (WAVC) and as the Chairman of the VCNetwork, the largest and most active California venture capital organization. In the Cleantech sector, he has served on several industry boards, including the American Council on Renewable Energy and the Cleantech Venture Network (Past Chairman of Advisory Board), as the Chairman of the Clean-Tech Investor Summit for nine years, and on the Stanford Precourt Institute for Energy (PIE) Advisory Council. Mr. Ehrenpreis also serves as Chairman of the World Energy Innovation Forum. Mr. Ehrenpreis was recently awarded the 2018 NACD Directorship 100 for his influential leadership in the boardroom and corporate governance community. Mr. Ehrenpreis holds a B.A. from the University of California, Los Angeles and a J.D. and M.B.A. from Stanford University.

We believe that Mr. Ehrenpreis possesses specific attributes that qualify him to serve as a member of the Board and to serve as chair of each of our Nominating and Corporate Governance Committee and our Compensation Committee, including his experience in the Cleantech and venture capital industries.

Lawrence J. Ellison has been a member of the Board since December 2018. Mr. Ellison is the founder of Oracle Corporation, a software and technology company, has served as its Chief Technical Officer since September 2014 and previously served as its Chief Executive Officer from June 1977 to September 2014. Mr. Ellison has also served on Oracle's board of directors since June 1977, including as its Chairman since September 2014 and previously from May 1995 to January 2004.

We believe that Mr. Ellison possesses specific attributes that qualify him to serve as a member of the Board, including his long-term leadership of one of the most successful technology companies in the world and experience with technology product development and strategy.

Antonio Gracias has been a member of the Board since May 2007 and served as our Lead Independent Director from September 2010 to April 2019. Since 2003, Mr. Gracias has been Chief Executive Officer of Valor Management LLC, a private equity firm. Mr. Gracias is a director of SpaceX, and was a director of SolarCity until its acquisition by us in November 2016. Mr. Gracias holds a joint B.S. and M.S. degree in international finance and economics from the Georgetown University School of Foreign Service and a J.D. from the University of Chicago Law School.

We believe that Mr. Gracias possesses specific attributes that qualify him to serve as a member of the Board, including his management experience with a nationally recognized private equity firm and his operations management and supply chain optimization expertise.

Mr. Gracias will not stand for re-election when his current term expires at Tesla's 2021 annual meeting of stockholders.

Stephen Jurvetson has been a member of the Board since June 2009, and was on a leave of absence from the Board from November 2017 to April 2019. Mr. Jurvetson is a co-founder of Future Ventures, a venture capital firm, and previously was a Managing Director of Draper Fisher Jurvetson, a venture capital firm, from 1995 to 2017. Mr. Jurvetson is a director of SpaceX. Mr. Jurvetson holds B.S. and M.S. degrees in electrical engineering from Stanford University and an M.B.A. from the Stanford Business School.

We believe that Mr. Jurvetson possesses specific attributes that qualify him to serve as a member of the Board, including his experience in the venture capital industry and his years of business and leadership experience.

Mr. Jurvetson will not stand for re-election when his current term expires at Tesla's 2020 Annual Meeting.

Hiromichi Mizuno has been a member of the Board since April 2020. From January 2015 to March 2020, Mr. Mizuno was Executive Managing Director and Chief Investment Officer of Japan's Government Pension Investment Fund, the largest pension fund in the world. Previously, Mr. Mizuno was a partner at Coller Capital, a private equity firm, from 2003. In addition to being a career-long finance and investment professional, Mr. Mizuno is a member of numerous business and government advisory boards, including the board of the PRI, an investor initiative to promote responsible investment in partnership with the United Nations, the World Economic Forum's Global Future Council, and the Japanese government's strategic fund integrated advisory board. Mr. Mizuno holds a B.A. in Law from Osaka City University and an M.B.A. from the Kellogg Graduate School of Management at Northwestern University.

We believe that Mr. Mizuno possesses specific attributes that qualify him to serve as a member of the Board, including his deep understanding of international economics, financial markets, and government policies.

James Murdoch has been a member of the Board since July 2017. Mr. Murdoch has been the Chief Executive Officer of Lupa Systems, a private investment company that he founded, since March 2019. Previously, Mr. Murdoch held a number of leadership roles at Twenty-First Century Fox, Inc., a media company ("21CF"), over two decades, including its Chief Executive Officer from 2015 to March 2019, its Co-Chief Operating Officer from 2014 to 2015, its Deputy Chief Operating Officer and Chairman and Chief Executive Officer, International from 2011 to 2014 and its Chairman and Chief Executive, Europe and Asia from 2007 to 2011. Previously, he served as the Chief Executive Officer of Sky plc from 2003 to 2007, and as the Chairman and Chief Executive Officer of STAR Group Limited, a subsidiary of 21CF, from 2000 to 2003. Mr. Murdoch also formerly served on the boards of News Corporation from 2013 to July 2020, of 21CF from 2017 to 2019, of Sky plc from 2016 to 2018, of GlaxoSmithKline plc from 2009 to 2012 and of Sotheby's from 2010 to 2012.

We believe that Mr. Murdoch possesses specific attributes that qualify him to serve as a member of the Board, including his lengthy executive and board experience across numerous companies, extensive knowledge of international markets and strategies, and experience with the adoption of new technologies.

Kimbal Musk has been a member of the Board since April 2004. Mr. Musk is a co-founder of The Kitchen, a growing family of businesses with the goal of providing all Americans with access to real food, and has also served as its Chief Executive Officer since its founding in 2004. In 2010, Mr. Musk became the Executive Director of Big Green (formerly The Kitchen Community), a non-profit organization that creates learning gardens in schools across the United States. Mr. Musk also co-founded Square Roots, an urban farming incubator program, in 2016. Previously, Mr. Musk was a co-founder of Zip2 Corporation, a provider of enterprise software and services, which was acquired by Compaq in March 1999. From 2012 to 2015, Mr. Musk was a director of the Anschutz Health and Wellness Center, a facility at the University of Colorado School of Medicine providing research, education and wellness services with the goal of achieving healthier lifestyles. Mr. Musk is a director of SpaceX, and was a director of Chipotle Mexican Grill, Inc. from 2013 to 2019. Mr. Musk holds a B. Comm. in business from Queen's University and is a graduate of The French Culinary Institute in New York City.

We believe that Mr. Musk possesses specific attributes that qualify him to serve as a member of the Board, including his business experience in retail and consumer markets, his experience on the Board, and his experience with technology companies.

Kathleen Wilson-Thompson has been a member of the Board since December 2018. Ms. Wilson-Thompson has served as Executive Vice President and Global Chief Human Resources Officer of Walgreens Boots Alliance, Inc., a global pharmacy and wellbeing company, since December 2014, and previously served as Senior Vice President and Chief Human Resources Officer from January 2010 to December 2014. Prior to Walgreens, Ms. Wilson-Thompson held various legal and operational roles at The Kellogg Company, a food manufacturing company, from July 2005 to December 2009, including most recently as its Senior Vice President, Global Human Resources. Ms. Wilson-Thompson also served on the board of directors of Ashland Global Holdings Inc. from 2017 to 2020 and on the board of directors of Vulcan Materials Company from 2009 to 2018. Ms. Wilson-Thompson holds an A.B. in English Literature from the University of Michigan and a J.D. and L.L.M. (Corporate and Finance Law) from Wayne State University.

We believe that Ms. Wilson-Thompson possesses specific attributes that qualify her to serve as a member of the Board, including her executive and board experience with both consumer-focused and industrial companies, as well as her expertise in managing human resources and other operations at mature companies with large workforces.

Additional Information

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 Elon Musk's August 7, 2018 Twitter post that he was considering taking Tesla private. On April 26, 2019, this settlement was amended to clarify certain of its terms, which was subsequently approved by the Court. Mr. Musk did not admit or deny any of the SEC's allegations, and there is no restriction on Mr. Musk's ability to serve as an officer or director on the Board (other than as its Chair for a specified time).

See "Corporate Governance" and "Executive Compensation—Compensation of Directors" below for additional information regarding the Board.

PROPOSAL TWO

TESLA PROPOSAL FOR NON-BINDING ADVISORY VOTE ON EXECUTIVE COMPENSATION

General

Pursuant to Schedule 14A of the Exchange Act, we are asking our stockholders to vote to approve, on an advisory basis, the compensation of our "named executive officers" as disclosed in accordance with the SEC's rules in the "Executive Compensation" section of this updated proxy statement beginning on page 38 below. This proposal, commonly known as a "say-on-pay" proposal, gives our stockholders the opportunity to weigh in on our named executive officers' compensation as a whole. This vote is not intended to address any specific item of compensation or any specific named executive officer, but rather the overall compensation of all of our named executive officers and the philosophy, policies and practices described in this updated proxy statement.

The say-on-pay vote is advisory, and therefore not binding on the Company, the Compensation Committee or the Board. The say-on-pay vote will, however, provide information to us regarding investor sentiment about our executive compensation philosophy, policies and practices, which the Compensation Committee will be able to consider when determining executive compensation for the remainder of the current fiscal year and beyond. The Board and the Compensation Committee value the opinions of our stockholders and to the extent there is any significant vote against our named executive officer compensation as disclosed in this updated proxy statement, we will consider our stockholders' concerns and the Compensation Committee will evaluate whether any actions are necessary to address those concerns.

Summary of 2019 Executive Compensation Program

The following is a summary of some of the key points of our 2019 executive compensation program:

- Tesla continues to emphasize structuring compensation incentives to reward our named executive officers based on performance.
- Equity awards weigh heavily in our named executive officers' total compensation, including awards that vest upon the achievement of clear and measurable milestones. Since these awards increase in value as our stock price increases (and in the case of stock option awards, have no value unless our stock price increases following their grant), our named executive officers' incentives are closely aligned with the long-term interests of our stockholders. In particular, 2019 was a record-setting year for Tesla's annual revenues, year-end cash balance, vehicle production and deliveries, and energy storage deployment, and we further laid the foundation for the future with international manufacturing operations, the unveiling of Model Y and Cybertruck, and the launch of the third generation of Solar Roof. During 2019, we granted certain of our named executive officers equity awards for promotions to their roles or as part of our ongoing compensation review and alignment process.
- Tesla has no cash bonus program for any of our named executive officers and generally does not provide any perquisites or tax reimbursements to our named executive officers that are not available to other employees. No named executive officer has any severance or change of control arrangement, other than the vesting of the 10-year performance-based stock option award granted to Elon Musk in January 2018 (the "2018 CEO Performance Award") based solely upon the achievement of market capitalization milestones as measured at the time of a change in control of Tesla. See "Executive Compensation—Compensation Discussion and Analysis—Chief Executive Officer Compensation—2018 CEO Performance Award" below for more details on the 2018 CEO Performance Award.
- Each named executive officer is also employed at will and is expected to demonstrate exceptional personal performance in order to continue serving as a member of the executive team.

- Elon Musk, our Chief Executive Officer, historically earned a base salary that reflected the applicable minimum wage requirements under California law, and he was subject to income taxes based on such base salary. However, he has never accepted his salary. Commencing in May 2019 at Mr. Musk's request, we eliminated altogether the earning and accrual of this base salary. Consequently, 100% of Mr. Musk's future compensation is at-risk in the form of the remaining unvested stock options under the 2018 CEO Performance Award and the 10-year performance-based stock option award granted to Elon Musk in August 2012 (the "2012 CEO Performance Award").
- In particular, the 2018 CEO Performance Award is comprised of 12 equal tranches, each vesting only upon the achievement of a market capitalization milestone matched to one of eight revenue-based operational milestones or eight Adjusted EBITDA-based operational milestones, all of which were viewed as difficult hurdles at the time of grant. While our stockholders benefit from each incremental increase in Tesla's performance and stock price, aligning their interests with Mr. Musk's incentives, the tranches under the 2018 CEO Performance Award vest only upon the full achievement of specific milestones, making it even more challenging for Mr. Musk to realize value from such increases. As of the date of this updated proxy statement, two of the 12 tranches under this award have vested and become exercisable, subject to Mr. Musk's payment of the exercise price of \$350.02 per share and the minimum five-year holding period generally applicable to any shares he acquires upon exercise. See "Executive Compensation—Compensation Discussion and Analysis—Chief Executive Officer Compensation" below for more details.

For detailed information about Tesla's executive compensation program, see the "Executive Compensation" section beginning on page 38 below.

Tesla believes that the information provided above and within the "Executive Compensation" section of this updated proxy statement demonstrates that Tesla's executive compensation program was designed appropriately and is working to ensure management's interests are aligned with our stockholders' interests to support long-term value creation.

Proposed Resolution

Accordingly, we ask our stockholders to vote "FOR" the following resolution at the 2020 Annual Meeting:

"RESOLVED, that the Company's stockholders approve, on an advisory basis, the compensation of the named executive officers, as disclosed in the Company's Updated Proxy Statement for the Annual Meeting of Stockholders pursuant to the compensation disclosure rules of the Securities and Exchange Commission, including the Compensation Discussion and Analysis, the compensation tables and the other related disclosure."

THE BOARD RECOMMENDS A VOTE FOR THE TESLA PROPOSAL FOR A NON-BINDING ADVISORY VOTE APPROVING EXECUTIVE COMPENSATION.

PROPOSAL THREE

TESLA PROPOSAL FOR RATIFICATION OF APPOINTMENT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

General

The Audit Committee has selected PricewaterhouseCoopers LLP as Tesla's independent registered public accounting firm to audit the consolidated financial statements of Tesla for the fiscal year ending December 31, 2020, which will include an audit of the effectiveness of Tesla's internal control over financial reporting. PricewaterhouseCoopers LLP has audited Tesla's financial statements since 2005. A representative of PricewaterhouseCoopers LLP is expected to be present at the meeting, will have the opportunity to make a statement if he or she desires to do so, and is expected to be available to respond to appropriate questions.

Stockholder ratification of the selection of our independent registered public accounting firm is a matter of good corporate practice. In the event that this selection is not ratified by the affirmative vote of a majority of the shares present and voting at the meeting in person or by proxy, the appointment of the independent registered public accounting firm will be reconsidered by the Audit Committee. Even if the selection is ratified, the Audit Committee in its discretion may direct the appointment of a different accounting firm at any time during the year if the Audit Committee determines that such a change would be in the best interests of Tesla and our stockholders.

Principal Accounting Fees and Services

The following table presents fees billed for professional audit services and other services rendered to Tesla by PricewaterhouseCoopers LLP for the years ended December 31, 2018 and 2019. The dollar amounts in the table and accompanying footnotes are in thousands.

	2018	2019
Audit Fees (1)	\$ 12,088	\$ 12,527
Audit-Related Fees (2)	160	
Tax Fees (3)	514	999
All Other Fees (4)	3	9
Total	\$ 12,766	\$ 13,535

- (1) Audit Fees consist of fees billed for professional services rendered for the audit of Tesla's consolidated financial statements included in Tesla's Annual Report on Form 10-K and for the review of the financial statements included in Tesla's Quarterly Reports on Form 10-Q, as well as services that generally only Tesla's independent registered public accounting firm can reasonably provide, including statutory audits and services rendered in connection with SEC filings. The Audit Fees incurred in 2019 also include fees of \$435 relating to services performed in connection with Tesla's securities offerings, in each case including comfort letters, consents and review of documents filed with the SEC and other offering documents.
- (2) Audit-Related Fees in 2018 consisted of fees billed for professional services for assistance with interpretation of accounting standards.
- (3) Tax Fees in 2018 and 2019 consisted of fees related to consultation and assistance with foreign taxation matters.
- (4) Other Fees in 2018 and 2019 primarily consisted of fees for use of accounting software.

Pre-Approval of Audit and Non-Audit Services

Tesla's Audit Committee has adopted a policy for pre-approving audit and non-audit services and associated fees of Tesla's independent registered public accounting firm. Under this policy, the Audit Committee must pre-approve all services and associated fees provided to Tesla by its independent registered public accounting firm, with certain *de minimis* exceptions described in the policy.

All PricewaterhouseCoopers LLP services and fees in fiscal 2018 and 2019 were pre-approved by the Audit Committee.

THE BOARD RECOMMENDS A VOTE *FOR* THE TESLA PROPOSAL FOR THE RATIFICATION OF THE APPOINTMENT OF PRICEWATERHOUSECOOPERS LLP AS TESLA'S INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM FOR THE FISCAL YEAR ENDING DECEMBER 31, 2020.

PROPOSAL FOUR

STOCKHOLDER PROPOSAL REGARDING PAID ADVERTISING

In accordance with SEC rules, we have set forth below a stockholder proposal, along with a supporting statement, exactly as submitted by James M. Danforth. Mr. Danforth has notified us that he is the beneficial owner of 850 shares of Tesla's common stock and intends to present the following proposal at the 2020 Annual Meeting. Mr. Danforth's address is 7050 Sherbourne Lane, San Diego, CA 92129. The stockholder proposal will be required to be voted upon at the 2020 Annual Meeting only if properly presented.

Stockholder Proposal and Supporting Statement

SEC Rule 14a-8 Proposal:

Should Tesla spend at least \$50/car produced to advertise its products/services in order to increase brand and product awareness and interest, achieve other goals set forth in the supporting statement below and to help mitigate and/or reduce harm to Tesla's goals, objectives, reputation and finances?

Supporting Statement:

Advertising became necessary the moment Tesla announced in Q1-19 that it would shut down retail stores and start focusing solely on website based sales instead. Tesla is in the enviable position of being able to generate advertising ROI from 4 sources, which are:

First, its [*sic*] self-evident that advertising can increase brand value, product awareness and interest. **Second**, Tesla ads can help mitigate and dilute substantial FUD ("Fear, Uncertainty, Doubt") and misinformation campaigns sponsored by competitors and detractors worldwide and steer the narrative more favorably. **Third**, impacts caused by less public visibility, due to retail store closings announced in Q1-19, can be explained and softened by ads.

Finally, Tesla ads will, by their very nature, increase knowledge and support for climate damage avoidance worldwide. This is a core desire of Tesla and a key driver of better company results too.

Tesla's call to action via advertisements will ring loudly and credibly with billions of consumers, many of whom who don't know who Tesla is at all. This call to action has never been more necessary or important than right now.

Opposing Statement of the Board

The Board has considered this proposal and has determined that it would not serve the best interests of Tesla or our stockholders. While we welcome stockholder feedback, we also believe we have an experienced management team that is best situated to determine Tesla's day-to-day business operations, including our sales and marketing practices and expenditures.

Moreover, the proponent's key premise is based on an apparent misunderstanding of Tesla's retail operations. Specifically, Tesla has made clear in statements since the first quarter of 2019 that we frequently optimize our retail operations, which means both closing or downsizing locations with underperforming foot traffic or sales throughput, as well as adding locations in our target markets with high foot traffic. As a result, our net store count remained stable across 2019. Moreover, Tesla does not focus solely on online sales as the proponent asserts. Rather, whether a customer places an order from his or her home or at a Tesla store, it is transacted by accessing Tesla's website.

The proponent also presents no evidence that Tesla has insufficient visibility with prospective customers or that paid advertising, whether at the arbitrary amount suggested by the proponent or at all, would increase such visibility in a manner favorable to the Company or its stockholders. On the contrary, among the milestones achieved in 2019 without traditional advertising and at relatively low marketing costs, Tesla delivered a record 367,656 vehicles, or a 50% increase from the prior year, and Model 3 outsold the BMW 3-Series, Mercedes C-class, Audi A4 and Lexus IS combined in the United States. The distinctions that Tesla has achieved in the past year include Model 3 being included in *Consumer Reports*' 2020 "Top Picks" List and being named the UK Car of the Year 2020 and the Midsize Car of the Year at the *AUTO BILD* Golden Steering Wheel Awards in Germany, and Model S being named *Motor Trend*'s Ultimate Car of the Year. Finally, Tesla continues to expand globally with our servicing and charging infrastructure, as well as through international manufacturing at Gigafactory Shanghai, which commenced vehicle production in 2019, and our Gigafactory Berlin, which is undergoing site preparations.

Whereas the proponent's assertions are based in speculation, objective factors demonstrate the existing and growing public visibility and interest in Tesla and our products without the need for paid advertising. Accordingly, at this time our management believes that our customers and stockholders would be better served by forgoing such costs.

THE BOARD RECOMMENDS A VOTE AGAINST THE STOCKHOLDER PROPOSAL REGARDING PAID ADVERTISING.

PROPOSAL FIVE

STOCKHOLDER PROPOSAL REGARDING SIMPLE MAJORITY VOTING PROVISIONS IN GOVERNING DOCUMENTS

In accordance with SEC rules, we have set forth below a stockholder proposal, along with a supporting statement, exactly as submitted by James McRitchie. Mr. McRitchie has notified us that he is the beneficial owner of 90 shares of Tesla's common stock and intends to present the following proposal at the 2020 Annual Meeting through his designee, John Chevedden. Mr. McRitchie's address is 9295 Yorkship Court, Elk Grove, CA 95758. The stockholder proposal will be required to be voted upon at the 2020 Annual Meeting only if properly presented.

Stockholder Proposal and Supporting Statement

Proposal Five - Simple Majority Vote

RESOLVED, Tesla, Inc. ("Tesla" or "Company") shareholders request that our board take each step necessary so that each voting requirement in our charter and bylaws that calls for a greater than simple majority vote be eliminated, and replaced by a requirement for a majority of the votes cast for and against applicable proposals, or a simple majority in compliance with applicable laws. This means the closest standard to a majority of the votes cast for and against such proposals consistent with applicable laws. It is also important that our company take each step necessary to avoid a failed vote on this proposal topic.

Supporting Statement: Shareowners are willing to pay a premium for shares of companies that have excellent corporate governance. Supermajority voting requirements have been found to be one of six entrenching mechanisms that are negatively related to company performance according to "What Matters in Corporate Governance" by Lucien Bebchuk, Alma Cohen and Allen Ferrell of the Harvard Law School (https://papers.ssrn.com/sol3/papers.cfm?abstract_id=593423).

Large funds, such as T. Rowe Price, BlackRock, SSgA and Northern Trust generally support elimination of supermajority requirements, since most view them as an entrenchment device for management. For example, BlackRock's Proxy Voting Guidelines for U.S. Securities (https://www.blackrock.com/corporate/literature/fact-sheet/blk-responsible-investment-guidelines-us.pdf) includes the following:

We generally favor a simple majority voting requirement to pass proposals. Therefore, we will support the reduction or the elimination of supermajority voting requirements to the extent that we determine shareholders' ability to protect their economic interests is improved.

Last proxy season, according to data obtained through ProxyInsight, shareholder proposals on this topic won over:

- 90% of the vote at Legg Mason, Axon Enterprise, L Brands, Skyworks Solutions, Leidos Holdings.
- 70% of the vote at Netflix, New York Community Bancorp, Xerox, OGE Energy, Dean Foods, Sonoco Products.

Consideration should also be given to the fact that Tesla shareholders do not elect each director annually, no action can be taken by written consent, shareholders cannot call special meetings and we have no right to proxy access to nominate directors.

Shareholders need a real voice through governance reforms, including a Simple Majority Vote standard. Please vote to enhance shareholder value:

Simple Majority Vote - Proposal Five

Opposing Statement of the Board

The Board has determined that this proposal would not serve the best interests of Tesla or our stockholders at this time, because our stockholders recently considered, but did not adopt, the implementation of the same changes requested by the proponent.

At our 2019 annual meeting of stockholders, the Board proposed and recommended that stockholders approve amendments to our current certificate of incorporation and bylaws to eliminate the respective requirements therein that certain categories of changes to them be approved by greater than a majority of the total voting power of all outstanding shares of our common stock (the "<u>Tesla Supermajority Amendment Proposal</u>"). However, our stockholders did not approve the Tesla Supermajority Amendment Proposal, which would have immediately implemented the changes requested by the proponent.

Because the proponent's proposal is advisory and non-binding, even if it were approved by our stockholders, the Board would not have the authority to implement such changes unilaterally. Rather, in order to carry out the recommendation espoused by the proposal, the Board would have to propose the Tesla Supermajority Amendment Proposal again at a future meeting of our stockholders. Given that the Board already did so at the 2019 annual meeting of stockholders, and the proponent also submitted a proposal substantially identical to the current proposal at each of Tesla's annual meetings of stockholders in 2019, 2016 and 2014, and in each case our stockholders did not approve any of such proposals, we believe that it would better serve the Company and its stockholders to focus on other business matters at this time.

THE BOARD RECOMMENDS A VOTE AGAINST THE STOCKHOLDER PROPOSAL REGARDING SIMPLE MAJORITY VOTING.

PROPOSAL SIX

STOCKHOLDER PROPOSAL REGARDING REPORTING ON EMPLOYEE ARBITRATION

In accordance with SEC rules, we have set forth below a stockholder proposal, along with a supporting statement, exactly as submitted by Nia Impact Capital. Nia Impact Capital has notified us that it is the beneficial owner of 205 shares of Tesla's common stock and intends to present the following proposal at the 2020 Annual Meeting. Nia Impact Capital's address is 2323 Broadway, Oakland, CA 94612. The stockholder proposal will be required to be voted upon at the 2020 Annual Meeting only if properly presented.

Stockholder Proposal and Supporting Statement

RESOLVED: Shareholders of Tesla, Inc. ("Tesla") ask the Board of Directors to oversee the preparation of a report on the impact of the use of mandatory arbitration on Tesla's employees and workplace culture. The report should evaluate the impact of Tesla's current use of arbitration on the prevalence of harassment and discrimination in its workplace and on employees' ability to seek redress. The report should be prepared at reasonable cost and omit proprietary and personal information.

WHEREAS: Title VII of the Civil Rights Act of 1964 states that it is unlawful "to discriminate against any individual with respect to his compensation, terms, conditions, or privileges of employment, because of such individual's race, color, religion, sex, or national origin."

Nevertheless, forty-eight percent of African Americans and thirty-six percent of Hispanics have experienced race-based workplace discrimination.² Fifty-five percent of senior-level women say that they have been sexually harassed during their careers.³

A workplace that tolerates harassment invites legal, brand, financial, and human capital risk. Companies may experience reduced morale, lost productivity, absenteeism, and challenges in attracting and retaining talent. Unexpected changes in leadership after allegations of harassment or discrimination, as has occurred at CBS, Nike, Papa Johns, Uber, Walt Disney, and Wynn Resorts, puts shareholder value at risk.

In contrast, the consultancy McKinsey found companies with high levels of ethnic and cultural diversity are thirty-three percent more likely to outperform in profitability while those in the top quartile for gender diversity are twenty-seven percent more likely to have superior value creation.⁴ In a 2019 study by the Wall Street Journal, the twenty most diverse companies in the S&P500 had an average annual five year stock return that was almost six percent higher than the twenty least-diverse companies.⁵

It is our understanding that Tesla requires its employees to agree to arbitrate employment-related claims. Mandatory arbitration limits employees' remedies for wrongdoing, keeps misconduct secret, precludes employees from suing in court when discrimination and harassment occur, and prevents employees from learning about shared concerns.⁶

Arbitration clauses face a changing regulatory landscape. In 2019, the U.S. House of Representatives passed a bill banning mandatory arbitration. Attorneys general from every state voiced support for ending forced arbitration of sexual harassment claims. California banned the use of arbitration agreements as a condition of employment and Washington state invalidated contracts requiring arbitration of sexual harassment or assault claims. Other states are expected to follow suit.

Continuing to rely on arbitration clauses when these protections may be removed, with retroactive implications, creates a long-tail risk for Tesla.

Investors' concerns about non-transparent working conditions, which allow for potential harassment and discrimination, are particularly pertinent to Tesla, which has faced allegations of sexual harassment and racial discrimination. Tesla does not currently report publicly on the diversity characteristics of its staff nor its approach to ensuring workplace diversity and inclusion.

- https://www.wsj.com/articles/what-metoo-has-to-do-with-the-workplace-gender-gap-1540267680?mod=ig_womenintheworkplaceoctober2018&mod=article_inline
- https://www.mckinsey.com/~/media/mckinsey/business%20functions/organization/our%20insights/delivering%20through%20diversity/delivering-through-diversity full-report.ashx
- https://www.wsj.com/articles/the-business-case-for-more-diversity-11572091200
- 6 https://www.eeoc.gov/eeoc/systemic/review/

Opposing Statement of the Board

The Board has considered this proposal and determined that it would not serve the best interests of Tesla or our stockholders, as its inaccurate and unsupported assertions regarding arbitration and its impact on workplace conditions at Tesla fail to justify the reporting it requests.

First, arbitration does not limit remedies, as Tesla's standard arbitration provision specifically states that the parties are entitled to all remedies available in a court of law. Second, an employee is free to publicize the results of an arbitration, other than any trade secrets or proprietary business information. Third, arbitration provisions do not impede employees' freedom to first file lawsuits in court, and arbitration proceedings are private only if such court rules that the underlying claims are subject to arbitration. Finally, the proponent does not clearly state how arbitration prevents employees from learning about shared concerns, but as noted above, employees may generally disclose the results of an arbitration to other parties.

On the other hand, we believe that arbitration provisions are very prevalent among employers for several reasons. Arbitration offers an alternative form of adjudication by an experienced jurist selected with both parties' participation that is often quicker than trial, especially in jurisdictions where courts are overburdened. Outcomes are also more certain because they may not be appealed absent extraordinary circumstances. While the employer must pay the entire cost of the proceedings, this overall expediency benefits both parties with a fair resolution and a speedier return to their respective priorities without miring them in lengthy litigation. Moreover, we believe employees often seek arbitration to avoid prospective employers being made aware of their claims against former employers, or to avoid a public record of their private information. In fact, outside of the U.S., where Tesla's offer letters do not have arbitration provisions, many countries use specialized labor court proceedings similar to arbitration to adjudicate employee claims.

Therefore, the proponent does not state convincing support for a correlation between arbitration and harassment, discrimination, or limits on employee grievances generally. In addition, while the proposal makes generalized references to allegations against Tesla, it does not present any specific evidence that harassment, lack of diversity, or non-transparent working conditions are areas of concern at Tesla. The proponent does state that arbitration provisions create risk for Tesla if they were to become legally prohibited, but fails to explain how such a corporate risk of legal non-compliance pertains to the alleged impact of arbitration on workplace harassment and discrimination.

https://www.eeoc.gov/laws/statutes/titlevii.cfm

https://www.nbcnews.com/politics/politics-news/poll-64-percent-americans-say-racism-remains-major-problem-n877536

Tesla's mission is to accelerate the world's transition to sustainable energy. Being the world's first vertically integrated sustainable energy company and a leader in innovation requires a diversity of thought and backgrounds that can be achieved only by maintaining a diverse and inclusive workforce. Moreover, implicit in our mission is a mandate to not only follow the law, but to do the right thing. Contrary to the proponent's vague claims, we believe that employment compliance issues are not an issue at Tesla and, as we have pledged in our public annual Impact Report, that Tesla has designed our workplace and policies to provide all employees with a respectful and safe working environment by not tolerating any discrimination, harassment, retaliation, or any other mistreatment at work, whether based on a legally protected status or otherwise. We believe that rather than devote attention and resources to reporting on an issue as to which the proponent has inaccurately characterized the fundamental premise, Tesla, its employees, and its stockholders would be better served by continuing to execute on tangible workplace goals and our mission.

THE BOARD RECOMMENDS A VOTE AGAINST THE STOCKHOLDER PROPOSAL REGARDING REPORTING ON EMPLOYEE ARBITRATION.

PROPOSAL SEVEN

STOCKHOLDER PROPOSAL REGARDING ADDITIONAL REPORTING ON HUMAN RIGHTS

In accordance with SEC rules, we have set forth below a stockholder proposal, along with a supporting statement, exactly as submitted by Sisters of the Good Shepherd New York Province. Sisters of the Good Shepherd New York Province has notified us that it is the beneficial owner of 7 shares of Tesla's common stock and intends to present the following proposal at the 2020 Annual Meeting through its designee, Mary Beth Gallagher. Sisters of the Good Shepherd New York Province's address is 25-30 21st Avenue, Astoria, New York 11105. The stockholder proposal will be required to be voted upon at the 2020 Annual Meeting only if properly presented.

Stockholder Proposal and Supporting Statement

Human Rights Disclosure

Tesla, Inc. - 2020

Whereas: Tesla manufactures and sells electric vehicles (EVs) and energy generation and storage systems. Tesla faces human rights and labor rights risks in its operations and value chain. Investors are unable to determine how Tesla is meeting its responsibility to respect human rights.

Tesla's products use thousands of purchased parts sourced from hundreds of global suppliers through complex extended supply chains. The company states that "reliably determining the origin [of raw materials] is a difficult task." The use of cobalt in lithium-ion batteries poses human rights risks for Tesla. 60% of cobalt globally is produced in the Democratic Republic of Congo (DRC) where child labor is pervasive. Cobalt mining is one of the worst forms of child labor. Children work in mines at risk of collapse, use sharp tools, and lack safety equipment. Tesla is among five companies facing a class action lawsuit filed on behalf of 14 children and parents from the DRC, which includes allegations of "aiding and abetting in the death and serious injury of children who claim they were working in cobalt mines in their supply chain." While Tesla reports on cobalt sourcing procedures and indicates it is looking for ways to reduce the cobalt in its batteries, the company does not provide sufficient evidence to demonstrate its cobalt supply chain is free of child labor. Conflict minerals, steel, lithium, rubber, mica, and electronics may also present human rights risks for Tesla.

In Tesla's operations, a federal judge ruled in 2019 that Tesla violated labor laws on 12 different occasions for preventing employees from exercising their right to unionize, including disciplining and firing employees for union activity.⁵

Working conditions and high injury rates in Tesla's factories may violate the human right to safe and healthy working conditions. From 2014 to 2018, Tesla's Fremont, CA plant had three times as many Occupational Safety and Health Administration (OSHA) violations as 10 major U.S. auto plants combined, resulting in fines.⁶ Insufficient safety trainings, noncompliant safety markings, exposure to toxins, and undercounting or mislabeling of injuries, which may falsely signal an improvement in conditions, have been documented at Tesla's plants.⁷

While Tesla has a Supplier Code of Conduct, a "Human Rights and Conflict Minerals Policy," and says it commits to "only sourcing responsibly produced materials," these guidelines only apply to suppliers. Tesla lacks a baseline commitment to respect human rights throughout its operations and its disclosure do not demonstrate that its due diligence effectively prevents, mitigates, or remediates adverse human rights impacts.

Resolved: Shareholders request that the Board of Directors prepare a report, at reasonable cost and omitting proprietary information, on Tesla's processes for embedding respect for human rights within operations and through business relationships.

Supporting Statement: This report might address:

- Board oversight of human rights; and
- Human rights due diligence processes, including systems for providing meaningful remedy when adverse human rights impacts occur.
- https://www.tesla.com/sites/default/files/about/legal/2018-conflict-minerals-report.pdf
- https://www.theguardian.com/news/2019/jan/14/on-the-charge-why-batteries-are-the-future-of-clean-energy
- http://iradvocates.org/sites/iradvocates.org/files/stamped%20-Complaint.pdf; https://www.theguardian.com/global-development/2019/dec/16/apple-and-google-named-in-us-lawsuit-over-congolese-child-cobalt-mining-deaths
- https://www.thedragonflyinitiative.com/material-change-report/; https://www.washingtonpost.com/graphics/business/batteries/tossed-aside-in-the-lithium-rush/?wpisc=al_alert-COMBO-economy%252Bnation
- 5 https://www.pv-tech.org/news/Tesla-found-in-violatation-of-federal-labour-laws-as-Walmart-solar-panel
- https://www.forbes.com/sites/alanohnsman/2019/03/01/tesla-safety-violations-dwarf-big-us-auto-plants-in-aftermath-of-musks-model-3-push/#2f028ea154ce
- https://www.usatoday.com/in-depth/news/investigations/2019/11/12/tesla-gigafactory-brings-nevada-jobs-and-housing-woes-worker-injuries-strained-ems/2452396001/; https://www.revealnews.org/article/tesla-says-its-factory-is-safer-but-it-left-injuries-off-the-books/; https://worksafe.typepad.com/files/worksafe tesla5 24.pdf

Opposing Statement of the Board

The Board has considered this proposal and has determined that it would not serve the best interests of Tesla or our stockholders. Inherent in Tesla's mission to accelerate the world's transition to sustainable energy is ensuring a better present and future for humanity, which includes a strong commitment to human rights that is demonstrated in part by our existing framework of fulsome public disclosures.

With respect to Tesla's supply chain, our Supplier Code of Conduct and Human Rights and Conflicts Minerals Policy on our website already address human rights. These policies state: (i) specific standards for human rights and labor practices with which Tesla's suppliers must comply, (ii) that Tesla will audit and investigate such compliance, (iii) that Tesla will take actions against non-compliant suppliers and Tesla personnel, and (iv) a mechanism to express any related concerns to the Board. Tesla also files annually with the SEC a Conflict Minerals Report that specifies in detail our processes for identifying and addressing risks relating to conflict minerals and performing related due diligence in our supply chain.

Despite acknowledging our policies, which report our processes for respecting human rights in our supply chain, the proponent goes beyond the scope of its proposal to deem them insufficient, alleging they do not demonstrate that our due diligence effectively prevents, mitigates, or remediates adverse human rights impact or that our cobalt supply chain is free of child labor. This is a mischaracterization, and our existing reporting should not be ignored simply because the proponent is not subjectively satisfied with the conclusions it draws from them. As discussed in detail in the above-referenced documents, we have adopted what we believe are best practices to identify, remedy and audit potential human rights issues, including additional precautions for materials sourced from higher-risk regions, as well as widely-recognized third party standards such as those of the Organisation for Economic Co-operation and Development and the Responsible Minerals Initiative.

Likewise, the proponent alleges that employee health and workplace safety is also inadequate at Tesla. We disagree, and believe our dedication to these areas is evidenced by the data and our practices, which we already describe clearly in our Impact Report. We also continue to evolve these disclosures to present the most relevant information. For example, we described in detail in the Impact Report published in 2020 the overall vision, values and principles of our Environmental, Health and Safety program, and enumerated specifically the various health and safety training programs, initiatives, controls and remediations that we have implemented. We also presented in graphic and case study format both quantitative statistics and qualitative improvements regarding employee engagements in the program, injury rates, safety improvement targets, and process improvements. Contrary to the proponent's assertions, we believe our Impact Reports demonstrate the continuing success of our workplace health and safety measures and our commitment to improving them even further.

Finally, it is not clear whether the proposal seeks reporting regarding labor union rights, and whether this topic lends itself to a recitation of statistics or due diligence processes. However, Tesla's employees are free to associate or refrain from associating with any third parties, including labor unions. Moreover, the proponent incompletely describes the status of certain unfair labor practice charges asserted against Tesla by the United Auto Workers to the National Labor Relations Board ("NLRB"). Specifically, an administrative law judge issued a decision in September 2019 recommending that the NLRB dismiss eight alleged violations but finding merit to a number of isolated and generally minor violations. Both parties have appealed this recommendation to the NLRB, which has not yet adopted a final decision.

Tesla is confident in our efforts regarding and commitment to human rights in our operations, and that our publicly available policies and periodically updated disclosures already provide robust and transparent information on these matters. Accordingly, we do not believe that additional duplicative reporting is warranted.

THE BOARD RECOMMENDS A VOTE AGAINST THE STOCKHOLDER PROPOSAL REGARDING ADDITIONAL REPORTING ON HUMAN RIGHTS.

CORPORATE GOVERNANCE

Investor Outreach

During 2014, the Board determined to formally identify, approach and establish an active dialogue with our largest stockholders and conduct an extensive and recurring review of our corporate governance practices. We inaugurated a program of periodic investor outreach to ensure that Tesla's Board and management understand and consider the issues that matter most to our stockholders. We have gradually expanded this program over time to include senior members of management and the Board, who have participated in hosting extended series of meetings with and preparing presentations to a broad base of investors. Through this program, we have received and continue to periodically receive helpful input regarding a number of stockholder-related matters, and have adopted a number of significant changes to our corporate governance practices. Moreover, members of the Board and management from time to time seek input from our investors when considering important corporate actions that involve corporate governance and alignment with stockholder interests.

We do not expect that we will always be able to address all of our stockholders' feedback. However, we seek to optimize our corporate governance by continually refining our relevant policies, procedures and practices to align the needs of the Company with evolving regulations and best practices, issues raised by our stockholders, and other factors as circumstances warrant.

Code of Business Conduct and Ethics and Corporate Governance Guidelines

The Board sets high standards for Tesla's workforce, officers and directors. Tesla is committed to establishing an operating framework that exercises appropriate oversight of responsibilities at all levels throughout the Company and managing its affairs in a manner consistent with rigorous principles of business ethics. Accordingly, Tesla has adopted a Code of Business Conduct and Ethics, which is applicable to Tesla and its subsidiaries' directors, officers and personnel. Tesla has also adopted Corporate Governance Guidelines, which, in conjunction with our certificate of incorporation, bylaws, and charters of the standing committees of the Board, form the framework for Tesla's corporate governance. The Code of Business Conduct and Ethics and the Corporate Governance Guidelines are each available on Tesla's website at: http://ir.tesla.com/corporate-governance/highlights. Tesla will disclose on its website any amendment to the Code of Business Conduct and Ethics, as well as any waivers of the Code of Business Conduct and Ethics, that are required to be disclosed by the rules of the SEC or The NASDAQ Stock Market LLC ("NASDAQ").

Director Independence

The Board periodically assesses, with the recommendation of the Nominating and Corporate Governance Committee, the independence of its non-employee members as defined in the listing standards of NASDAQ and applicable laws. As part of such review in 2020, the Board undertook an analysis for each non-employee director and considered all relevant facts and circumstances, including the director's other commercial, accounting, legal, banking, consulting, charitable and familial relationships. The Board determined that with respect to each of its current members other than Elon Musk, who is our Chief Executive Officer, and Kimbal Musk, who is Elon Musk's brother, there are no disqualifying factors with respect to director independence enumerated in the listing standards of NASDAQ or any relationships that would interfere with the exercise of independent judgment in carrying out the responsibilities of a director, and that each such member is an "independent director" as defined in the listing standards of NASDAQ and applicable laws.

In particular, the Board reviewed the following considerations:

• Ira Ehrenpreis, Antonio Gracias, Stephen Jurvetson, James Murdoch, Elon Musk, Kimbal Musk, and/or investment funds affiliated with them, have made minority investments in certain companies or investment funds, (i) of which other Tesla directors are founders, significant stockholders, directors, officers, or managers, and/or (ii) with which Tesla has certain relationships set forth below in "Certain Relationships and Related Party Transactions—Related Party Transactions." The Board concluded that none of these investments are material so as to impede the exercise of independent judgment by any of Messrs. Ehrenpreis, Gracias, Jurvetson or Mr. Murdoch, and that none of them has a direct or indirect interest in any transaction between Tesla and another company set forth below in "Certain Relationships and Related Party Transactions—Related Party Transactions."

- Messrs. Gracias and Jurvetson are directors of SpaceX, (i) of which Elon Musk and Kimbal Musk are also directors, and (ii) with which Tesla has certain relationships set forth below in "Certain Relationships and Related Party Transactions—Related Party Transactions—SpaceX." The Board concluded that each of Messrs. Gracias and Jurvetson is an experienced investment professional who has served on the boards of multiple companies without conflict or impairment of independent judgment.
- Lawrence J. Ellison and Mr. Murdoch, and/or entities affiliated with them, have purchased certain Tesla products and services from Tesla as set forth below in "Certain Relationships and Related Party Transactions—Related Party Transactions—Other Transactions." The Board concluded that such purchases were negotiated and completed through ordinary course sales processes in good faith on terms generally available to similar customers, and would not impair the independent judgment of Messrs. Ellison or Murdoch.
- Robyn Denholm and Mr. Ellison are or were formerly officers of certain companies from which Tesla has purchased business services. The Board concluded that such purchases were for standard offerings in the ordinary course of business pursuant to good faith contracting processes in which neither Ms. Denholm nor Mr. Ellison were involved or had any material interest.
- Tesla determined not to renew its directors and officers liability insurance policy for the 2019-2020 year due to disproportionately high premiums quoted by insurance companies. Instead, Elon Musk agreed with Tesla to personally provide coverage substantially equivalent to such a policy for a one-year period, and the other members of the Board are third-party beneficiaries thereof. The Board concluded that because such arrangement is governed by a binding agreement with Tesla as to which Mr. Musk does not have unilateral discretion to perform, and is intended to replace an ordinary course insurance policy, it would not impair the independent judgment of the other members of the Board.

In addition, prior to their departures from the Board in June 2019, the Board had determined that Brad Buss and Linda Johnson Rice were independent directors as defined in the listing standards of NASDAQ and applicable laws.

Board Leadership Structure

Roles of Chair of the Board and Lead Independent Director

Following careful deliberation, the Board appointed Robyn Denholm to serve as the independent Chair of the Board in November 2018, having considered her strong leadership, independent presence, and financial and business expertise on the Board over an extended period of time. Together, Ms. Denholm and our Chief Executive Officer Elon Musk comprise our senior Board leadership, which the Board believes is appropriate at this time to provide the most effective leadership structure for Tesla in a highly competitive and rapidly changing technology industry. As Chair of the Board, Ms. Denholm has broad authority and oversight over the affairs of the Board, with Mr. Musk available to her as a resource in this regard. Moreover, as an independent Chair of the Board, Ms. Denholm has the authority to direct the actions of the other independent directors and regularly communicate with Mr. Musk as their representative, which are duties previously performed by Antonio Gracias in his former role as Lead Independent Director. After a brief transition period to assist Ms. Denholm, Mr. Gracias relinquished such role in April 2019, and the Board determined that a Lead Independent Director is not currently necessary.

As Chair of the Board, Ms. Denholm, among other things:

- reviews the agenda and materials for meetings of the independent directors;
- consults with our Chief Executive Officer regarding Board meeting agendas, schedules and materials;
- acts as a liaison between our Chief Executive Officer and the independent directors when appropriate;
- otherwise communicates regularly with our Chief Executive Officer;
- raises issues with management on behalf of the independent directors;
- annually reviews, together with the Nominating and Corporate Governance Committee, the Board's performance during the prior year; and

• serves as the Board's liaison for consultation and communication with stockholders as appropriate.

Tesla also has a mechanism for stockholders to communicate directly with non-management directors (see "Corporate Governance—Contacting the Board" below).

Committees of the Board

In addition, the Board has four standing committees—the Audit Committee, the Compensation Committee, the Nominating and Corporate Governance Committee, and the Disclosure Controls Committee—which are each further described below. Each of the Board committees is comprised solely of independent directors, and the Board may appoint a chair to each committee. Our independent directors regularly meet in executive session, and at such other times as necessary or appropriate as determined by the independent directors. In addition, as part of our governance review and succession planning, the Board (led by the Nominating and Corporate Governance Committee) evaluates our leadership structure to ensure that it remains the optimal structure for Tesla, reviews the composition, size and performance of the Board and its committees, evaluates individual Board members, and identifies and evaluates candidates for election or re-election to the Board. See "Corporate Governance—Process and Considerations for Nominating Board Candidates" below for additional information.

Board Role in Risk Oversight

The Board is responsible for overseeing the major risks facing Tesla while management is responsible for assessing and mitigating Tesla's risks on a day-to-day basis. In addition, the Board has delegated oversight of certain categories of risk to the Audit Committee and Compensation Committee, which are comprised entirely of independent directors. The Audit Committee and Compensation Committee respectively report to the Board as appropriate on matters that involve specific areas of risk that each Committee oversees.

Financial, Compliance and Controls Risks

The Audit Committee has scheduled periodic and annual reviews and discussions with management regarding significant risk exposures and incident metrics, including those relating to global financial, accounting and treasury matters, internal audit and controls, legal and regulatory compliance, and data privacy and cybersecurity. These discussions cover the steps management has taken to monitor, control and report such exposures, as well as Tesla's policies with respect to risk assessment and risk management.

Employee Compensation Risks

The Compensation Committee oversees management of risks relating to Tesla's compensation plans and programs. Tesla's management and the Compensation Committee have assessed the risks associated with Tesla's compensation policies and practices for all employees, including non-executive officers. These include risks relating to setting ambitious targets for our employees' compensation or the vesting of their equity awards and our emphasis on at-risk equity-based compensation, and the potential impact of such practices on the retention or decision-making of our employees, particularly our senior management. Based on the results of this assessment, Tesla does not believe that its compensation policies and practices for all employees, including non-executive officers, create risks that are reasonably likely to have a material adverse effect on Tesla.

Board Meetings and Committees

During fiscal 2019, the Board held 14 meetings. Each director attended or participated in 75% or more of the aggregate of the total number of meetings of the Board and the total number of meetings of all Board Committees on which such director served (in each case held during such director's relevant period of service), except for (i) Lawrence J. Ellison, who was required to devote substantial time on extraordinary transitional matters for Oracle Corporation during the illness and passing of its co-Chief Executive Officer; (ii) James Murdoch, who communicated separately with the respective chairperson of the Board or Board Committee when he was unable to attend a meeting due to an atypically high volume of critical business meetings in 2019; and (iii) Stephen Jurvetson, who was on a leave of absence from the Board until April 2019 and therefore attended no meetings in 2019 prior to such time.

Audit Committee

The Audit Committee, which has been established in accordance with Section 3(a)(58) of the Exchange Act, currently consists of Robyn Denholm, Antonio Gracias, Stephen Jurvetson, Hiromichi Mizuno, and James Murdoch, each of whom is "independent" as such term is defined for audit committee members by the listing standards of NASDAQ. Ms. Denholm is the chair of the Audit Committee. The Board has determined that Ms. Denholm is an "audit committee financial expert" as defined in the rules of the SEC.

The Audit Committee is responsible for, among other things:

- reviewing and approving the selection of Tesla's independent auditors, and approving the audit and nonaudit services to be performed by Tesla's independent auditors;
- providing oversight, recommendations, and under specified thresholds, approvals, regarding significant financial matters and investment practices, including any material acquisitions and divestitures;
- monitoring the integrity of Tesla's financial statements and Tesla's compliance with legal and regulatory requirements as they relate to financial statements or accounting matters;
- reviewing the adequacy and effectiveness of Tesla's internal control policies and procedures in addition to Tesla's risk management, data privacy and data security;
- discussing the scope and results of the audit with the independent auditors and reviewing with management and the independent auditors Tesla's interim and year-end operating results; and
- preparing the audit committee report that the SEC requires in Tesla's annual proxy statement.

The Audit Committee held ten meetings during fiscal 2019. The Audit Committee has adopted a written charter approved by the Board, which is available on Tesla's website at: http://ir.tesla.com/corporate-governance/highlights.

The Audit Committee Report is included in this updated proxy statement on page 62.

Compensation Committee

The Compensation Committee is currently comprised of Robyn Denholm, Ira Ehrenpreis, and Kathleen Wilson-Thompson, each of whom qualifies as an independent director under the listing standards of NASDAQ. Mr. Ehrenpreis is the chair of the Compensation Committee.

The Compensation Committee is responsible for, among other things:

- overseeing Tesla's compensation policies, plans and benefit programs and making related recommendations to the Board, including by considering "say-on-pay" votes of Tesla's stockholders;
- reviewing and approving for Tesla's executive officers: the annual base salary, equity compensation, employment agreements, severance arrangements and change in control arrangements, and any other compensation, benefits, or arrangements;
- administering the compensation of members of the Board and Tesla's equity compensation plans; and
- preparing the compensation committee report that the SEC requires to be included in Tesla's annual proxy statement.

The Compensation Committee held four meetings during fiscal 2019. The Compensation Committee has adopted a written charter approved by the Board, which is available on Tesla's website at: http://ir.tesla.com/corporate-governance/highlights.

The Compensation Committee Report is included in this updated proxy statement on page 47.

Nominating and Corporate Governance Committee

The Nominating and Corporate Governance Committee currently consists of Robyn Denholm, Ira Ehrenpreis, James Murdoch and Kathleen Wilson-Thompson, each of whom qualifies as an independent director under the listing standards of NASDAQ. Mr. Ehrenpreis is the chair of the Nominating and Corporate Governance Committee.

The Nominating and Corporate Governance Committee is responsible for, among other things:

- assisting the Board in identifying prospective director nominees and recommending nominees for each annual meeting of stockholders to the Board;
- reviewing developments in corporate governance practices and developing and recommending governance principles applicable to the Board;
- considering questions of possible conflicts of interest of Tesla's directors and officers;
- reviewing the manner in and the process by which stockholders communicate with the Board and recommending Board responses;
- reviewing the succession planning for Tesla's executive officers;
- overseeing the evaluation of Tesla's Board and management; and
- recommending members for each Board committee to the Board.

The Nominating and Corporate Governance Committee held five meetings during fiscal 2019. The Nominating and Corporate Governance Committee has adopted a written charter approved by the Board, which is available on Tesla's website at: http://ir.tesla.com/corporate-governance/highlights.

Disclosure Controls Committee

The Disclosure Controls Committee currently consists of Robyn Denholm, Stephen Jurvetson, James Murdoch, and Kathleen Wilson-Thompson, each of whom qualifies as an independent director under the listing standards of NASDAQ. Ms. Denholm is the chair of the Disclosure Controls Committee.

The Disclosure Controls Committee is responsible for, among other things:

- overseeing the implementation of and compliance with the terms of Tesla's consent agreement with the SEC dated September 29, 2018, as amended April 26, 2019;
- overseeing the controls and processes governing certain public disclosures by Tesla and its executive officers; and
- reviewing and resolving certain conflicts of interest or other human resources issues involving any executive officer and ensuring appropriate disclosures, if applicable.

The Disclosure Controls Committee held eight meetings during fiscal 2019. The Disclosure Controls Committee has adopted a written charter approved by the Board, which is available on Tesla's website at: http://ir.tesla.com/corporate-governance/highlights.

Compensation Committee Interlocks and Insider Participation

Brad Buss, Robyn Denholm, Ira Ehrenpreis, Antonio Gracias, Linda Johnson Rice, and Kathleen Wilson-Thompson served as members of the Compensation Committee during at least part of fiscal 2019. None of such persons is or was formerly an officer or an employee of Tesla. See "Certain Relationships and Related Party Transactions" below for certain transactions involving Tesla in which members of the Compensation Committee may potentially be deemed to have an indirect interest.

During 2019, no interlocking relationships existed between any member of Tesla's Board or Compensation Committee and any member of the board of directors or compensation committee of any other company.

Process and Considerations for Nominating Board Candidates

The Nominating and Corporate Governance Committee is responsible for, among other things, determining the criteria for Board membership, recommending Board candidates, and proposing any changes to the composition of the Board. The Nominating and Corporate Governance Committee's criteria and process for fulfilling these duties are generally as follows:

- The Nominating and Corporate Governance Committee regularly reviews the current composition and size of the Board, and oversees an annual evaluation of the performance of the Board as a whole and of its individual members. For example, in consultation with Robyn Denholm, the Chair of the Board, the Nominating and Corporate Governance Committee conducted in 2019 a comprehensive top-down evaluation of the full Board, including its size and composition, to consider and recommend to the Board ways to optimize its then-current membership.
- The Nominating and Corporate Governance Committee applies uniform evaluation processes and standards for all Board members, including in identifying, considering or recommending new candidates for the Board to fill vacancies or add additional directors, and in recommending existing Board members for nomination to be re-elected at annual meetings of stockholders. In conducting its search for new independent directors in 2018 and 2020, the Nominating and Corporate Governance Committee reviewed not only the qualifications of director candidates on a standalone basis but also their specific fit on the Board as a whole.
- In carrying out the foregoing duties, the Nominating and Corporate Governance Committee consistently seeks to achieve a balance of knowledge, experience and capability on the Board. While the Nominating and Corporate Governance Committee has not established specific minimum qualifications for director candidates, it considers all pertinent factors that it considers appropriate, including diversity, and believes that the Board should be comprised of directors who (1) are predominantly independent, (2) are of high integrity, (3) have broad, business-related knowledge and experience at the policy-making level in business or technology, including their understanding of Tesla's business in particular, (4) have qualifications that will increase overall Board effectiveness, and (5) meet other requirements as may be required by applicable rules, such as financial literacy or financial expertise with respect to Audit Committee members. For example, after conducting independent director searches in 2018 and 2020 in which numerous highly-qualified candidates from a variety of backgrounds were considered, the Nominating and Corporate Governance Committee recommended to the Board Lawrence J. Ellison and Kathleen Wilson-Thompson in 2018 to further bolster the Board's expertise in technological innovation and workforce management and relations, and Hiromichi Mizuno in 2020 to add an additional perspective on global financial markets and economics.
- In evaluating and identifying candidates, the Nominating and Corporate Governance Committee has the authority to retain and terminate any third party search firm that is used to identify director candidates and has the authority to approve the fees and retention terms of any search firm.
- With regard to any candidates who are properly recommended by stockholders (as described in more detail below) or by other sources, the Nominating and Corporate Governance Committee reviews the qualifications of any such candidate, which review may, in the Nominating and Corporate Governance Committee's discretion, include interviewing references for the candidate, direct interviews with the candidate, or other actions that the Nominating and Corporate Governance Committee deems necessary or proper.
- After completing its review and evaluation of director candidates, the Nominating and Corporate
 Governance Committee recommends the director nominees that it has determined to be qualified to the
 full Board.

It is the policy of the Nominating and Corporate Governance Committee to consider properly submitted recommendations for candidates to the Board from stockholders. Stockholder recommendations for candidates to the Board must be directed in writing to Tesla, Inc., 3500 Deer Creek Road, Palo Alto, California 94304, Attention: Legal Department, and should also be sent by e-mail to shareholdermail@tesla.com. Such recommendations must include the candidate's name, home and business contact information, detailed biographical data and qualifications, information regarding any relationships between the candidate and Tesla within the last three years, and evidence of the nominating person's ownership of Tesla stock. Such recommendations must also include a statement from the recommending stockholder in support of the candidate, particularly within the context of the criteria for Board membership, including issues of character, integrity, judgment, diversity, age, independence, skills, education, expertise, business acumen, business experience, length of service, understanding of Tesla's business, other commitments and the like, as well as any personal references and an indication of the candidate's willingness to serve.

Attendance at Annual Meetings of Stockholders by the Board

Although Tesla does not have a formal policy regarding attendance by members of the Board at Tesla's annual meetings of stockholders, directors are encouraged to attend. All of our directors who served at the time of the 2019 annual meeting of stockholders attended such meeting.

Stock Transactions

Hedging, Short Sales and Rule 10b5-1 Trading Plans

Tesla has an insider trading policy that prohibits all of our directors, officers and employees from, among other things, engaging in short sales, hedging or similar transactions designed to decrease the risks associated with holding Tesla securities. This prohibition encompasses transactions in publicly-traded options, such as puts and calls, and other derivative securities with respect to Tesla securities, but not transactions designed to facilitate portfolio diversification, such as broad-based index options, futures or baskets.

In addition, three of Tesla's current executive officers and three directors have entered into currently effective Rule 10b5-1 trading plans.

Pledging of Shares

The Board has a policy that limits pledging of Company stock by our directors and executive officers. Pursuant to this policy, directors and executive officers may pledge their Company stock (exclusive of options, warrants, restricted stock units or other rights to purchase stock) as collateral for loans and investments, provided that the maximum aggregate loan or investment amount collateralized by such pledged stock does not exceed twenty-five percent (25%) of the total value of the pledged stock.

Example: A director pledges 1,000 shares as collateral for a loan, and the current stock price is \$800 per share. The director may borrow up to 25% of 1,000 x \$800, or \$200,000, against such shares. If the stock price later increases to \$1,600 per share, the director may borrow up to an additional \$200,000 against the pledged shares. If the director borrows the full allowable amount and the stock price then decreases to \$1,200, the director must repay \$100,000 to maintain compliance with the 25% limit under the pledging policy.

The Board believes this share pledging policy to be in the best interests of Tesla and our stockholders by providing directors and executive officers, whose compensation is heavily based on equity awards, flexibility in financial planning without having to rely on large cash compensation or the sale of Company shares. Therefore, this policy allows their interests to be well-aligned with those of our stockholders, while also mitigating risk exposure to Tesla.

See "Ownership of Securities" below for information regarding any shares pledged by our directors or executive officers as of June 30, 2020; however, such pledging does not indicate the extent to which there may be actual borrowings against such shares as of such date. Tesla management monitors compliance with this policy by reviewing and, if necessary, reporting to the Board or its committees the extent to which any officer or director has pledged shares of Company stock. We believe that this monitoring is effective and includes appropriate controls, and we have confirmed that each of our directors and executive officers who have pledged stock are and have been compliant with this policy.

Stock Ownership by Board and Management

To align the interests at the highest level of our management with those of our stockholders, the Board has instituted the following requirements relating to stock ownership under our Corporate Governance Guidelines.

Each member of the Board and our Chief Executive Officer is subject to the following minimum stock ownership requirements: (i) each director shall own shares of Tesla stock equal in value to at least five times the annual cash retainer for directors (exclusive of retainer amounts for service as Lead Independent Director or as a member or chair of a Board committee), and (ii) our Chief Executive Officer shall own shares of Tesla stock equal in value to at least six times his/her base salary. Each individual shall have five years from the later of March 3, 2015 and the date such person assumed his or her relevant role at Tesla to come into compliance with these ownership requirements. Each person's compliance with the minimum stock ownership level will be determined on the date when this compliance grace period expires, and then annually on each December 31, by multiplying the number of shares held by such person and the average closing price of those shares during the preceding month. Our Chief Executive Officer and each of our directors is currently either in compliance with these requirements or is in the applicable period to come into compliance therewith.

Our Corporate Governance Guidelines also provide that no equity award as to which vesting or the lapse of a period of restriction occurs based solely on the passage of time that is granted to a named executive officer may vest, or have a period of restriction that lapses, earlier than six months from the date on which such vesting or lapse commences. Furthermore, our Corporate Governance Guidelines provide that no named executive officer may sell, transfer, pledge, assign, or otherwise dispose of any shares of Tesla stock acquired pursuant to any stock option, restricted stock unit or other equity award granted by Tesla earlier than the date that is six months after the date on which such award vests or the period of restriction with respect to such award lapses, as applicable.

Prohibition of Equity Award Repricing

Tesla views equity-based compensation to be a key factor in incentivizing the future performance of our personnel. Consequently, the Tesla, Inc. 2019 Equity Incentive Plan (the "2019 Plan"), as well as Tesla's previous 2010 Equity Incentive Plan, provide that stock options and other equity awards issued under these plans that derive their value from the appreciation of the value of Tesla's stock may not be exchanged for other awards, repurchased for cash, or otherwise be made the subject of transactions that have the purpose or effect of repricing such awards.

In addition, applicable NASDAQ rules prohibit any repricing with respect to the 2018 CEO Performance Award

Contacting the Board

Any stockholder who desires to contact our non-employee directors regarding appropriate Tesla business-related comments may do so electronically at the following website: http://ir.tesla.com/corporate-governance/contact-the-board. Such stockholders who desire to contact our non-employee directors by mail may do so by writing to Tesla, Inc., 3500 Deer Creek Road, Palo Alto, CA 94304, Attention: Legal Department. Our General Counsel, or someone acting in his or her place, receives these communications unfiltered by Tesla, forwards communications to the appropriate committee of the Board or non-employee director, and facilitates an appropriate response. Please note that requests for investor relations materials should be sent to ir@tesla.com.

EXECUTIVE OFFICERS

The names of Tesla's executive officers, their ages, their positions with Tesla and other biographical information as of August 1, 2020, are set forth below. Except for Messrs. Elon Musk and Kimbal Musk who are brothers, there are no other family relationships among any of our directors or executive officers.

Name	Age	Position
Elon Musk	49	Chief Executive Officer
Zachary Kirkhorn	35	Chief Financial Officer
Jerome Guillen	47	President, Automotive
		Senior Vice President, Powertrain and Energy
Andrew Baglino	39	Engineering

Elon Musk. For a brief biography of Mr. Musk, please see "Proposal One—Election of Directors—Information Regarding the Board and Director Nominees" above.

Zachary Kirkhorn has served as our Chief Financial Officer since March 2019. Previously, Mr. Kirkhorn served in various finance positions continuously since joining Tesla in March 2010, other than between August 2011 and June 2013 during which he attended business school, including most recently as Vice President, Finance, Financial Planning and Business Operations from December 2018 to March 2019. Mr. Kirkhorn holds dual B.S.E. degrees in economics and mechanical engineering and applied mechanics from the University of Pennsylvania and an M.B.A. from Harvard University.

Jerome Guillen has served as our President of Automotive since September 2018 and previously served as our Vice President, Trucks and Other Programs from January 2016 to September 2018, our Vice President, Worldwide Sales & Service from April 2013 to August 2015 and our Model S Program Director from November 2010 to April 2013. Prior to joining us, Mr. Guillen served as Director, Business Innovation at Daimler AG, an automobile manufacturer, from September 2007 to November 2010. Mr. Guillen also served as Director, New Product Development at Freightliner LLC, a manufacturer of trucks and heavy duty vehicles, from September 2002 to September 2007. Mr. Guillen holds a PhD in mechanical engineering from the University of Michigan, in addition to a dual degree in energy technologies from Escuela Tecnica Superior de Ingenieros Industriales in Madrid and in mechanical engineering from Ecole Nationale Superieure de Techniques Avancees in Paris.

Andrew Baglino has served as our Senior Vice President, Powertrain and Energy Engineering since October 2019. Previously, Mr. Baglino served in various engineering positions continuously since joining Tesla in March 2006. Mr. Baglino holds a B.S. in electrical engineering from Stanford University.

EXECUTIVE COMPENSATION

Compensation Discussion and Analysis

The following discussion and analysis of compensation arrangements of our named executive officers for 2019 should be read together with the compensation tables and related disclosures set forth below. This discussion contains forward-looking statements that are based on our current considerations, expectations, and determinations regarding future compensation programs. The actual amount and form of compensation and the compensation programs that we adopt may differ materially from current or planned programs as summarized in this discussion.

The following discussion and analysis relates to the compensation arrangements for 2019 of (i) our principal executive officer, (ii) our principal financial officer, (iii) our former principal financial officer who served in such capacity until March 2019, and (iv) the two most highly compensated persons, other than our principal executive officer and principal financial officer, who were serving as executive officers at the end of our fiscal year ended December 31, 2019 (our "named executive officers"). We had no other executive officers serving at the end of our fiscal year ended December 31, 2019. Our named executive officers for fiscal year 2019 were:

Name	Position
Elon Musk	Chief Executive Officer
Zachary Kirkhorn	Chief Financial Officer
Jerome Guillen	President, Automotive
Andrew Baglino	Senior Vice President, Powertrain and Energy Engineering
Deepak Ahuja	Former Chief Financial Officer

Mr. Ahuja transitioned from his previous role as Chief Financial Officer effective March 2019.

Compensation Philosophy

As the world's first vertically integrated sustainable energy company, our mission is to accelerate the world's transition to sustainable energy. We design, develop, manufacture and sell high-performance, fully electric vehicles and energy generation and storage systems, and also install and maintain such energy systems and sell solar electricity. To achieve our goals, we have designed, and intend to modify as necessary, our compensation and benefits program and philosophy, to attract, retain and incentivize talented, deeply qualified and committed executive officers who share our philosophy and desire to work toward these goals. We believe compensation incentives for executive officers should promote the success of our company and motivate them to pursue corporate objectives. We have put an emphasis on structuring compensation incentives so as to reward clear, easily measured performance goals that closely align their incentives with the long-term interests of our stockholders. Further, we have sought to harmonize the compensation structures of our other employees to conform to our overall compensation philosophy.

Our current compensation programs reflect our startup origins in that they consist primarily of salary and equity awards. Consistent with our historical compensation philosophy, we do not currently provide an annual cash bonus program or any severance provisions for continued cash payments or other benefits upon termination of employment with us.

As our needs evolve, we intend to continue to evaluate our philosophy and compensation programs as circumstances require, and, at a minimum, the Compensation Committee will review executive compensation annually. We may from time to time make new equity awards and adjustments to the components of our executive compensation program in connection with our periodic compensation review.

Key Factors in Determining Executive Compensation

Role of Compensation Committee in Executive Compensation

The Compensation Committee has overall responsibility for recommending to the Board the compensation of our Chief Executive Officer and determining the compensation of our other executive officers. Members of the Compensation Committee are appointed by the Board. Currently, the Compensation Committee consists of three members of the Board: Ira Ehrenpreis (Chair), Robyn Denholm, and Kathleen Wilson-Thompson, none of whom is an executive officer of Tesla, and each of whom qualifies as (i) an "independent director" under the NASDAQ Stock Market Rules and (ii) an "outside director" under Section 162(m) of the Internal Revenue Code (the "Code"). See "Corporate Governance—Board Meetings and Committees—Compensation Committee" above.

Role of Compensation Consultants

The Compensation Committee has the authority to engage the services of outside consultants to assist in making decisions regarding the establishment of Tesla's compensation programs and philosophy. No such consultants were engaged by the Compensation Committee or Tesla specifically with respect to executive or director compensation during 2019.

Role of Executive Officers in Compensation Decisions

Historically, for executive officers other than our Chief Executive Officer, the Compensation Committee has sought and considered input from our Chief Executive Officer regarding such executive officers' responsibilities, performance and compensation. Specifically, our Chief Executive Officer recommends base salary increases and equity award levels for our senior personnel, and advises the Compensation Committee regarding the compensation program's ability to attract, retain and motivate executive talent. These recommendations reflect compensation levels that our Chief Executive Officer believes are qualitatively commensurate with an executive officer's individual qualifications, experience, responsibility level, functional role, knowledge, skills, and individual performance, as well as Tesla's performance. The Compensation Committee considers our Chief Executive Officer's recommendations, but ultimately determines compensation in its judgment, and approves the specific compensation for all of our executive officers (other than for our Chief Executive Officer, which is approved by the Board). All such compensation determinations by our Compensation Committee are largely discretionary.

The Compensation Committee meets regularly in executive session. Our Chief Executive Officer is not present during Compensation Committee deliberations or votes on his compensation and also recuses himself from sessions of the Board where the Board acts on the Compensation Committee's recommendations regarding his compensation. In addition, the Board has established a management committee under the 2019 Plan (the "Equity Award Committee") to grant and administer equity awards, subject to certain maximum limits on the seniority of personnel to whom the Equity Award Committee may grant awards and the value of any individual award. For example, the Equity Award Committee is not authorized to grant awards to executive officer-level employees. Moreover, pursuant to applicable law, the Equity Award Committee may not grant awards to its members, and the number of shares of our common stock underlying awards granted by it may not exceed amounts determined by the Board from time to time. The Board has delegated to the Compensation Committee oversight authority over the Equity Award Committee.

Role of Stockholder Say-on-Pay Votes

At the 2011, 2014 and 2017 annual meetings of our stockholders, we held triennial stockholder advisory "sayon-pay" votes on the compensation of our named executive officers for the 2010, 2013 and 2016 fiscal years, respectively. Each time, our stockholders overwhelmingly approved the compensation of our named executive officers, with over 94% of our stockholder votes cast in favor of our compensation policies for our named executive officers. Given these results, and following consideration of them, the Compensation Committee has decided to retain our overall approach to executive compensation while continuing to evaluate our practices frequently, including in response to future say-on-pay votes. Moreover, we are required to hold a vote at least every six years regarding how often to hold a stockholder advisory vote on the compensation of our named executive officers. We held our most recent such vote at the 2017 annual meeting of stockholders, at which our stockholders indicated a preference for a triennial vote. Consequently, the Board determined that we will hold a triennial stockholder advisory vote on the compensation of our named executive officers until they consider the results of our next sayon-pay frequency vote, which will be held at the 2023 annual meeting of stockholders. In addition, in accordance with this triennial frequency, we will again hold a say-on-pay advisory vote at the 2020 Annual Meeting. See "Proposal Two—Tesla Proposal for Non-Binding Advisory Vote on Executive Compensation."

Clawback Policy

Our Corporate Governance Guidelines sets forth a compensation recovery ("clawback") policy with respect to any annual incentive payment or long-term incentive payment that may be received by an executive officer, where such payment would be predicated upon achieving certain financial results that were subsequently the subject of a restatement of our financial statements, and a lower payment would have been made to the executive based upon the restated financial results. In such case, the Board has the authority to seek to recover from the executive officer the amount by which such officer's incentive payments for the relevant period exceeded the lower payment that would have been made based on the restated financial results.

Moreover, the terms of the 2018 CEO Performance Award include a clawback provision in the event of a restatement of our financial statements previously filed with the SEC. See "Executive Compensation—Compensation Discussion and Analysis—Chief Executive Officer Compensation—2018 CEO Performance Award" below.

Current Elements of Named Executive Officer Compensation

Overview and Fiscal Year 2019 Company Highlights

Our current executive compensation program, which was developed and approved by the Compensation Committee, generally consists of base salary, equity-based incentives and other benefits. We combine these elements in order to formulate compensation packages that provide competitive pay and align the interests of our named executive officers with long-term stockholder interests by rewarding the achievement of financial, operational and strategic objectives. In 2019, Tesla's accomplishments under our executive leadership included the following:

- Total revenues of \$24.6 billion, a year-over-year increase of approximately 15%;
- Year-end cash and cash equivalents balance of \$6.3 billion, an approximately 70% increase from the end of 2018;
- Annual vehicle delivery and production records of 367,656 and 365,232 total vehicles, representing year-over-year increases of approximately 50% and 43%, respectively;
- 1.65 gigawatt hours of energy storage deployed in 2019, more than the aggregate of all prior years combined;
- The beginning of the next phase of our global growth with the commencement of Model 3 production at Gigafactory Shanghai in China, less than 10 months from breaking ground, and the selection of a site for a Gigafactory in Berlin, Germany; and
- The unveiling of Model Y and Cybertruck, the former of which we commenced deliveries in the first quarter of 2020, and the launch of the third generation of Solar Roof.

Base Salary

The Compensation Committee is responsible for reviewing our Chief Executive Officer's and other executive officers' base salaries. The base salaries of all executive officers are reviewed annually and adjusted when necessary to reflect individual roles, performance and the competitive market. Because we typically do not provide cash bonuses to our executive officers, salary is the primary cash-based element of our executive officers' compensation structure.

The following table sets forth information regarding the annualized base salary rates at the end of 2019 for our named executive officers:

	Ending Fiscal 2019
	Base
Name	Salary(\$)(1)
Elon Musk	—(2)
Zachary Kirkhorn	275,000
Jerome Guillen	300,000
Andrew Baglino	300,000
Deepak Ahuja	—(3)

- (1) Reflects an annualized rate assuming 52 weeks each comprised of five work days.
- (2) Mr. Musk historically earned a base salary that reflected the applicable minimum wage requirements under California law, and he was subject to income taxes based on such base salary. However, he has never accepted his salary. Commencing in May 2019 at Mr. Musk's request, we eliminated altogether the earning and accrual of this base salary.
- (3) Mr. Ahuja transitioned from his role as Chief Financial Officer effective March 2019.

In April 2020, the base salaries of our named executive officers were reduced by 30%. This reduction was part of a company-wide reduction (subject to applicable laws) for salaried employees, which was intended to be a proactive and temporary response to global market conditions. The rate of reduction in base salary for our vice president-level and higher employees, including our named executive officers, was higher than those applicable to all other salaried employees. Subject to applicable laws, such reductions were eliminated after approximately 11 weeks.

Equity-Based Incentives

Our equity award program is the primary vehicle for offering long-term incentives to our named executive officers. Our equity-based incentives have historically been granted in the form of options to purchase shares of our common stock and restricted stock unit awards that are settled in shares of our common stock upon vesting, and we have granted to our named executive officers both awards that vest over a long-term period and awards that vest only upon the achievement of specified Tesla performance milestones, in each case subject to continued service. We believe that equity awards more closely align the interests of our named executive officers with our stockholders, provide our named executive officers with incentives linked to long-term performance, and create an ownership culture. In addition, the vesting features of our equity awards contribute to executive retention because these features provide an incentive to our named executive officers to remain in our employ during the scheduled vesting periods or until the achievement of the applicable performance milestones, which are expected to be achieved over the medium- to long-term. To date, we have not had an established set of criteria for granting equity awards; instead, the Compensation Committee exercises its judgment and discretion, in consultation with our Chief Executive Officer and from time to time, a compensation consultant. The Compensation Committee considers, among other things, the role and responsibility of the named executive officer, competitive factors, the amount of stock-based equity compensation already held by the named executive officer, and the cash-based compensation received by the named executive officer, to determine the level and types of equity awards that it approves.

The Compensation Committee meets periodically, including to approve equity award grants to our executives from time to time. We do not have, nor do we plan to establish, any program, plan, or practice to time equity award grants in coordination with releasing material non-public information. We generally grant one-time new hire equity awards to our employees upon their commencement of employment with us, or upon their promotion to new positions. Additionally, as part of our ongoing executive compensation review and alignment process, we periodically grant equity awards to our executives. For example, during 2019 we granted a promotion award to Zachary Kirkhorn in connection with his promotion to Chief Financial Officer, and equity awards to certain of our named executive officers pursuant to our executive compensation review and alignment process. For details on such grants, see "Executive Compensation—Grants of Plan-Based Awards in 2019" below.

Severance and Change in Control Benefits

No named executive officer has a severance or change in control arrangement with Tesla, other than the vesting of the 2018 CEO Performance Award based solely upon the achievement of market capitalization milestones as measured at the time of a change in control of Tesla. See "Executive Compensation—Potential Payments Upon Termination or Change in Control" and "Executive Compensation—Compensation Discussion and Analysis—Chief Executive Officer Compensation—2018 CEO Performance Award" below.

Bonus

We do not currently have or have planned, and we typically have not historically entered into, any specific arrangements with our named executive officers providing for cash-based bonus awards.

Non-Equity Incentive Plan Compensation

We did not provide any non-equity incentive plan compensation to any of our named executive officers in 2019, and we do not currently have or have planned any specific arrangements with our named executive officers providing for non-equity incentive plan compensation.

Perquisites

Generally, we do not provide any perquisites or other personal benefits to our named executive officers except in certain limited circumstances.

Health and Welfare Benefits

We provide the following benefits to our named executive officers on the same basis provided to all of our employees:

- health, dental and vision insurance;
- life insurance and accidental death and dismemberment insurance;
- a Section 401(k) plan for which no match by Tesla is provided;
- an employee stock purchase plan;
- short-and long-term disability insurance;
- medical and dependent care flexible spending account; and
- a health savings account.

Chief Executive Officer Compensation

Overview

Historically, in developing compensation recommendations for our Chief Executive Officer, the Compensation Committee has sought both to appropriately reward our Chief Executive Officer's previous and current contributions and to create incentives for our Chief Executive Officer to continue to contribute significantly to successful results in the future. Each of the 2012 CEO Performance Award and the 2018 CEO Performance Award is focused on this latter objective, as it solely rewards future performance.

In addition to serving as our Chief Executive Officer since October 2008, Elon Musk has contributed significantly and actively to us since our earliest days in April 2004 by recruiting executives and engineers, contributing to vehicle engineering and design, raising capital for us and bringing investors to us, and raising public awareness of Tesla.

Cash Compensation

Mr. Musk historically earned a base salary that reflected the applicable minimum wage requirements under California law, and he was subject to income taxes based on such base salary. However, he has never accepted his salary. Commencing in May 2019 at Mr. Musk's request, we eliminated altogether the earning and accrual of this base salary.

Historical Equity Compensation

Prior to stock option awards made in December 2009, Mr. Musk did not receive any equity compensation for his services for a period of five years.

In 2010 and 2011, Mr. Musk did not receive any equity grants, because the Compensation Committee believed his existing grants made in December 2009 already provided sufficient motivation for Mr. Musk to perform his duties as Chief Executive Officer.

In August 2012, to create incentives for continued long-term success from the then-recently launched Model S program as well as from Tesla's then-planned Model X and Model 3 programs, and to further align executive compensation with increases in stockholder value, the Board granted to Mr. Musk the 2012 CEO Performance Award, comprised of a stock option award to purchase 5,274,901 shares of Tesla's common stock, representing 5% of Tesla's total issued and outstanding shares at the time of grant. The 2012 CEO Performance Award consists of 10 equal vesting tranches, each requiring that Tesla meet a combination of (i) the achievement of a specified operational milestone relating to development of Model X or Model 3, aggregate vehicle production, or a gross margin target, and (ii) a sustained incremental \$4 billion increase in Tesla's market capitalization from \$3.2 billion, Tesla's market capitalization at the time of grant. The market capitalization conditions for all of the 10 vesting tranches and 9 of the 10 operational milestones have been achieved, and therefore 9 of 10 tranches under the 2012 CEO Performance Award have vested. As of the date of this updated proxy statement, only one operational milestone, requiring gross margin of 30% or more for four consecutive quarters, has not been achieved and remains outstanding.

Prior to 2018, the only additional equity awards received by Mr. Musk related to certain immaterial awards granted during 2013 pursuant to a patent incentive program that was available to our employees generally.

2018 CEO Performance Award

Early in 2017, with the 2012 CEO Performance Award heading to substantial completion after having helped Tesla grow its market capitalization to over \$55 billion in just over five years, the independent members of the Board began preliminary discussions regarding how to continue to incentivize Mr. Musk to lead Tesla through the next phase of its development. In January 2018, following more than six months of careful analysis and development led by the Compensation Committee, with participation by every independent Board member, the help of Compensia, a national compensation consulting firm, and engagement with and feedback from our largest institutional stockholders, the Board granted the 2018 CEO Performance Award to Mr. Musk. Such grant was subject to approval by a majority of the total votes of Tesla common stock not owned by Mr. Musk or Kimbal Musk cast at a meeting of the stockholders to approve the 2018 CEO Performance Award. On March 21, 2018, such approval was obtained, with approximately 73% of the votes cast by such disinterested shares voting in favor of the 2018 CEO Performance Award.

The 2018 CEO Performance Award is comprised of a 10-year maximum term stock option to purchase 20,264,042 shares of Tesla's common stock, divided equally among 12 separate tranches that are each equivalent to 1% of the issued and outstanding shares of Tesla's common stock at the time of grant, at an exercise price of \$350.02 per share. Each of the 12 vesting tranches of the 2018 CEO Performance Award vests upon certification by the Board that both (i) the market capitalization milestone for such tranche, which begins at \$100 billion for the first tranche and increases by increments of \$50 billion thereafter, and (ii) any one of the following 8 operational milestones focused on revenue or 8 operational milestones focused on profitability, has been met:

Total Revenue* (in billions)	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

^{* &}quot;Revenue" means total revenues as reported in Tesla's financial statements on Forms 10-Q or 10-K filed with the SEC for the previous four consecutive fiscal quarters.

Any single operational milestone may only satisfy the vesting requirement of one tranche, together with the corresponding market capitalization milestone. Subject to any applicable clawback provisions, policies or other forfeiture terms, once a milestone is achieved, it is forever deemed achieved for determining the vesting of a tranche. Meeting more than 12 of the 16 operational milestones will not result in any additional vesting or other compensation to Mr. Musk under the 2018 CEO Performance Award. Except in a change in control situation, measurement of the market capitalization milestones will be based on both (i) a six calendar month trailing average of Tesla's stock price as well as (ii) a 30 calendar day trailing average of Tesla's stock price, in each case based on trading days only. Upon the consummation of certain acquisitions or split-up, spin-off or divestiture transactions, each then-unachieved market capitalization milestone and/or operational milestone will be adjusted to offset the impact of such transactions to the extent they could be considered material to the achievement of those milestones.

In establishing the Revenue and Adjusted EBITDA milestones, the Board carefully considered a variety of factors, including Tesla's growth trajectory and internal growth plans and the historical performance of other highgrowth and high-multiples companies in the technology space that have invested in new businesses and tangible assets. These benchmarks provided revenue/EBITDA to market capitalization multiples, which were then used to inform the specific operational targets that aligned with Tesla's plans for future growth. Nevertheless, the Board considers each of the market capitalization and operational milestones to be challenging hurdles. For example, in order to meet all 12 market capitalization milestones, Tesla will have to add approximately \$600 billion to its market capitalization at the time of the grant of the 2018 CEO Performance Award, and in order to satisfy all eight revenue-based operational milestones, Tesla would have to increase revenue by more than \$163 billion from its annual revenue of approximately \$11.8 billion in 2017, the last fiscal year completed prior to the grant of the 2018 CEO Performance Award.

In addition, Mr. Musk must continue to lead Tesla as our Chief Executive Officer or, alternatively, as our Chief Product Officer and Executive Chairman (with any other Chief Executive Officer reporting directly to him), at the time each milestone is met in order for the corresponding tranche to vest. With limited exceptions, Mr. Musk must hold any shares that he acquires upon exercise of the 2018 CEO Performance Award for at least five years post-exercise. There will be no acceleration of vesting of the 2018 CEO Performance award upon Mr. Musk's termination, death or disability, or a change in control of Tesla. However, in a change in control situation, the achievement of the milestones will be based solely on the market capitalization milestones, with the measurement of Tesla's market capitalization determined by the product of the total number of outstanding shares of Tesla common stock immediately before the change in control multiplied by the greater of the last closing price of a share of Tesla common stock before the effective time of the change in control or the per share price (plus the per share value of any other consideration) received by Tesla's stockholders in the change in control.

^{** &}quot;Adjusted EBITDA" means (i) net income (loss) attributable to common stockholders before (ii) interest expense, (iii) (benefit) provision for income taxes, (iv) depreciation and amortization, and (v) stock-based compensation, as each such item is reported in Tesla's financial statements on Forms 10-Q or 10-K filed with the SEC for the previous four consecutive fiscal quarters.

In the event of a restatement of Tesla's financial statements previously filed with the SEC, if a lesser portion of the 2018 CEO Performance Award would have vested based on the restated financial results, then Tesla will require forfeiture (or repayment, as applicable) of the portion of the 2018 CEO Performance Award that would not have vested based on the restated financial results (less any amounts Mr. Musk may have paid to Tesla in exercising any forfeited awards). The 2018 CEO Performance Award also will be subject, if more stringent than the foregoing, to any current or future Tesla clawback policy applicable to equity awards, provided that the policy does not discriminate solely against Mr. Musk except as required by applicable law.

As of the date of this filing, three operational milestones and two market capitalization milestones have been achieved, of which two operational milestones and two market capitalization milestones have also been certified by our Board of Directors. Consequently, two of the 12 tranches under the 2018 CEO Performance Award, corresponding to options to purchase an aggregate 3,377,340 shares of Tesla's common stock, have vested and become exercisable, subject to Mr. Musk's payment of the exercise price of \$350.02 per share and the minimum five-year holding period generally applicable to any shares he acquires upon exercise.

Realized Compensation

For purposes of the table in "Executive Compensation—Summary Compensation Table" below, we are required to report pursuant to applicable SEC rules any stock option grants to Mr. Musk at values determined as of their respective grant dates and which are driven by certain assumptions prescribed by Financial Accounting Board Accounting Standards Codification Topic 718, "Compensation—Stock Compensation" ("ASC Topic 718"). Moreover, we are required to report in "Executive Compensation—Pay Ratio Disclosure" below (i) Mr. Musk's annual total compensation, (ii) the median of the annual total compensation of all Tesla employees qualifying for this analysis, other than Mr. Musk, in each case calculated pursuant to the methodology used for the table in "Executive Compensation—Summary Compensation Table," and (iii) the ratio of the former to the latter.

In addition, we are required to report in "Executive Compensation—2019 Option Exercises and Stock Vested" below an amount for the "value realized" upon: (i) any exercise by Mr. Musk of a stock option, which is based on the difference between the market price of the underlying shares at the time of exercise and the exercise price of the stock option, and (ii) any vesting of a restricted stock unit award, based on the market price of the award at the time of vesting. Such amount is required to be reported even if Mr. Musk does not actually receive any cash from such exercise or vesting, either because he does not also sell any shares or because he sells only a number of shares sufficient to cover the related tax liabilities resulting from the exercise or vesting.

As a result, there may be a significant disconnect between what is reported as compensation for Mr. Musk in a given year in such sections and the value actually realized as compensation in that year or over a period of time. Moreover, the vast majority of compensation in respect of past stock option grants to Mr. Musk, including the 2012 CEO Performance Award and the 2018 CEO Performance Award, were incentives for <u>future</u> performance and their value is realizable only if Tesla's stock price appreciates compared to the dates of the grants, and if the Company achieves applicable vesting requirements.

To supplement the disclosures in "Executive Compensation—Summary Compensation Table," "Executive Compensation—Pay Ratio Disclosure" and "Executive Compensation—2019 Option Exercises and Stock Vested" below, we have included the following table, which shows the total realized compensation of Mr. Musk for the last three fiscal years, as well as the ratio of Mr. Musk's realized compensation to the median of the annual total compensation of all other Tesla employees qualifying for this analysis as reported in "Executive Compensation—Pay Ratio Disclosure." Realized compensation is not a substitute for reported compensation in evaluating our compensation structure, but we believe that realized compensation is an important factor in understanding that the value of compensation that Mr. Musk ultimately realizes is dependent on a number of additional factors, including: (i) the vesting of certain of his option awards only upon the successful achievement of a number of market capitalization increase and operational milestone targets, including milestones that have not yet been achieved under each of the 2012 CEO Performance Award and the 2018 CEO Performance Award; (ii) the fact that Mr. Musk does not receive any cash if he does not actually sell shares and thereby reduce his investment in us, and he does not receive any cash to the extent that he sells only shares sufficient to cover income taxes with respect to his awards (including stock options exercised solely to avoid their expiration in accordance with their terms); and (iii) the thencurrent market value of our common stock at the times at which Mr. Musk may elect to actually sell his shares.

	"Total Compensation" of CEO, as Reported in Summary Compensation Table Below	"Value Realized on Exercise or Vesting of Awards" of CEO, as Reported in Option Exercises and Stock Vested Table Below	Median Annual Total Compensation of all Qualifying Non-CEO Employees, as reported in Pay Ratio Disclosure Section Below	Total CEO Realized Compensation	Ratio of Total CEO Realized Compensation to Median Annual Total Compensation of all Qualifying Non- CEO
Year	(\$)	(\$)	(\$)	(\$)(1)(2)	Employees
2019	23,760(3)	30,483,250(4)	58,455	23,760	0.41:1
2018	2,284,044,884(5)	<u> </u>	56,163	56,380	1.00:1
2017	49,920	_	54,816	49,920	0.91:1

- (1) "Total CEO realized compensation" for a given year is defined as (i) the amounts reported for Mr. Musk in "Executive Compensation—Summary Compensation Table" below under the columns "Salary," "Bonus," "Non-Equity Incentive Plan Compensation" and "All Other Compensation," plus (ii) with respect to any stock option exercised by Mr. Musk in such year in connection with which shares of stock were also sold other than to satisfy any resulting tax liability, the difference between the market price of such shares at the time of exercise and the applicable exercise price of the option, plus (iii) with respect to any restricted stock unit vested by Mr. Musk in such year in connection with which shares of stock were also sold other than automatic sales to satisfy any withholding obligations related to such vesting, the market price of such shares at the time of vesting, plus (iv) any cash actually received by Mr. Musk in respect of any shares sold to cover tax liabilities as described in (ii) and (iii) above, following the payment of such tax liabilities.
- (2) Of the amounts noted, Mr. Musk has not accepted his salary in the amounts of \$23,760, \$56,380, and \$49,920 for 2019, 2018, and 2017, respectively.
- (3) Reflects the applicable minimum wage requirements under California law for part of 2019. Commencing in May 2019 at Mr. Musk's request, we eliminated altogether the earning and accrual of this base salary.
- (4) Reflects the exercise of a vested stock option award as to which Mr. Musk paid the exercise price in cash. None of the shares received upon exercise have been sold, and therefore this amount has not been received by Mr. Musk.
- Includes \$2,283,988,504 attributed to the 2018 CEO Performance Award, which is intended to compensate Mr. Musk over its 10-year maximum term and will become vested as to all shares subject to it only if our market capitalization increases to \$650.0 billion and 12 of 16 total operational milestones are achieved during such 10-year period. Each tranche of 1/12th of the total number of shares subject to the option becomes vested and exercisable each time: (i) our market capitalization increases initially to \$100.0 billion for the first tranche, and by an additional \$50.0 billion for each tranche thereafter; and (ii) one of 16 specified operational milestones relating to total revenue or adjusted EBITDA (other than any operating milestone that previously counted towards the vesting of another tranche) is attained, subject to Mr. Musk's continued service to us as either CEO, or as both Executive Chairman and Chief Product Officer with the CEO reporting to him, at each such vesting event. This award was designed to be entirely an incentive for future performance that would take many years, if at all, to be achieved. Further, each of the requirements underlying the performance milestones was selected to be very difficult to achieve. If any options have not vested by the end of the term of the option award, they will be forfeited and Mr. Musk will not realize the value of such options. As of the date of this filing, three operational milestones and two market capitalization milestones have been achieved, of which two operational milestones and two market capitalization milestones have also been certified by our Board of Directors, Consequently, two of the 12 tranches under the 2018 CEO Performance Award have vested and become exercisable as of the date of this filing, subject to Mr. Musk's payment of the exercise price of \$350.02 per share and the minimum five-year holding period generally applicable to any shares he acquires upon exercise. See "Executive Compensation—Compensation Discussion and Analysis—Chief Executive Officer Compensation—2018 CEO Performance Award" above.

Tax and Accounting Considerations

Sections 280G and 409A. We have not provided or committed to provide any executive officer or director with a gross-up or other reimbursement for tax amounts the executive might pay pursuant to Section 280G or Section 409A of the Code. Section 280G and related Code sections provide that executive officers, directors who hold significant stockholder interests and certain other service providers could be subject to significant additional taxes if they receive payments or benefits in connection with a change in control of Tesla that exceeds certain limits, and that we or our successor could lose a deduction on the amounts subject to the additional tax. Section 409A also imposes additional significant taxes on the individual in the event that an executive officer, director or service provider of certain types receives "deferred compensation" that does not meet the requirements of Section 409A.

Tax Deduction Limit. Section 162(m) of the Code generally disallows a tax deduction to public corporations for compensation greater than \$1,000,000 paid in any fiscal year to certain executive officers. However, prior to the enactment of U.S. tax legislation in December 2017 (the "Tax Act"), certain types of performance-based compensation were excluded from the \$1,000,000 deduction limit if specific requirements were met. Under the Tax Act, this exclusion for performance-based compensation is not available with respect to taxable years beginning after December 31, 2017, unless the compensation is pursuant to a written binding contract which was in effect on or before November 2, 2017, and which is not modified in any material respect on or after such date. Pursuant to the Tax Act, for taxable years beginning after December 31, 2017, Section 162(m) of the Code was expanded to cover additional executive officers and other employees, including the chief financial officer, so that the compensation of the chief executive officer and chief financial officer (at any time during the fiscal year), the three next most highly compensated executive officers during the taxable year and any other individual who was considered a "covered employee" for any prior taxable year that begins after 2016, will be subject to the \$1,000,000 deductibility limit under Section 162(m) of the Code. Commencing with our 2018 fiscal year, to the extent that the aggregate amount of any covered officer's salary, bonus, any amount realized from certain option exercises and vesting of restricted stock units or other equity awards, and certain other compensation amounts that are recognized as taxable income by the officer exceeds \$1,000,000, we will not be entitled to a U.S. federal income tax deduction for the amount over \$1,000,000 in that year, unless the compensation qualifies for the transition relief applicable to certain written binding contracts in effect on or before November 2, 2017. The Compensation Committee has not adopted a formal policy regarding tax deductibility of compensation paid to our executive officers.

Accounting Implications. We follow ASC Topic 718 for our stock-based compensation awards. ASC Topic 718 requires companies to measure the compensation expense for all stock-based compensation awards made to employees and directors based on the grant date "fair value" of these awards. This calculation is performed for accounting purposes and reported in the compensation tables below, even though our named executive officers may never realize any value from their awards. ASC Topic 718 also requires companies to recognize the compensation cost of their stock-based compensation awards in their income statements over the period that an executive officer is required to render service in exchange for the option or other award.

Compensation Committee Report

The Compensation Committee oversees Tesla's compensation programs, policies and practices. The Compensation Committee has reviewed and discussed the Compensation Discussion and Analysis required by Item 402(b) of Regulation S-K with management. Based on such review and discussions, the Compensation Committee has recommended to the Board that the Compensation Discussion and Analysis be included in this proxy statement.

Respectfully submitted by the members of the Compensation Committee of the Board

Ira Ehrenpreis (Chair) Robyn Denholm Kathleen Wilson-Thompson

Summary Compensation Table

The following table presents information concerning the total compensation of our named executive officers for each of the last three fiscal years. No disclosure is provided for fiscal years for which those persons were not named executive officers.

Name and Principal Position	Year	Salary (\$)	Bonus (\$)	Stock Awards (\$)(1)	Option Awards (\$)(2)	Incentive Plan Compensation (\$)	All Other Compensation (\$)	Total (\$)
Elon Musk	2019	23,760(3)						23,760
Chief Executive Officer	2018	56,380	_	_	2,283,988,504 (4)		_	2,284,044,884
	2017	49,920	_	_	· · · · · · · · · · · · · · · · · · ·	_	_	49,920
Zachary Kirkhorn	2019	276,058	_	5,019,998	15,947,901	_	_	21,243,957
Chief Financial Officer								
Jerome Guillen	2019	301,154	_	_	7,965,058	_	_	8,266,212
President, Automotive	2018	301,154	_	_	17,450,897	_	_	17,752,051
Andrew Baglino	2019	301,154	_	_	4,779,080	_	_	5,080,234
SVP, Powertrain and Energy Engineering								
Deepak Ahuja (5)	2019	176,870	_	_	_	_	_	176,870
Former Chief Financial	2018	501,923	_	_	5,708,430	_	_	6,210,353
Officer	2017	428,846	_	10,501,859	4,567,304	_	_	15,498,009

Non-Fauity

- (1) This column reflects the grant date fair value computed in accordance with ASC Topic 718 of the restricted stock unit awards granted to the named executive officers, which is measured on the grant date based on the closing fair market value of our common stock. These amounts do not necessarily correspond to the actual value that may be recognized by the named executive officers, which depends, among other things, on the market value of our common stock.
- (2) This column reflects the aggregate grant date fair value computed in accordance with ASC Topic 718 of the options to purchase shares of our common stock granted to the named executive officers. The assumptions used in the valuation of these awards are set forth in the notes to our consolidated financial statements, which are included in our Annual Report on Form 10-K for the year ended December 31, 2019, filed with the SEC on February 13, 2020. These amounts do not necessarily correspond to the actual value that may be recognized by the named executive officers, which depends, among other things, on the market value of our common stock appreciating from that on the grant date(s) of the option(s).
- (3) Reflects the applicable minimum wage requirements under California law for part of 2019. Commencing in May 2019 at Mr. Musk's request, we eliminated altogether the earning and accrual of this base salary.
- Reflects the 2018 CEO Performance Award, which is intended to compensate Mr. Musk over its 10-year maximum term and will become vested as to all shares subject to it only if our market capitalization increases to \$650.0 billion and 12 of 16 total operational milestones are achieved during such 10-year period. Each tranche of 1/12th of the total number of shares subject to the option will become vested and exercisable each time: (i) our market capitalization increases initially to \$100.0 billion for the first tranche, and by an additional \$50.0 billion for each tranche thereafter; and (ii) one of 16 specified operational milestones relating to total revenue or adjusted EBITDA (other than any operating milestone that previously counted towards the vesting of another tranche) is attained, subject to Mr. Musk's continued service to us as either CEO, or as both Executive Chairman and Chief Product Officer with the CEO reporting to him, at each such vesting event. This award was designed to be entirely an incentive for future performance that would take many years, if at all, to be achieved. Further, each of the requirements underlying the performance milestones was selected to be very difficult to achieve. If any options have not vested by the end of the term of the option award, they will be forfeited and Mr. Musk will not realize the value of such options. As of the date of this filing, three operational milestones and two market capitalization milestones have been achieved, of which two operational milestones and two market capitalization milestones have also been certified by our Board of Directors. Consequently, two of the 12 tranches under the 2018 CEO Performance Award have vested and become exercisable as of the date of this filing, subject to Mr. Musk's payment of the exercise price of \$350.02 per share and the minimum five-year holding period generally applicable to any shares he acquires upon exercise. See "Executive Compensation—Compensation Discussion and Analysis—Chief Executive Officer Compensation—2018 CEO Performance Award" and "Executive Compensation—Compensation Discussion and Analysis—Chief Executive Officer Compensation—Realized Compensation" above.
- (5) Mr. Ahuja transitioned from his role as Chief Financial Officer effective March 2019.

Pay Ratio Disclosure

Tesla is committed to fair and competitive compensation for our employees. Moreover, Elon Musk, our Chief Executive Officer, has agreed to a compensation arrangement in the 2018 CEO Performance Award that is substantially tied to the appreciation of our market capitalization. Because equity awards are available to all Tesla employees, this also means that Mr. Musk's compensation is tied to the success of Tesla employees. We are providing a ratio of (i) Mr. Musk's 2019 annual total compensation to (ii) the median of the 2019 annual total compensation of all applicable qualifying Tesla employees other than Mr. Musk, as if all of such employees were named executive officers, in each case calculated pursuant to the disclosure requirements of "Executive Compensation—Summary Compensation Table" above.

Mr. Musk's 2019 annual total compensation, as reported in "*Executive Compensation—Summary Compensation Table*," was \$23,760, and the median 2019 annual total compensation of all other qualifying employees, as determined pursuant to the methodology set forth below, was \$58,455. Consequently, the applicable ratio of such amounts for 2019 was 0.41:1.

Our methodology for identifying the median of the 2019 annual total compensation for each individual other than Mr. Musk was as follows:

- We determined that as of December 31, 2019, Tesla and all of our subsidiaries had 44,452 individuals qualifying for this analysis (full-time, part-time and temporary employees other than Mr. Musk, subject to the following bullet), of which approximately 27% were based outside of the U.S. and approximately 33% were production line employees.
- We did not include in the population of qualifying individuals any employees of staffing agencies whose compensation is determined by such agencies.
- We applied the requirements and assumptions required for the table in "Executive Compensation— Summary Compensation Table" for each of such individuals as if he or she was a named executive officer to calculate the total annual compensation, including base salary or wages, performance-based commission payments, and equity awards based on their grant date fair values.
- We converted any payment earned or paid in a foreign currency to U.S. dollar using the average of the prevailing conversion rates for the month of December 2019.
- We selected the median of all total annual compensation amounts calculated in accordance with the foregoing.

Grants of Plan-Based Awards in 2019

The following table presents information concerning each grant of an award made to a named executive officer in fiscal 2019 under any plan.

			d Future Payout ty Incentive Plar		All Other Stock Awards: Number of Shares of	All Other Option Awards: Number of Securities	Exercise or Base Price of Option	Grant Date Fair Value of Stock
Name	Grant Date(1)	Threshold	Target	Maximum	Stocks or Units (#)	Underlying Options(#)	Awards (\$/Sh)	and Option Awards (\$)
		(\$)	(\$)	(\$)	Units (#)	,		
Zachary J. Kirkhorn	1/22/2019(2)	_	_	_	_	10,886	298.92	1,452,638
	1/22/2019(2)	_	_	_	3,629	_	_	1,084,781
	4/19/2019(3)		_		_	129,609	273.26	14,495,263
	4/19/2019(3)	_	_	_	14,401	_	_	3,935,217
Jerome Guillen	7/19/2019(2)	_	_	_	_	70,186	258.18	7,965,058
Andrew Baglino	7/19/2019(2)	_	_	_	_	42,112	258.18	4,779,080

⁽¹⁾ The vesting schedule applicable to each outstanding award is set forth in "Executive Compensation— Outstanding Equity Awards at 2019 Fiscal Year-End" below.

⁽²⁾ This award was granted as part of Tesla's ongoing executive compensation review and alignment process.

⁽³⁾ This award was granted in connection with Mr. Kirkhorn's promotion to Chief Financial Officer.

Outstanding Equity Awards at 2019 Fiscal Year-End

The following table presents information concerning unexercised options and unvested restricted stock unit awards for each named executive officer outstanding as of the end of fiscal 2019.

			Option Award	ls			Stoo	ek Awards
Name	Grant Date	Number of Securities Underlying Unexercised Options (#) Exercisable	Number of Securities Underlying Unexercised Options (#) Unexercisable	Equity Incentive Plan Awards: Number of Securities Underlying Unexercised Unearned Options (#)	Option Exercise Price (\$)	Option Expiration Date	Number of Shares or Units of Stock That Have Not Vested (#)	Market Value of Shares or Units of Stock That Have Not Vested (\$\((\) \)(1)
Elon Musk	3/21/2018(2)			20,264,042	350.02	1/19/2028		(5)(1)
	6/10/2013(3)	350			100.05	6/10/2023	_	_
	4/8/2013(3)	350	_	_	41.83	4/8/2023	_	_
	8/13/2012(4)	4,572,410	_	527,491	31.17	8/13/2022	_	_
Zachary J. Kirkhorn	4/19/2019(5)	24,302	105,307	´ —	273.26	4/19/2029	_	_
,	4/19/2019(6)	´—	´—	_	_	_	12,600	5,270,958
	1/22/2019(7)	2,177	8,709	_	298.92	1/22/2029	´ —	· · · —
	1/22/2019(8)	´—	´—	_	_	_	2,904	1,214,830
	10/16/2018(9)	603	1,982	_	276.59	10/16/2028	´ —	· · · —
	10/16/2018(8)	_	· —	_	_	_	690	288,648
	11/13/2017(10)	_	_	_	_	_	437	182,810
	5/8/2017(11)	_	_	_	_	_	431	180,300
	9/12/2016(12)	_	_	_	_	_	220	92,033
	5/9/2016(13)	_	_	_	_	_	155	64,841
	1/10/2011(14)	2,000	_	_	28.45	1/10/2021	_	_
Jerome Guillen	7/19/2019(15)	7,019	63,167	_	258.18	7/19/2029	_	_
	10/16/2018(16)	24,125	79,270	_	276.59	10/16/2028	_	_
	2/12/2018(17)	16,500	28,500	_	315.73	2/12/2028	_	_
	10/9/2017(18)	3,873	_	7,748	342.94	10/9/2027	_	_
	8/14/2017(14)	5,322	3,802	_	363.80	8/13/2027	_	_
	4/10/2017(11)	_	_		_	_	1,453	607,833
	6/13/2016(19)	6,823	_	20,470	217.87	6/13/2026	_	_
	6/13/2016(13)	_	_	_	_	_	569	238,030
	1/13/2014(20)	6,500	_	13,750	139.34	1/13/2024	_	_
Andrew Baglino	7/19/2019(21)	4,211	37,901	_	258.18	7/19/2029	_	_
	10/16/2018(9)	2,412	7,928	_	276.59	10/16/2028	_	_
	10/16/2018(8)	_	_	_	_	_	2,758	1,153,754
	3/19/2018(22)	5,500	9,500	_	313.56	3/19/2028	_	
	2/20/2018(23)			_			1,662	695,264
	1/11/2016(14)	7,762	552	_	207.85	1/11/2026		
	1/11/2016(24)		_				552	230,918
D 1 41 : (25)	11/10/2014(20)	4,518	_	2,500	241.93	11/10/2024	_	_
Deepak Ahuja(25)	_	_	_		_	_	_	_

⁽¹⁾ The market value of unvested restricted stock units is calculated by multiplying the number of unvested restricted stock units held by the applicable named executive officer by the closing price of our common stock on December 31, 2019, which was \$418.33.

^{(2) 1/12}th of the total number of shares subject to the option becomes vested and exercisable each time: (i) our market capitalization increases initially to \$100.0 billion for the first tranche, and by an additional \$50.0 billion for each tranche thereafter; and (ii) one of 16 specified operational milestones relating to total revenue or adjusted EBITDA (other than any operating milestone that previously counted towards the vesting of another tranche) is attained, subject to Mr. Musk's continued service to us as either CEO, or as both Executive Chairman and Chief Product Officer with the CEO reporting to him, at each such vesting event. See "Executive Compensation—Compensation Discussion and Analysis—Chief Executive Officer Compensation—2018 CEO Performance Award" above.

⁽³⁾ Stock option awards granted as part of our company-wide patent incentive program. The total number of shares subject to the option was vested and exercisable on the applicable grant date of the option.

- (4) 1/10th of the total number of shares subject to the option became and will become vested and exercisable each time: (i) our market capitalization increases by \$4.0 billion above the initially measured market capitalization of \$3.2 billion; and (ii) one of 10 specified performance milestones relating to the development of our Model X and Model 3 vehicles and our total production of vehicles is attained, subject to Mr. Musk's continued service to us at each such vesting event. If any shares have not vested by the end of the term of the option, they will be forfeited and Mr. Musk will not realize the value of such shares. As of the date of this filing, 10 market capitalization milestones and nine performance milestones have been achieved. See "Executive Compensation—Compensation Discussion and Analysis—Chief Executive Officer Compensation—Historical Equity Compensation" above.
- (5) 1/8th of the shares subject to the option became vested and exercisable on September 13, 2019, and 1/48th of the shares subject to the option become vested and exercisable each month thereafter, subject to the grantee's continued service to us on each such vesting date.
- (6) 1/8th of this award became vested on December 5, 2019, and 1/16th of this award becomes vested every three months thereafter, subject to the grantee's continued service to us on each such vesting date.
- (7) 1/60th of the shares subject to the option became vested and exercisable on January 5, 2019, and 1/60th of the shares subject to the option become vested and exercisable each month thereafter, subject to the grantee's continued service to us on each such vesting date.
- (8) 1/20th of this award vested on March 5, 2019, and 1/20th of this award vests every three months thereafter, subject to the grantee's continued service to us on each such vesting date.
- (9) 1/60th of the shares subject to the option became vested and exercisable on November 1, 2018, and 1/60th of the shares subject to the option become vested and exercisable each month thereafter, subject to the grantee's continued service to us on each such vesting date.
- (10) 1/16th of this award vested on December 5, 2017, and 1/16th of this award vests every three months thereafter, subject to the grantee's continued service to us on each such vesting date.
- (11) 1/16th of this award vested on September 5, 2017, and 1/16th of this award vests every three months thereafter, subject to the grantee's continued service to us on each such vesting date.
- (12) 1/16th of this award vested on December 5, 2016, and 1/16th of this award vests every three months thereafter, subject to the grantee's continued service to us on each such vesting date.
- (13) 1/16th of this award vested on September 5, 2016, and 1/16th of this award vests every three months thereafter, subject to the grantee's continued service to us on each such vesting date.
- (14) 1/48th of the shares subject to the option vested or shall vest monthly starting on the one-month anniversary of the applicable grant date, subject to the grantee's continued service to us on each such vesting date.
- (15) 1/10th of the shares subject to the option became vested and exercisable on December 24, 2019, and 1/60th of the shares subject to the option become vested and exercisable each month thereafter, subject to the grantee's continued service to us on each such vesting date.
- (16) 1/10th of the shares subject to the option became vested and exercisable on April 1, 2019, and 1/60th of the shares subject to the option become vested and exercisable every month thereafter, subject to the grantee's continued service to us on each such vesting date.
- (17) 1/60th of the shares subject to the option became vested and exercisable on March 12, 2018, and 1/60th of the shares subject to the option become vested and exercisable each month thereafter, subject to the grantee's continued service to us on each such vesting date.
- (18) 1/3rd of the shares subject to the option became or will become vested and exercisable upon the achievement, as determined by the Board, of each of three specified performance goals relating to weekly or cumulative deliveries of certain of our current and future vehicles, subject to the grantee's continued service to us on each such vesting date.
- (19) 1/4th of the shares subject to the option became or will become vested and exercisable upon the achievement, as determined by the Board, of each of four specified performance goals relating to the development, cumulative deliveries, and cumulative revenues for certain of our vehicles, subject to the grantee's continued service to us on each such vesting date
- (20) 1/4th of the shares subject to the option became vested and exercisable upon each of the following, as determined by the Board: (i) the completion of the first Model X production vehicle; (ii) aggregate vehicle production of 100,000 vehicles in a trailing 12-month period; and (iii) completion of the first Model 3 production vehicle. 1/4 of the shares subject to this option will become vested and exercisable upon the determination by the Board that annualized gross margin of greater than 30.0% in any three years is achieved, subject to the grantee's continued service to us on each such vesting date.

- (21) 1/60th of the total shares subject to the option became vested and exercisable on July 24, 2019, and 1/60th of the shares subject to the option become vested and exercisable every month thereafter, subject to the grantee's continued service to us on each such vesting date.
- (22) 1/60th of the shares subject to the option became vested and exercisable on March 27, 2018, and 1/60th of the shares subject to the option become vested and exercisable each month thereafter, subject to the grantee's continued service to us on each such vesting date.
- (23) 1/16th of this award vested on June 5, 2018, and 1/16th of this award vests every three months thereafter, subject to the grantee's continued service to us on each such vesting date.
- (24) 1/16th of this award vested on June 5, 2016, and 1/16th of this award vests every three months thereafter, subject to the grantee's continued service to us on each such vesting date.
- (25) Mr. Ahuja transitioned from his role as Chief Financial Officer effective March 2019.

2019 Option Exercises and Stock Vested

The following table presents information concerning each exercise of stock options and vesting of stock awards during fiscal 2019 for each of the named executive officers.

	Option .	Awards	Stock Awards			
<u>Name</u>	Number of Shares Acquired on Exercise (#)	Value Realized on Exercise (\$)(1)	Number of Shares Acquired on Vesting (#)	Value Realized on Vesting (\$)(2)		
Elon Musk	175,000	30,483,250(3)		_		
Zachary Kirkhorn	_	<u> </u>	2,311	763,485		
	_		510	117,086		
	_			99,868		
			508			
	_		540	149,332		
Jerome Guillen	1,000	166,760	_	_		
	1,000	166,080	_	_		
	1,000	167,410	_	_		
	8,000	1,325,280	_	_		
	2,000	353,960	_	_		
	2,000	380,120	_	_		
	_		526	173,775		
	_		527	120,989		
	_		527	103,603		
	_		526	145,460		
Andrew Baglino	2,000	210,349	_	_		
	_	_	909	300,306		
	_		909	208,688		
	_	_	908	178,504		
	_	_	909	251,375		
Deepak Ahuja (4)	_	_	2,667	737,532		

⁽¹⁾ Reflects the product of the number of shares of stock subject to the exercised option multiplied by the difference between the market price of our common stock at the time of exercise on the exercise date and the exercise price of the option.

- (2) Reflects the product of the number of shares of stock vested multiplied by the market price of our common stock on the vesting date.
- (3) None of the shares received upon exercise have been sold, and therefore this amount has not been received by Mr. Musk. See "Executive Compensation—Compensation Discussion and Analysis—Chief Executive Officer Compensation—Realized Compensation" above.
- (4) Mr. Ahuja transitioned from his role as Chief Financial Officer effective March 2019.

Potential Payments Upon Termination or Change in Control

We do not have an employment agreement for any specific term with any of our named executive officers. Moreover, we do not have any contract, agreement, plan or arrangement that would result in payments to a named executive officer at, following, or in connection with any termination of employment, including resignation, severance, retirement or a constructive termination of employment of a named executive officer, or a change in control of Tesla (other than the vesting of the 2018 CEO Performance Award based solely upon the achievement of market capitalization milestones as measured at the time of a change in control of Tesla, which by its nature cannot be estimated at this time) or a change in the named executive officer's responsibilities. See also "Executive Compensation—Compensation Discussion and Analysis—Chief Executive Officer Compensation—2018 CEO Performance Award" above.

Compensation of Directors

2019 Director Compensation Table

The following table provides information concerning the compensation paid by us to each of our non-employee directors who served during any part of fiscal year 2019. Elon Musk, who is our Chief Executive Officer, does not receive additional compensation for his services as a director.

The awards with respect to which values are provided under the column "Option Awards" below are exclusively stock options, which have realizable value only if they actually vest over time and to the extent, if any, that our stock price exceeds the applicable exercise prices. The values provided below for these awards are based on applicable accounting standards, and do not necessarily reflect the actual amounts realized or realizable pursuant to the underlying stock options.

Name	Fees Earned or Paid in Cash (\$)	Option Awards (\$)(1)(2)(3)	All Other Compensation	Total (\$)
Robyn Denholm	191,257(4)	2,524,440(4)	27,982(5)	2,743,679
Ira Ehrenpreis	37,500	_	_	37,500
Lawrence J. Ellison	20,000	5,848,976	_	5,868,976
Antonio Gracias	25,240	_	_	25,240
Stephen Jurvetson	19,265	1,184,605	_	1,203,870
James Murdoch	32,500	_	_	32,500
Kimbal Musk	20,000	_		20,000
Kathleen Wilson-Thompson	27,005	7,329,733	_	7,356,738
Brad Buss(6)	15,310	_	_	15,310
Linda Johnson Rice(6)	11,196	_	_	11,196

⁽¹⁾ As of December 31, 2019, the aggregate number of shares underlying option awards outstanding for each of our non-employee directors with such awards was:

	Aggregate Number of Shares Underlying
<u>Name</u>	Options Outstanding .
Robyn Denholm	206,165
Ira Ehrenpreis	148,000
Lawrence J. Ellison	58,334
Antonio Gracias	202,000
Stephen Jurvetson	12,000
James Murdoch	84,668
Kimbal Musk	50,000
Kathleen Wilson-Thompson	73,334

(2) Reflects the aggregate grant date fair value computed in accordance with ASC Topic 718. The assumptions used in the valuation of option awards are set forth in the notes to our consolidated financial statements, which are included in our Annual Report on Form 10-K for the year ended December 31, 2019, filed with the SEC on February 13, 2020. These amounts do not necessarily correspond to the actual value that may be recognized by our non-employee directors, which depends, among other things, on the market value of our common stock appreciating from that on the grant date(s) of the option(s). Following vesting, the actual receipt of any shares by each recipient will further be subject to his payment of the applicable exercise price.

- (3) Reflects stock option grants for service on the Board or as members or chairs of Board committees that were automatically granted pursuant to our non-employee director compensation policy. Prior to February 2020, such stock options were generally granted automatically once every three years, and such awards vest monthly over three years, subject to continued service. See "Executive Compensation—Compensation of Directors—Non-Employee Director Compensation Arrangements" below for more detail.
- (4) Reflects compensation for service as Chair of the Board, including a cash retainer and an automatic stock option grant, approved by the Board. See "Executive Compensation—Compensation of Directors—Non-Employee Director Compensation Arrangements" below for more detail.
- (5) Consists of reimbursements for out-of-pocket travel expenses incurred in connection with Board service, including attendance at Board or Board committee meetings.
- (6) Board term ended in June 2019 without standing for re-election at the 2019 annual meeting of stockholders.

Non-Employee Director Compensation Arrangements

Overview and Philosophy

Our director compensation policy that is applicable to all of Tesla's non-employee directors is designed to be consistent with our compensation philosophy for our employees, with an emphasis on equity-based compensation over cash in order to align the value of their compensation with the market value of our stock, and consequently, with the long-term interests of our stockholders. Moreover, while we offer to our employees restricted stock units, which tend to retain some value even if the market value of our stock decreases, the equity-based compensation to our directors is exclusively in the form of stock options, which have value only to the extent, if any, that our stock price increases following their grant. Conversely, fluctuating stock prices have at times resulted in 100% of the vested stock options then held by each of our non-employee directors being out-of-the-money. Consequently, a large portion of our non-employee directors' compensation is entirely at risk.

Outside Director Compensation Policy

Our current director compensation policy provides that each non-employee director will receive the following compensation for Board and Board committee services, as applicable. Historically, automatically granted stock option awards for such services were made only once every three years, vesting in equal monthly tranches over such period. In February 2020, the Board amended the director compensation policy with prospective effectiveness, such that future stock option awards to purchase one-third of the previously applicable numbers of shares will be automatically granted annually, in lieu of such triennial grants.

- an annual cash retainer for general Board service of \$20,000;
- no cash awards for attendance of general Board meetings;
- an annual cash retainer for serving as the chair of the Audit Committee of \$15,000, for serving as the chair of the Compensation Committee of \$10,000 and for serving as the chair of the Nominating and Corporate Governance Committee of \$7,500;
- an annual cash retainer for serving on the Audit Committee of \$7,500 per member, for serving on the Compensation Committee of \$5,000 per member, and for serving on the Nominating and Corporate Governance Committee of \$5,000 per member;
- upon first joining the Board, an automatic initial grant of a stock option to purchase a number of shares of our common stock equal to 1,389 multiplied by the number of months (rounded up to a whole number) between the date on which such director joined the Board and the first June 18 following such date (the "<u>Initial Annual Award Grant Date</u>"), vesting 100% on the Initial Annual Award Grant Date (subject to continued service through such date);
- (i) on the Initial Annual Award Grant Date, or for a director who was previously granted an outstanding stock option for Board service to purchase 50,000 shares of our common stock vesting monthly over three years, the date on which such award fully vests, and (ii) in either case every year thereafter, an automatic grant of a stock option to purchase 16,668 shares of our common stock;

- for serving as the lead independent director, (i) shortly following appointment as the lead independent director, or for a director who was previously granted an outstanding stock option for such service to purchase 24,000 shares of our common stock vesting monthly over three years, the date on which such award fully vests, and (ii) in either case every year thereafter, an automatic grant of a stock option to purchase 8,000 shares of our common stock;
- for serving as a member of the Audit Committee, the Compensation Committee or the Nominating and Corporate Governance Committee, (i) shortly following appointment as a member of such Committee, or for a director who was previously granted an outstanding stock option for such service to purchase 12,000 shares, 9,000 shares, or 6,000 shares, respectively, of our common stock vesting monthly over three years, the date on which such award fully vests, and (ii) in either case every year thereafter, an automatic grant of a stock option to purchase 4,000 shares, 3,000 shares, or 2,000 shares, respectively, of our common stock; and
- in addition to any applicable grant in the immediately preceding bullet, for serving as the chair of the Audit Committee, the Compensation Committee or the Nominating and Corporate Governance Committee, (i) shortly following appointment as the chair of such Committee, or for a director who was previously granted an outstanding stock option for such service to purchase 12,000 shares, 6,000 shares, or 3,000 shares, respectively, of our common stock vesting monthly over three years, the date on which such award fully vests, and (ii) in either case every year thereafter, an automatic grant of a stock option to purchase 4,000 shares, 2,000 shares, or 1,000 shares, respectively, of our common stock.

Unless noted above, each automatic stock option grant for service as a member of the Board, lead independent director, member of a Board committee or chair of a Board committee, in each case as described above, will vest in equal monthly tranches for over one year (or, for awards granted prior to the amendment of the director compensation policy in February 2020, over three years) starting on the one month anniversary of the vesting commencement date, subject to continued service in the capacity for which such grant was made (except that if a director who was granted such an option ceases to be a director on the day before an annual meeting that is held earlier than the anniversary date of the vesting commencement date for that calendar year, vesting will accelerate with respect to the shares that would have vested if such director continued service through such anniversary date).

Chair of the Board Compensation

In addition, the Board previously approved the following additional compensation arrangements for Robyn Denholm for her service as Chair of the Board, commencing on July 1, 2019:

- an annual cash retainer of \$300,000; and
- an automatic annual grant of a stock option to purchase 8,000 shares of our common stock, which will vest 1/12th per month for 12 months starting on the one month anniversary of the vesting commencement date, subject to Ms. Denholm's continued service as Chair of the Board (except that if Ms. Denholm ceases to be a director on the day before an annual meeting that is held earlier than the anniversary date of the vesting commencement date, vesting will accelerate with respect to the shares that would have vested if she had continued service through such anniversary date).

From July 2020, Ms. Denholm requested that Tesla eliminate the future payment to her of all cash retainer amounts for service on the Board, as its Chair and on the various committees of the Board, citing a desire in her Board leadership role to have 100% of her compensation at risk and aligned with the interests of stockholders. Moreover, in consideration of the significant impact on travel and other circumstances resulting from the global COVID-19 pandemic, Ms. Denholm also requested that the grant of her automatic annual stock option award in 2020 for service as Chair of the Board be deferred until after the 2020 Annual Meeting.

Other Information

If, following a change in control of Tesla, the service of a non-employee director is terminated, all stock options granted to the director pursuant to the compensation policy shall fully vest and become immediately exercisable.

Non-employee directors may also have their travel, lodging and related expenses associated with attending Board or Board committee meetings reimbursed by Tesla.

Equity Compensation Plan Information

The following table summarizes the number of securities underlying outstanding options, stock awards, warrants and rights granted to employees and directors, as well as the number of securities remaining available for future issuance, under Tesla's equity compensation awards as of December 31, 2019.

Plan category	(a) Number of securities to be issued upon exercise of outstanding options, warrants and rights (#)(1)	(b) Weighted-average exercise price of outstanding options, warrants and rights (\$)(2)	(c) Number of securities remaining available for future issuance under equity compensation plans (excluding securities reflected in column (a)) (#)
Equity compensation plans approved by security holders	34,689,313	279.20	18,663,018(3)
security holders	111,796(4)	375.68	
Total	34,801,109	279.49	18,663,018

⁽¹⁾ Consists of options to purchase shares of our common stock, including the 2018 CEO Performance Award, and restricted stock unit awards representing the right to acquire shares of our common stock.

⁽²⁾ The weighted average exercise price is calculated based solely on the outstanding stock options. It does not take into account the shares issuable upon vesting of outstanding restricted stock unit awards, which have no exercise price.

⁽³⁾ Consists of 11,441,597 shares remaining available for issuance under the 2019 Plan, and 7,221,421 shares remaining available for issuance under the Tesla, Inc, 2019 Employee Stock Purchase Plan.

⁽⁴⁾ Consists of outstanding stock options and restricted stock unit awards that were assumed in connection with acquisitions. No additional awards may be granted under the plans pursuant to which such awards were initially granted.

CERTAIN RELATIONSHIPS AND RELATED PARTY TRANSACTIONS

Review of Related Party Transactions

In accordance with the charter for the Audit Committee of the Board, our Audit Committee reviews and approves in advance any proposed related person transactions.

For purposes of these procedures, "<u>related person</u>" and "<u>transaction</u>" have the meanings contained in Item 404 of Regulation S-K.

The individuals and entities that are considered "related persons" include:

- Directors, nominees for director and executive officers of Tesla;
- Any person known to be the beneficial owner of five percent or more of Tesla's common stock (a "<u>5%</u> <u>Stockholder</u>"); and
- Any immediate family member, as defined in Item 404(a) of Regulation S-K, of a director, nominee for director, executive officer or 5% Stockholder.

In accordance with our Related Person Transactions Policy and Procedures, the Audit Committee must review and approve all transactions in which (i) Tesla or one of its subsidiaries is a participant, (ii) the amount involved exceeds \$120,000 and (iii) a related person has a direct or indirect material interest, other than transactions available to all Tesla employees generally.

In assessing a related party transaction brought before it for approval the Audit Committee considers, among other factors it deems appropriate, whether the related party transaction is on terms no less favorable than terms generally available to an unaffiliated third-party under the same or similar circumstances and the extent of the related person's interest in the transaction. The Audit Committee may then approve or disapprove the transaction in its discretion.

Any related person transaction will be disclosed in the applicable SEC filing as required by the rules of the SEC.

Related Party Transactions

SpaceX

Elon Musk is the Chief Executive Officer, Chief Technical Officer and a significant stockholder of SpaceX. Kimbal Musk, Antonio Gracias, and Stephen Jurvetson, who are members of the Board, are also members of the board of directors of SpaceX. In addition, certain members of the Board, and/or investment funds affiliated with them, have made minority investments in SpaceX.

SpaceX purchased certain battery components from Tesla at an aggregate purchase price of \$1.0 million in 2019, and at an aggregate purchase price of \$1.2 million in 2020 through June. The pricing for such components was negotiated in good faith.

SpaceX has purchased certain non-battery vehicle parts from Tesla from time to time from a standard parts catalog that is also available to other business partners. Such parts are offered to all buyers, including SpaceX, at uniform prices. SpaceX purchased an aggregate \$0.6 million of such parts in 2019 and an aggregate \$0.7 million of such parts in 2020 through June.

In 2020, Tesla agreed to build a custom tool for SpaceX at its tool machining facility at an estimated cost of \$0.7 million. The pricing for such project, including labor hours, was negotiated in good faith, and such work will take place during previously scheduled downtime at Tesla's facility.

In 2020, Tesla agreed to build and sell a specified quantity of custom machine parts to SpaceX and provide related engineering and manufacturing support, at an estimated cost of \$0.4 million. The pricing for this project was negotiated in good faith.

In 2020, Tesla agreed to temporarily assign up to 20 of its employees to support SpaceX on certain technical matters, for which SpaceX will pay Tesla up to an estimated \$0.1 million, dependent upon the number of employees actually assigned.

In 2020 and 2019, SpaceX purchased certain Tesla Energy equipment and services from Tesla for \$1.1 million and \$0.3 million, respectively, through standard sales processes. The prices were negotiated in good faith.

Since April 2016, SpaceX has invoiced Tesla for our use of an aircraft owned and operated by SpaceX at rates determined by Tesla and SpaceX, subject to rules of the Federal Aviation Administration governing such arrangements. Tesla did not incur any expenses under this arrangement in 2019 and has incurred \$0.2 million in 2020 through June.

Other Transactions

Elon Musk is a co-founder and significant stockholder of The Boring Company, which in 2020 agreed to purchase certain Tesla Energy products for an estimated price of \$0.2 million through standard sales processes. The price was negotiated in good faith.

In the ordinary course of business, we enter into offer letters with our executive officers. We have also entered into indemnification agreements with each of our directors and officers. The indemnification agreements and our certificate of incorporation and bylaws require us to indemnify our directors and officers to the fullest extent permitted by Delaware law. In 2019, Tesla entered into a one-year agreement with Elon Musk relating to the indemnification of directors and officers, as described in "Corporate Governance—Director Independence" above.

In 2020, Tesla entered into a new agreement relating to the indemnification of directors and officers with Elon Musk, for an interim term of 90 days. During the interim term, we are resuming our annual evaluation of all available options for providing directors' and officers' indemnity coverage, which we had suspended during the height of shelter-in-place requirements related to the COVID-19 pandemic. As part of such process, we intend to obtain a binding market quote for a directors' and officers' liability insurance policy with an aggregate coverage limit of \$100 million, which we will weigh in selecting an indemnity coverage option for a customary term following the end of the interim period. The indemnification agreement provides that Mr. Musk will provide, from his personal funds, directors' and officers' indemnity coverage to us during the interim term in the event such coverage is not indemnifiable by us, up to a total of \$100 million. In return, we will pay Mr. Musk a one-time fee of \$972,361. We will also exercise reasonable best efforts to obtain the market quote described above, and will pay an additional amount to Mr. Musk to reconcile the one-time fee to be equal to the market-based premium for such market quote as prorated for 90 days and further discounted by 50%, if the latter amount is greater.

In 2019, our Board member James Murdoch purchased a Tesla Powerpack system from us at a total upfront cost of \$0.6 million through standard sales processes. The price was negotiated in good faith.

In 2020, a company affiliated with our Board member Lawrence J. Ellison entered into an agreement to obtain preliminary design services from us for an estimated \$0.4 million, relating to the potential future implementation of a Tesla Energy system. The services contract was negotiated and priced in good faith.

In February 2020, Messrs. Elon Musk and Ellison 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 \$11.0 million.

DELINQUENT SECTION 16(a) REPORTS

Under Section 16 of the Exchange Act, Tesla's directors, executive officers and any persons holding more than 10% of the Tesla's common stock are required to report initial ownership of the Tesla common stock and any subsequent changes in ownership to the SEC. Specific due dates have been established by the SEC, and Tesla is required to disclose in this proxy statement any failure to file required ownership reports by these dates. Based solely upon a review of forms filed with the SEC and the written representations of such persons, Tesla is aware of no late Section 16(a) filings other than a late Form 4 filed by each of Lawrence J. Ellison and Kathleen Wilson-Thompson reporting an automatic stock option grant in June 2019 for their Board service, due to an administrative delay by Tesla.

OWNERSHIP OF SECURITIES

The following table sets forth certain information regarding the beneficial ownership of Tesla's common stock, as of June 30, 2020, for the following:

- each person (or group of affiliated persons) who is known by us to beneficially own 5% of the outstanding shares of our common stock;
- each of our non-employee directors;
- each of our current executive officers named in the Summary Compensation Table of this updated proxy statement; and
- all current directors and executive officers of Tesla as a group.

In computing the number of shares of common stock beneficially owned by a person and the percentage ownership of that person, we deemed to be outstanding all shares of common stock subject to options or other convertible securities held by that person or entity that are currently exercisable or exercisable within 60 days of June 30, 2020. We did not deem these shares outstanding, however, for the purpose of computing the percentage ownership of any other person. Applicable percentage ownership is based on 186,318,901 shares of Tesla's common stock outstanding at June 30, 2020.

Unless otherwise indicated, all persons named below can be reached at Tesla, Inc., 3500 Deer Creek Road, Palo Alto, California 94304.

	Shares Beneficially	Percentage of Shares Beneficially
Beneficial Owner Name	Owned	Owned
5% Stockholders		
Elon Musk (1)	40,360,377	21.0%
Baillie Gifford & Co. (2)	13,826,979	7.6%
Capital Ventures International (3)	12,134,541	6.7%
Capital World Investors (4)	10,739,283	5.9%
Named Executive Officers & Directors		
Elon Musk (1)	40,360,377	21.0%
Zachary J. Kirkhorn (5)	64,309	*
Jerome Guillen (6)	104,130	*
Andrew Baglino (7)	31,573	*
Robyn Denholm (8)	183,275	*
Ira Ehrenpreis (9)	151,207	*
Lawrence J. Ellison (10)	3,029,028	1.6%
Antonio Gracias (11)	367,823	*
Stephen Jurvetson (12)	57,476	*
Hiromichi Mizuno (13)	2,778	*
James Murdoch (14)	75,596	*
Kimbal Musk (15)	162,884	*
Kathleen Wilson-Thompson (16)	34,804	*
All current executive officers and directors as a group (13 persons) (17)	44,625,260	23.1%

^{*} Represents beneficial ownership of less than 1%.

⁽¹⁾ Includes (i) 34,098,597 shares held of record by the Elon Musk Revocable Trust dated July 22, 2003; and (ii) 6,261,780 shares issuable to Mr. Musk upon exercise of options exercisable within 60 days after June 30, 2020. Includes 18,466,225 shares pledged as available collateral to secure personal indebtedness, subject to our directors' and executive officers' stock pledging policy.

- (2) This information is as of December 31, 2019, based solely on Amendment No. 4 to Schedule 13G of Baillie Gifford & Co. filed on February 3, 2020, which we do not know or have reason to believe is not complete or accurate and on which we are relying pursuant to applicable SEC regulations. Includes shares held by Baillie Gifford & Co. and/or one or more of its investment adviser subsidiaries, which may include Baillie Gifford Overseas Limited, on behalf of investment advisory clients, which may include investment companies registered under the Investment Company Act, employee benefit plans, pension funds or other institutional clients. The address for Baillie Gifford & Co. is Calton Square, 1 Greenside Row, Edinburgh EH1 3AN, Scotland, UK.
- (3) This information is as of December 31, 2019, based solely on Amendment No. 1 to Schedule 13G filed on February 10, 2020 jointly by the Capital Ventures Group, which we do not know or have reason to believe is not complete or accurate and on which we are relying pursuant to applicable SEC regulations. Includes 586,506 shares beneficially owned by Capital Ventures International, 3,823 shares beneficially owned by G1 Execution Services, LLC, 860,175 shares beneficially owned by Susquehanna Investment Group, and 10,684,037 shares beneficially owned by Susquehanna Securities, LLC. Susquehanna Advisors Group, Inc. is the investment manager to Capital Ventures International, and therefore may be deemed to beneficially own the shares owned by Capital Ventures International. G1 Execution Services, LLC, Susquehanna Investment Group and Susquehanna Securities, LLC are affiliated independent broker-dealers which, together with Capital Ventures International and Susquehanna Advisors Group, Inc., may be deemed to be a group (the "Capital Ventures Group"). The address for Capital Ventures International is P.O. Box 897, Windward 1, Regatta Office Park, West Bay Road, Grand Cayman, KY1-1103, Cayman Islands. The address of each of Susquehanna Advisors Group, Inc., Susquehanna Investment Group and Susquehanna Securities, LLC is 401 E. City Ave, Suite 220, Bala Cynwyd, PA 19004. The address of G1 Execution Services, LLC is 175 W. Jackson Blvd., Suite 1700, Chicago, IL 60604.
- (4) This information is as of December 31, 2019, based solely on Amendment No. 1 to Schedule 13G of Capital World Investors filed on February 14, 2020, which we do not know or have reason to believe is not complete or accurate and on which we are relying pursuant to applicable SEC regulations. Includes shares that may be deemed to be beneficially owned by Capital Research and Management Company and Capital International Limited, which collectively provide investment management services under the name Capital World Investors. The address for these entities is 333 South Hope Street, Los Angeles, CA 90071.
- (5) Includes 52,478 shares issuable upon exercise of options exercisable within 60 days after June 30, 2020. Includes 7,100 shares pledged as available collateral to secure personal indebtedness, subject to our directors' and executive officers' stock pledging policy.
- (6) Includes 94,378 shares issuable upon exercise of options exercisable within 60 days after June 30, 2020.
- (7) Includes 27,351 shares issuable upon exercise of options exercisable within 60 days after June 30, 2020.
- (8) Includes 182,275 shares issuable upon exercise of options exercisable within 60 days after June 30, 2020.
- (9) Includes 127,443 shares issuable upon exercise of options exercisable within 60 days after June 30, 2020.
- (10) Includes 27,778 shares issuable upon exercise of options exercisable within 60 days after June 30, 2020.
- (11) Includes (i) 268,857 shares owned by AJG Growth Fund LLC ("Growth Fund"), which are pledged as available collateral to secure personal indebtedness, subject to our directors' and executive officers' stock pledging policy, and (ii) 98,457 shares issuable upon exercise of options exercisable within 60 days of June 30, 2020. Mr. Gracias is the fund manager for Growth Fund. The address for this entity is 875 North Michigan Avenue, Suite 3214, Chicago, IL 60611.
- (12) Includes (i) 52,100 shares held by the Steve Jurvetson TR UA dated January 29, 2019 Future Venture Living Trust, (ii) 43 shares held by Draper Fisher Jurvetson Fund X Partners, L.P., and (iii) 5,333 shares issuable upon exercise of options exercisable within 60 days after June 30, 2020.
- (13) Comprised entirely of shares issuable upon exercise of options exercisable within 60 days after June 30, 2020.
- (14) Includes (i) 10,485 shares held by the JRM Family Trust and (ii) 65,111 shares issuable upon exercise of options exercisable within 60 days after June 30, 2020.
- (15) Includes 32,036 shares issuable upon exercise of options exercisable within 60 days after June 30, 2020. Includes 130,848 shares pledged as available collateral to secure personal indebtedness, subject to our directors' and executive officers' stock pledging policy.
- (16) Includes 34,444 shares issuable upon exercise of options exercisable within 60 days after June 30, 2020.
- (17) Includes 7,011,642 shares issuable upon exercise of options held by our current executive officers and directors within 60 days after June 30, 2020.

AUDIT COMMITTEE REPORT

The Audit Committee assists the Board in fulfilling its responsibilities for oversight of the integrity of Tesla's consolidated financial statements, our internal accounting and financial controls, our compliance with legal and regulatory requirements, the organization and performance of our internal audit function and the qualifications, independence and performance of our independent registered public accounting firm.

The management of Tesla is responsible for establishing and maintaining internal controls and for preparing Tesla's consolidated financial statements. The independent registered public accounting firm is responsible for auditing the financial statements. It is the responsibility of the Audit Committee to oversee these activities.

The Audit Committee has:

- Reviewed and discussed the audited financial statements with Tesla management and with PricewaterhouseCoopers LLP, Tesla's independent registered public accounting firm;
- Discussed with PricewaterhouseCoopers LLP the matters required to be discussed by the applicable requirements of the Public Company Accounting Oversight Board and the SEC; and
- Received the written disclosures and the letter from PricewaterhouseCoopers LLP required by
 applicable requirements of the Public Company Accounting Oversight Board regarding
 PricewaterhouseCoopers LLP's communications with the Audit Committee concerning independence
 and has discussed with PricewaterhouseCoopers LLP their independence.

Based upon these discussions and review, the Audit Committee recommended to the Board that the audited consolidated financial statements be included in Tesla's Annual Report on Form 10-K for the fiscal year ended December 31, 2019 for filing with the United States Securities and Exchange Commission.

Members of the Audit Committee:

Robyn Denholm (Chair) Antonio Gracias Stephen Jurvetson Hiromichi Mizuno* James Murdoch

^{*} Mr. Mizuno was appointed to the Audit Committee on April 23, 2020 and therefore did not participate in the reviews, discussions and recommendations discussed in this report.

OTHER MATTERS

Tesla knows of no other matters to be submitted at the 2020 Annual Meeting. If any other matters properly come before the 2020 Annual Meeting, it is the intention of the persons named in the proxy card to vote the shares they represent as the Board may recommend. Discretionary authority with respect to such other matters is granted by the execution of the proxy, whether through telephonic or Internet voting or, alternatively, by using a paper copy of the proxy card that has been requested.

It is important that your shares be represented at the 2020 Annual Meeting, regardless of the number of shares that you hold. You are, therefore, urged to vote by telephone or by using the Internet as instructed on the proxy card or, if so requested, by executing and returning, at your earliest convenience, the requested proxy card in the envelope that will have been provided.

THE BOARD OF DIRECTORS

Palo Alto, California August 13, 2020

UNITED STATES SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

	FORM 10-K	
Mark One)		
ANNUAL REPORT PURSUANT TO SECTION	ION 13 OR 15(d) OF THE	SECURITIES EXCHANGE ACT OF 1934
	the fiscal year ended December 31,	
101	OR	
☐ TRANSITION REPORT PURSUANT TO SEC		E SECURITIES EXCHANGE ACT OF 1934
	nsition period fromto	
	Commission File Number: 001-347	
	Commission File Number: 001-34/3	
(Exact r	Tesla, Inc.	s charter)
Delaware		91-2197729
(State or other jurisdiction of		(I.R.S. Employer
incorporation or organization)		Identification No.)
3500 Deer Creek Road		0.420.4
Palo Alto, California (Address of principal executive offices)		94304 (Zip Code)
(induities of principal electric offices)	(650) 681-5000	(Elp cour)
(Registr:	ant's telephone number, including	area code)
	registered pursuant to Section 12(b	
Title of each class	Trading Symbol(s)	Name of each exchange on which registered
Common stock	TSLA	The Nasdag Global Select Market

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

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

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

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

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

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

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

X 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. $\ \square$

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

The aggregate market value of voting stock held by non-affiliates of the registrant, as of June 30, 2019, the last day of the registrant's most recently completed second fiscal quarter, was \$31.54 billion (based on the closing price for shares of the registrant's Common Stock as reported by the NASDAQ Global Select Market on June 30, 2019). Shares of Common Stock held by each executive officer, director, and holder of 5% or more of the outstanding Common Stock have been excluded in that such persons may be deemed to be affiliates. This determination of affiliate status is not necessarily a conclusive determination for other purposes.

As of February 7, 2020, there were 181,341,586 shares of the registrant's Common Stock outstanding.

DOCUMENTS INCORPORATED BY REFERENCE

Portions of the registrant's Proxy Statement for the 2020 Annual Meeting of Stockholders are incorporated herein by reference in Part III of this Annual Report on Form 10-K to the extent stated herein. Such proxy statement will be filed with the Securities and Exchange Commission within 120 days of the registrant's fiscal year ended December 31, 2019.

TESLA, INC.

ANNUAL REPORT ON FORM 10-K FOR THE YEAR ENDED DECEMBER 31, 2019

INDEX

		Page
PART I.		
Item 1.	Business	
	Risk Factors	
	Unresolved Staff Comments.	
Item 2.	Properties	
Item 3.	Legal Proceedings	
Item 4.	Mine Safety Disclosures	
PART II	•	
Item 5.	Market for Registrant's Common Equity, Related Stockholder Matters and Issuer Purchases of Equity Securities	
Item 6.	Selected Consolidated Financial Data	
Item 7.	Management's Discussion and Analysis of Financial Condition and Results of Operations	
Item 7A.	Quantitative and Qualitative Disclosures About Market Risk	
Item 8.	Financial Statements and Supplementary Data	
Item 9.	Changes in and Disagreements with Accountants on Accounting and Financial Disclosure	
	Controls and Procedures	
Item 9B.	Other Information	
PART II	I.	
	Directors, Executive Officers and Corporate Governance	
	Executive Compensation	
Item 12.	Security Ownership of Certain Beneficial Owners and Management and Related Stockholder Matters	
Item 13.	Certain Relationships and Related Transactions, and Director Independence	
Item 14.	Principal Accountant Fees and Services	
PART IV	V.	
Item 15.	Exhibits and Financial Statement Schedules	
	Summary	
Signature	98	

Forward-Looking Statements

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

PART I

ITEM 1. BUSINESS

Overview

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

We currently offer or are planning to introduce electric vehicles to address a wide range of consumer and commercial vehicle markets, including Model 3, Model Y, Model S, Model X, Cybertruck, Tesla Semi and a new Tesla Roadster. In order to meet customers' range, functionality and performance expectations, we have employed our considerable design and vehicle engineering capabilities to overcome the design, styling and performance issues that have historically limited broad adoption of electric vehicles. Combined with technical advancements in our powertrain system, Autopilot and Full Self-Driving ("FSD") hardware, and neural net, our electric vehicles boast advantages such as leading range and recharging flexibility; superior acceleration, handling and safety characteristics; a unique suite of user convenience and infotainment features; the ability to have additional features enabled through over-the-air updates; and savings in charging, maintenance and other costs of ownership.

In furtherance of our mission to accelerate the world's transition to sustainable energy, we have also developed an expertise in solar energy systems. We sell and lease retrofit solar energy systems for residential and commercial customers, and alternatively provide certain customers with access to our solar energy systems through power purchase or subscription-based arrangements. We also offer the Solar Roof, which features attractive and durable glass roof tiles integrated with solar energy generation. Our approach to the solar business emphasizes simplicity, standardization and accessibility to make it easy and cost-effective for customers to adopt clean energy, while reducing our customer acquisition costs.

Finally, we have leveraged our technological expertise in batteries, energy management, power electronics, and integrated systems from our vehicle powertrain systems to develop and manufacture energy storage products, including Powerwall, Powerpack and Megapack. These scalable systems may be used in homes, commercial facilities and on the utility grid, and are capable of numerous applications including backup or off-grid power, peak demand reduction, demand response, reducing intermittency of renewable energy generation, facilitation of the use of renewable energy generation over fossil fuel generation, and other grid services and wholesale electric market services. Drawing on our solar business expertise, we can also offer integrated systems combining energy generation and storage. Like our vehicles, our energy storage products can be remotely updated over-the-air with software or firmware improvements.

Segment Information

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

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

Our Products and Services

Automotive

Model 3

Model 3 is a four-door mid-size sedan that we designed for manufacturability with a base price for mass-market appeal, which we began delivering in July 2017. We currently manufacture Model 3 at the Fremont Factory as well as at Gigafactory Shanghai, where we are ramping production with an installed annual production capacity for 150,000 Model 3 vehicles. We currently offer Model 3 in rear-wheel drive and dual motor all-wheel drive variants, including a Performance version of the latter.

Model Y

Model Y is a compact sport utility vehicle ("SUV") built on the Model 3 platform with the capability for seating for up to seven adults, which we began producing in January 2020 and expect to commence delivering in the first quarter of 2020. We currently manufacture Model Y at the Fremont Factory, and are further ramping production there and making preparations for production next at Gigafactory Shanghai. We currently offer Model Y in dual motor all-wheel drive Long Range and Performance versions.

Model S and Model X

Model S is a four-door full-size sedan that we began delivering in June 2012. Model S introduced Tesla vehicle mainstays such as a large touchscreen driver interface, Autopilot hardware, over-the-air software updates, and fast charging through our Supercharger network.

Model X is a mid-size SUV with seating for up to seven adults, which we began delivering in September 2015. Model X introduced features including unique falcon wing doors for easy access to passenger seating and an all-glass panoramic windshield.

Model S and Model X feature the highest performance characteristics and longest ranges that we offer in a sedan and SUV, respectively. These vehicles are equipped with a standard dual motor all-wheel drive powertrain, and are also available in Performance versions with enhanced acceleration and/or top speed and styling. We manufacture Model S and Model X at the Fremont Factory.

Future Consumer and Commercial Electric Vehicles

In addition, we have unveiled a number of planned electric vehicles to address a broader cross-section of the vehicle market, including specialized consumer electric vehicles in Cybertruck and the new Tesla Roadster and a commercial electric vehicle in Tesla Semi.

Energy Generation and Storage

Energy Storage Products

We began deliveries of the current generations of our Powerwall and Powerpack products in late 2016 and 2017, respectively, and of our Megapack product in late 2019. Powerwall is a 13.5 kilowatt hour ("kWh") rechargeable lithium-ion battery with integrated inverter, designed to store energy at a home or small commercial facility. Powerpack and Megapack are fully integrated energy storage solutions for commercial, industrial, utility and energy generation customers, comprised of up to 232kWh (AC) battery packs and up to 700 kilovolt-ampere (at 480V) inverters for Powerpack and up to 3 megawatt hour ("MWh") (AC) battery packs and up to 1.54 megavolt-ampere inverters for Megapack, multiple units of which may be grouped together to form larger installations, capable of reaching gigawatt hours ("GWh") or greater. Powerpack and Megapack can also be combined with renewable energy generation sources to create microgrids that provide communities with clean, resilient and affordable power.

We also develop and advance our software capabilities for the control and optimal dispatch of energy storage systems across a wide range of markets and applications, which can be sent to our systems through over-the-air updates.

Solar Energy Offerings

The major components of our retrofit solar energy systems include solar panels that convert sunlight into electrical current, inverters that convert the electrical output from the panels to a usable current compatible with the electric grid, racking that attaches the solar panels to the roof or ground, electrical hardware that connects the solar energy system to the electric grid, and our monitoring device. We purchase the majority of these components, and we do so from multiple sources to ensure competitive pricing and adequate supply. We also design and manufacture certain components for our solar energy products. In addition to selling retrofit solar energy systems to customers and certain channel partners, we also make them available through lease and power purchase agreement ("PPA") arrangements, currently with 20-year terms and typically with renewal options, and a subscription-based sale of solar power, which is currently available in California.

In 2019, we commenced direct customer and channel partner sales of the third generation of our Solar Roof, which features aesthetically pleasing and durable glass roofing tiles designed to complement the architecture of homes and commercial buildings while turning sunlight into electricity. We are ramping the volume production of this version of the Solar Roof at Gigafactory New York, and are increasing our installation capabilities by training our personnel and third party partners.

Technology

Automotive

Our core vehicle technology competencies include battery and powertrain engineering and manufacturing, as well as our ability to design vehicles that utilize the unique advantages of an electric powertrain. Our core intellectual property includes our electric powertrain and our work on developing self-driving technologies. Our powertrain consists of our battery pack, power electronics, motor, gearbox, and control software. We offer several powertrain variants for our vehicles that incorporate years of research and development. In addition, we have designed our vehicles to incorporate the latest advances in consumer technologies, such as mobile computing, sensing, displays, and connectivity.

Battery and Powertrain

We optimize the design of the lithium-ion cells we use and of our battery packs to achieve high energy density at decreasing costs while also maintaining safety, reliability and long life in the rigors of an automotive environment. Our proprietary technology includes systems for high density energy storage, cooling, safety, charge balancing, structural durability, and electronics management. We have also pioneered advanced manufacturing techniques to manufacture large volumes of battery packs with high quality at low cost. Moreover, we maintain extensive testing and R&D capabilities for battery cells, packs and systems, and have built an expansive body of knowledge on lithium-ion cell vendors, chemistry types and performance characteristics. We believe that the flexibility that we have built into our designs, combined with our research and real-world performance data, will enable us to continue to evaluate new battery cells and optimize battery pack system performance and cost for our current and future vehicles.

The power electronics in our electric powertrain govern the flow of electrical current throughout our vehicles as needed, convert direct current from the battery pack into alternating current to drive our vehicles' motors (and vice versa from an external electricity source to charge the battery pack), and provide regenerative braking functionality. The primary technological advantages to our proprietary power electronics designs include the ability to drive large amounts of electrical current in a small physical package with high efficiency and low cost, and to recharge on a wide variety of electricity sources at home, at the office or on the road, including at our Superchargers.

We offer dual motor powertrain vehicles, which use two electric motors to maximize traction and performance in an all-wheel drive configuration. Tesla's dual motor powertrain digitally and independently controls torque to the front and rear wheels. The near-instantaneous response of the motors, combined with low centers of gravity, provides drivers with controlled performance and increased traction control. We are also developing vehicle powertrain technology featuring three electric motors for further increased performance.

Vehicle Control and Infotainment Software

The performance and safety systems of our vehicles and their battery packs require sophisticated control software. There are numerous processors in our vehicles to control these functions, and we write custom firmware for many of these processors. Software algorithms control traction, vehicle stability, the acceleration and regenerative braking of the vehicle, climate control and thermal management, and are also used extensively to monitor the charge state of the battery pack and to manage all of its safety systems. Drivers use the information and control systems in our vehicles to optimize performance, customize vehicle behavior, manage charging modes and times and control all infotainment functions. We develop almost all of this software, including most of the user interfaces, internally.

Self-Driving Development

We have expertise in developing technologies, systems and software to achieve self-driving vehicles. We are equipping all new Tesla vehicles with hardware needed for full self-driving in the future, including a new powerful and proprietary on-board computer that we introduced in 2019. This hardware suite enables field data from the on-board camera, radar, ultrasonics, and GPS to continually train and improve our neural network for real-world performance.

Currently, we offer in our vehicles certain advanced driver assist systems under our Autopilot and FSD options, including auto-steering, traffic aware cruise control, automated lane changing, automated parking, driver warning systems, and a Smart Summon feature that enables vehicles to be remotely summoned over short distances in parking lots and driveways. These systems relieve our drivers of the most tedious and potentially dangerous aspects of road travel, and the field data feedback loops from the on-board hardware, as well as over-the-air firmware updates, allow us to improve them over time. Although at present the driver is ultimately responsible for controlling the vehicle, our systems provide safety and convenience functionality that allows our customers to rely on them much like the system that airplane pilots use when conditions permit.

Energy Generation and Storage

Energy Storage Products

We are leveraging many of the component-level technologies from our vehicles to advance our energy storage products, including high density energy storage, cooling, safety, charge balancing, structural durability, and electronics management. By taking a modular approach to the design of battery systems, we are able to maximize manufacturing capacity to produce our Powerwall, Powerpack and Megapack products. Additionally, we are making significant strides in the area of bi-directional, grid-tied power electronics that enable us to interconnect our battery systems seamlessly with global electricity grids while providing fast-acting systems for power injection and absorption.

Solar Energy Systems

We are continually innovating and developing new technologies to facilitate the growth of our solar energy business. For example, we have developed proprietary software to reduce solar energy system design and installation timelines and costs, and the Solar Roof is designed to work seamlessly with Powerwall.

Design and Engineering

Automotive

We have created significant in-house capabilities in the design and test engineering of electric vehicles and their components and systems. We design, engineer and test bodies, chassis, exteriors, interiors, heating and cooling and low voltage electrical systems in-house, and to a lesser extent, in conjunction with our suppliers. Our team has core competencies in computer aided design and crash test simulations, which reduces the product development time of new models. We continue to grow our capabilities, including for on-site crash testing, durability testing and component validation.

Additionally, our team has expertise in selecting and working with various materials. For example, given the impact of mass on range, which is very important for passenger vehicles, Model S and Model X are built with lightweight aluminum bodies and chassis which incorporate a variety of materials and production methods that help optimize vehicle weight, and Model 3 and Model Y are built with a mix of materials to be lightweight and safe while also increasing cost-effectiveness for these mass-market vehicles. On the other hand, to accommodate the durability required of work vehicles, we plan to use a thick cold-rolled stainless steel alloy and ultra-strong glass for Cybertruck while employing our expertise in battery engineering to maintain excellent range.

Energy Generation and Storage

Energy Storage Products

We have an in-house engineering team that both designs our energy storage products themselves, and works with our residential, commercial and utility customers to design bespoke systems incorporating our products. Our team's expertise in electrical, mechanical, civil and software engineering enables us to create integrated energy storage solutions that meet the various and particular needs of our customers.

Solar Energy Systems

We also have an in-house team that designs a customized solar energy system or Solar Roof for each of our customers, including an integrated energy storage system when requested by the customer. We have developed software that simplifies and expedites the design process and optimizes the design to maximize the energy production of each system. This team completes a structural analysis of each building and produces a full set of structural design and electrical blueprints that contain the specifications for all system components. Additionally, this team specifies complementary mounting and grounding hardware where required.

Sales and Marketing

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

Automotive

Direct Sales

We market and sell our vehicles directly to customers using means that we believe will maximize our reach, improve the overall customer experience and maximize capital efficiency. Currently, our sales channels include our website and an international network of company-owned stores. In some states, we have also opened galleries to educate and inform customers about our products, but such locations do not actually transact in the sale of vehicles. We believe this infrastructure enables us to better control costs of inventory, manage warranty service and pricing, educate consumers about electric vehicles and charging, maintain and strengthen the Tesla brand, and obtain rapid customer feedback.

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

Used Vehicle Sales

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

Public Charging

We continue to build out our global Supercharger network for our customers' convenience, including to enable long-distance travel and urban ownership, which is a part of our strategy to remove a barrier to the broader adoption of electric vehicles caused by the perception of limited range. Each Tesla Supercharger is an industrial grade, high-speed charger designed to recharge a Tesla vehicle significantly more quickly than other charging options, and we continue to evolve our technology to allow for even faster charging times at lower cost to us. Where possible, we are co-locating Superchargers with our solar and energy storage systems to further reduce costs and promote renewable power. Supercharger stations typically are strategically placed along well-traveled routes and in dense city centers to allow Tesla vehicle owners the ability to enjoy quick, reliable and ubiquitous charging with convenient, minimal stops. Use of the Supercharger network is either free under certain sales programs or requires a competitive fee.

We also work with a wide variety of hospitality, retail, and public destinations, as well as businesses with commuting employees, to offer additional charging options for our customers. These Destination Charging and workplace locations deploy Tesla Wall Connectors to provide charging to Tesla vehicle owners who patronize or are employed at their businesses. We also work with single-family homeowners and multi-family residential entities to deploy home charging solutions in our communities.

Energy Generation and Storage

We market and sell our solar and energy storage products to individuals, commercial and industrial customers and utilities through a variety of channels.

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

We sell Powerpack and Megapack systems to commercial and utility customers through our international sales organization, which consists of experienced energy industry professionals in all of our target markets, as well as through our channel partner network. In certain jurisdictions, we also sell installed solar energy systems (with or without energy storage) to commercial customers through cash, lease and PPA transactions.

Service and Warranty

Automotive

Service

We provide service for our electric vehicles at our company-owned service locations and through an expanding fleet of Tesla Mobile Service technicians who provide services that do not require a vehicle lift remotely at customers' homes or other locations. Performing vehicle service ourselves provides us with the capability to identify problems, find solutions, and incorporate improvements faster, and optimize logistics and inventory for service parts better, than traditional automobile manufacturers. Our vehicles are also designed with the capability to wirelessly upload data to us via an on-board system with cellular connectivity, allowing us to diagnose and remedy many problems before ever looking at the vehicle.

Vehicle Limited Warranty and Extended Service Plans

We provide a manufacturer's warranty on all new and used Tesla vehicles. Each new vehicle has a four year or 50,000 mile New Vehicle Limited Warranty, subject to separate limited warranties for the supplemental restraint system, battery and drive unit, and body rust perforation. For the battery and drive unit on our current new Model S and Model X vehicles, we offer an eight year, 150,000 mile limited warranty, with minimum 70% retention of battery capacity over the warranty period. For the battery and drive unit on our current new Model 3 and Model Y vehicles, we offer an eight year or 100,000 mile limited warranty for our Standard or Standard Range Plus battery and an eight year or 120,000 mile limited warranty for our Long Range or Performance battery, with minimum 70% retention of battery capacity over the warranty period.

In addition to the New Vehicle Limited Warranty, we currently offer for Model S and Model X Extended Service plans for new vehicles in specified regions. The Extended Service plans cover the repair or replacement of vehicle parts for up to an additional four years or up to an additional 50,000 miles after the expiration of the New Vehicle Limited Warranty.

Energy Generation and Storage

Energy Storage Systems

We generally provide a 10-year "no defect" and "energy retention" warranty with every current Powerwall and a 15-year "no defect" and "energy retention" warranty with every current Powerpack or Megapack system. Pursuant to these energy retention warranties, we guarantee that the energy capacity of the applicable product will be at least a specified percentage (within a range up to 80%) of its nameplate capacity during specified time periods, depending on the product, battery pack size and/or region of installation, and subject to specified use restrictions or kWh throughputs caps. In addition, we offer certain extended warranties, which customers are able to purchase from us at the time they purchase an energy storage system, including a 20 year extended protection plan for Powerwall and a selection of 10 or 20 year performance guarantees for Powerpack and Megapack. In circumstances where we install a Powerwall or Powerpack system, we also provide certain warranties on our installation workmanship. All of the warranties for our energy storage systems are subject to customary limitations and exclusions.

Solar Energy Systems

For retrofit solar energy systems, we provide a workmanship warranty for up to 20 years from installation and a separate warranty against roof leaks. We also pass-through the inverter and module manufacturer warranties (typically 10 years and 25 years respectively). When we lease a retrofit solar energy system, we compensate the customer if their system produces less energy than guaranteed over a specified period. For the Solar Roof, we provide a warranty against defects for 25 years, a 25 year weatherization warranty and a power output warranty. For all systems (retrofit and Solar Roof) we also provide service and repair (either under warranty or for a fee) during the entire term of the customer relationship.

Financial Services

Automotive

Purchase Financing and Leases

We offer leasing and/or loan financing arrangements for our vehicles in certain jurisdictions in North America, Europe and Asia through various financial institutions. In certain international markets, we offer resale value guarantees to customers who purchase and finance their vehicles through one of our specified commercial banking partners, under which those customers have the option of selling their vehicles back to us at preset future dates, generally at the end of the terms of the applicable loans or financing programs, for pre-determined resale values. In certain markets, we also offer vehicle buyback guarantees to financial institutions, which may obligate us to repurchase the vehicles for pre-determined prices.

We also currently offer leasing directly through our local subsidiaries for Model S, Model X and Model 3 in the U.S. and for Model S and Model X in Canada.

Insurance

In August 2019, we launched an insurance product designed for our customers, which offers rates that are often better than other alternatives. This product is currently available in California, and we plan to expand both the markets in which we offer insurance products and our ability to offer such products, as part of our ongoing effort to decrease the total cost of ownership for our customers.

Energy Generation and Storage

Energy Storage Systems

We currently offer a loan product to residential customers who purchase Powerwall together with a new solar energy system, and lease and PPA options to commercial customers who purchase a Powerpack system together with a new solar energy system. We intend to introduce financial services offerings for customers who purchase standalone energy storage products in the future.

Solar Energy Systems

We are an industry leader in offering innovative financing alternatives that allow our customers to take direct advantage of available tax credits and incentives to reduce the cost of owning a solar energy system through a solar loan, or to make the switch to solar energy with little to no upfront costs under a lease or PPA. Our solar loan offers third-party financing directly to a qualified customer to enable the customer to purchase and own a solar energy system. We are not a party to the loan agreement between the customer and the third-party lender, and the third-party lender has no recourse against us with respect to the loan. Our solar lease offers customers a fixed monthly fee, at rates that typically translate into lower monthly utility bills, and an electricity production guarantee. Our solar PPA charges customers a fee per kWh based on the amount of electricity produced by our solar energy systems. We monetize the customer payments we receive from our leases and PPAs through funds we have formed with investors. We also intend to introduce financial services offerings for our Solar Roof customers in the future.

Manufacturing

We manufacture our products and related components primarily at the Fremont Factory and at nearby facilities in the Bay Area, California; Gigafactory Nevada near Reno, Nevada; Gigafactory New York in Buffalo, New York; and Gigafactory Shanghai in China. We have also selected a site near Berlin, Germany to build a factory for the European market, which we refer to as Gigafactory Berlin.

Manufacturing Facilities in the Bay Area, California

We manufacture our vehicles, and certain parts and components that are critical to our intellectual property and quality standards, at our manufacturing facilities in the Bay Area in California, including the Fremont Factory, and other local manufacturing facilities. Our Bay Area facilities contain several manufacturing operations, including stamping, machining, casting, plastics, body assembly, paint operations, seat assembly, final vehicle assembly and end-of-line testing for our vehicles, as well as production of battery packs and drive units for Model S and Model X. Some major vehicle component systems are purchased from suppliers; however, we have a high level of vertical integration in our manufacturing processes at our Bay Area facilities.

Gigafactory Nevada

Gigafactory Nevada is a facility where we work together with our suppliers to integrate battery material, cell, module and battery pack production in one location. We use the battery packs manufactured at Gigafactory Nevada for Model 3, Model Y and our energy storage products. We also manufacture Model 3 and Model Y drive units at Gigafactory Nevada. Finally, the assembly of Megapack systems takes place at Gigafactory Nevada, allowing us to ship deployment-ready systems directly to customers.

We have designed Gigafactory Nevada to allow us access to high volumes of lithium-ion battery cells while achieving a significant reduction in the cost of our battery packs, and we have an agreement with Panasonic to partner with us on Gigafactory Nevada with investments in production equipment that it is using to manufacture and supply us with battery cells. Given its importance to the production of our vehicle and energy storage products, in particular Model 3, Model Y and Megapack, we continue to invest in Gigafactory Nevada to achieve additional production output there.

Gigafactory New York

We have primarily used our manufacturing facility in Buffalo, New York, which we refer to as Gigafactory New York, for the development and production of our Solar Roof and other solar products and components, energy storage components, and Supercharger components, and for other lessor-approved functions. In particular, our manufacturing operations at Gigafactory New York are increasing significantly as we ramp the production of the third generation of our Solar Roof there.

Gigafactory Shanghai

In December 2019, we commenced production of Model 3 vehicles at Gigafactory Shanghai, which we have established in order to increase the affordability of our vehicles for customers in local markets by reducing transportation and manufacturing costs and eliminating certain tariffs on vehicles imported into China from the U.S. At Gigafactory Shanghai, we have installed annual production capacity for 150,000 Model 3 vehicles that we believe we will eventually be able to push to actual rates of production in excess of such number, subject to local production of battery packs, which we began ramping there later than other processes. We have also commenced construction of the next phase of Gigafactory Shanghai to add Model Y manufacturing capacity at least equivalent to that for Model 3. Much of the investment in Gigafactory Shanghai has been and is expected to continue to be provided through local debt financing, including a RMB 9.0 billion (or the equivalent amount in U.S. dollars) fixed asset term facility and a RMB 2.25 billion (or the equivalent amount in U.S. dollars) working capital revolving facility that our subsidiary entered into in December 2019. We are supplementing such financing with limited direct capital expenditures by us, at a lower cost per unit of production capacity than that of Model 3 production at the Fremont Factory.

Other Manufacturing

Generally, we continue to expand production capacity at our existing facilities. We also intend to further increase cost-competitiveness in our significant markets by strategically adding local manufacturing, including at our planned Gigafactory Berlin.

Supply Chain

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

As is the case for most automotive companies, most of our procured components and systems are sourced from single suppliers. Certain key components we use have multiple available sources, and we work to qualify multiple suppliers for each such component where it is sensible to do so, in order to minimize production risks owing to disruptions in their supply. We also mitigate risk by maintaining safety stock for key parts and assemblies and die banks for components with lengthy procurement lead times.

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

Governmental Programs, Incentives and Regulations

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

Programs and Incentives

California Alternative Energy and Advanced Transportation Financing Authority Tax Incentives

We have entered into multiple agreements over the past few years with the California Alternative Energy and Advanced Transportation Financing Authority ("CAEATFA") that provide multi-year sales tax exclusions on purchases of manufacturing equipment that will be used for specific purposes, including the expansion and ongoing development of Model S, Model X, Model 3, Model Y and future electric vehicles and the expansion of electric vehicle powertrain production in California.

Gigafactory Nevada—Nevada Tax Incentives

In connection with the construction of Gigafactory Nevada, we have entered into agreements with the State of Nevada and Storey County in Nevada that provide abatements for sales, use, real property, personal property and employer excise taxes, discounts to the base tariff energy rates and transferable tax credits. These incentives are available for the applicable periods beginning on October 17, 2014 and ending on either June 30, 2024 or June 30, 2034 (depending on the incentive). Under these agreements, we were eligible for a maximum of \$195.0 million of transferable tax credits, subject to capital investments by us and our partners for Gigafactory Nevada of at least \$3.50 billion, which we exceeded during 2017, and specified hiring targets for Gigafactory Nevada, which we exceeded during 2018. As a result, as of December 31, 2018, we had earned the maximum amount of credits.

Gigafactory New York—New York State Investment and Lease

We have a lease through the Research Foundation for the State University of New York (the "SUNY Foundation") for Gigafactory New York, which was constructed on behalf of the SUNY Foundation. Under the lease and a related research and development agreement, there continues to be, on behalf of the SUNY Foundation, installation of certain utilities and other improvements and acquisition of certain manufacturing equipment designated by us to be used at Gigafactory New York. The terms of such agreement require us to comply with a number of covenants, including required hiring and cumulative investment targets, which we have met to date as of the applicable measurement dates.

Gigafactory Shanghai—Lease and Land Use Rights

We have a lease arrangement with the local government of Shanghai for land use rights at Gigafactory Shanghai. Under the terms of the arrangement, we are required to meet a cumulative capital expenditure target and an annual tax revenue target starting at the end of 2023, which we believe will be attainable even if our actual vehicle production at Gigafactory Shanghai were far lower than the volumes we are forecasting.

Tesla Regulatory Credits

In connection with the production, delivery, placement into service and ongoing operation of our zero emission vehicles, charging infrastructure and solar systems in global markets, we have earned and will continue to earn various tradable regulatory credits. We have sold these credits, and will continue to sell future credits, to automotive companies and other regulated entities who can use the credits to comply with emission standards and other regulatory requirements. For example, under California's Zero Emission Vehicle Regulation and those of states that have adopted California's standard, vehicle manufacturers are required to earn or purchase credits, referred to as ZEV credits, for compliance with their annual regulatory requirements. These laws provide that automakers may bank or sell to other regulated parties their excess credits if they earn more credits than the minimum quantity required by those laws. Tesla also earns other types of saleable regulatory credits in the United States and abroad, including greenhouse gas, fuel economy, renewable energy, and clean fuels credits. Likewise, several U.S. states have adopted procurement requirements for renewable energy production. These requirements enable companies deploying solar energy to earn tradable credits known as Solar Renewable Energy Certificates ("SRECs").

Energy Storage Systems—Incentives

The regulatory regime for energy storage projects is still under development. Nevertheless, there are various policies, incentives and financial mechanisms at the federal, state and local levels that support the adoption of energy storage. For example, energy storage systems that are charged using solar energy are eligible for the 26% tax credit in 2020 with a ramp down in 2021 and beyond under Section 48(a)(3) of the Internal Revenue Code, or the IRC, as described below. In addition, California and a number of other states have adopted procurement targets for energy storage, and behind the meter energy storage systems qualify for funding under the California Self Generation Incentive Program.

The Federal Energy Regulatory Commission ("FERC") has also taken steps to enable the participation of energy storage in wholesale energy markets. For example, in late 2016, FERC issued a final rule, Order No. 821, to further break down barriers preventing energy storage from fully participating in wholesale energy markets. Order 821 is currently under review before the U.S. Court of Appeals for the D.C. Circuit.

Solar Energy Systems—Government and Utility Programs and Incentives

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

The federal government currently provides an uncapped investment tax credit ("ITC") under two sections of the IRC: Section 48 and Section 25D. Section 48(a)(3) of the IRC allows a taxpayer to claim a credit of 26% of qualified expenditures for a commercial solar energy system that commences construction by December 31, 2020. The credit then declines to 22% in 2021 and a permanent 10% thereafter. We claim the Section 48 commercial credit when available for both our residential and commercial projects, based on ownership of the solar energy system. The federal government also provides accelerated depreciation for eligible commercial solar energy systems. Section 25D of the IRC allows a homeowner-taxpayer to claim a credit of 26% of qualified expenditures for a residential solar energy system owned by the homeowner that is placed in service by December 31, 2020. The credit then declines to 22% in 2021 and is scheduled to expire thereafter. Customers who purchase their solar energy systems for cash or through our solar loan offering are eligible to claim the Section 25D investment tax credit.

In addition to the federal ITC, many U.S. states offer personal and corporate tax credits and incentives for solar energy systems.

Regulations

Vehicle Safety and Testing

Our vehicles are subject to, and comply with or are otherwise exempt from, numerous regulatory requirements established by the National Highway Traffic Safety Administration ("NHTSA"), including all applicable United States Federal Motor Vehicle Safety Standards ("FMVSS"). Our vehicles fully comply with all applicable FMVSSs without the need for any exemptions, and we expect future Tesla vehicles to either fully comply or comply with limited exemptions related to new technologies. Additionally, there are regulatory changes being considered for several FMVSS, and while we anticipate compliance, there is no assurance until final regulation changes are enacted.

As a manufacturer, we must self-certify that our vehicles meet all applicable FMVSS, as well as the NHTSA bumper standard, or otherwise are exempt, before the vehicles can be imported or sold in the U.S. Numerous FMVSS apply to our vehicles, such as crash-worthiness requirements, crash avoidance requirements, and electric vehicle requirements. We are also required to comply with other federal laws administered by NHTSA, including the CAFE standards, Theft Prevention Act requirements, consumer information labeling requirements, Early Warning Reporting requirements regarding warranty claims, field reports, death and injury reports and foreign recalls, and owner's manual requirements.

The Automobile Information and Disclosure Act requires manufacturers of motor vehicles to disclose certain information regarding the manufacturer's suggested retail price, optional equipment and pricing. In addition, this law allows inclusion of city and highway fuel economy ratings, as determined by EPA, as well as crash test ratings as determined by NHTSA if such tests are conducted.

Our vehicles sold outside of the U.S. are subject to similar foreign safety, environmental and other regulations. Many of those regulations are different from those applicable in the U.S. and may require redesign and/or retesting. The European Union has established new rules regarding additional compliance oversight that are scheduled to commence in 2020, and there is also regulatory uncertainty related to the United Kingdom's withdrawal from the European Union. These changes could impact the rollout of new vehicle features in Europe.

Self-Driving

There are no federal U.S. regulations pertaining to the safety of self-driving vehicles; however, NHTSA has established recommended guidelines. Certain U.S. states have legal restrictions on self-driving vehicles, and many other states are considering them. This patchwork increases the legal complexity for our vehicles. In Europe, certain vehicle safety regulations apply to self-driving braking and steering systems, and certain treaties also restrict the legality of certain higher levels of self-driving vehicles. Self-driving laws and regulations are expected to continue to evolve in numerous jurisdictions in the U.S. and foreign countries, and may create restrictions on self-driving features that we develop.

Automobile Manufacturer and Dealer Regulation

State laws regulate the manufacture, distribution, sale and service of automobiles, and generally require motor vehicle manufacturers and dealers to be licensed in order to sell vehicles directly to consumers in the state. As we open additional Tesla stores and service centers, we secure dealer licenses (or their equivalent) and engage in sales activities to sell our vehicles directly to consumers. Certain states do not permit automobile manufacturers to be licensed as dealers or to act in the capacity of a dealer, or otherwise restrict a manufacturer's ability to deliver or service vehicles. To sell vehicles to residents of states where we are not licensed as a dealer, we generally conduct the transfer of title out of the state. In such states, we have opened "galleries" that serve an educational purpose and where the title transfer may not occur.

As we expand our retail footprint in the U.S., some automobile dealer trade associations have both challenged the legality of our operations in court and used administrative and legislative processes to attempt to prohibit or limit our ability to operate existing stores or expand to new locations. We expect that the dealer associations will continue to mount challenges to our business model. In addition, we expect the dealer associations to actively lobby state licensing agencies and legislators to interpret existing laws or enact new laws in ways not favorable to Tesla's ownership and operation of its own retail and service locations, and we intend to actively fight any such efforts to limit our ability to sell and service our own vehicles.

Battery Safety and Testing

Our battery pack conforms to mandatory regulations that govern transport of "dangerous goods," defined to include lithium-ion batteries, which may present a risk in transportation. The regulations vary by mode of shipping transportation, such as by ocean vessel, rail, truck, or air. We have completed the applicable transportation tests for our battery packs, demonstrating our compliance with applicable regulations.

We use lithium-ion cells in our high voltage battery packs in our vehicles and energy storage products. The use, storage, and disposal of our battery packs is regulated under federal law. We have agreements with third party battery recycling companies to recycle our battery packs and we are also developing our own recycling technology.

Solar Energy—General

We are not a "regulated utility" in the U.S., although we are subject to certain state and federal regulations applicable to solar and battery storage providers. To operate our systems, we obtain interconnection agreements from the utilities. In most cases, interconnection agreements are standard form agreements that have been preapproved by the public utility commission or other regulatory body.

Sales of electricity and non-sale equipment leases by third parties, such as our leases, PPAs and subscription agreements, face regulatory challenges in some states and jurisdictions.

Solar Energy—Net Metering

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

Solar Energy—Mandated Renewable Capacity

Many states also have adopted procurement requirements for renewable energy production, such as an enforceable renewable portfolio standard, or RPS, or other policies that require covered entities to procure a specified percentage of total electricity delivered to customers in the state from eligible renewable energy sources, such as solar energy systems. In SREC state markets, the RPS requires electricity suppliers to secure a portion of their electricity from solar generators. The SREC program provides a means for the generation of SRECs, which can then be sold separately from the energy produced to covered entities who surrender the SRECs to the state to prove compliance with the state's renewable energy mandate.

Competition

Automotive

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

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

Our vehicles also compete in the market based on the compelling user experience that they offer. We believe that a key factor in our success will be our Autopilot and FSD technologies that currently enable the driver-assistance features in our vehicles, and in which we are making significant strides through our proprietary and powerful FSD computer and remotely updateable artificial intelligence software. Ultimately, while we are subject to regulatory constraints over which we have no control, our goal is a fully autonomously-driven future that improves safety and provides our customers with convenience and additional income through participation in an autonomous Tesla ride-hailing network. This network, which will also include our own fleet of vehicles, will also allow us to access a new customer base even as modes of transportation evolve. Finally, our vehicles offer unparalleled invehicle entertainment features, currently including Internet search, music services, passenger karaoke, and parked video streaming and gaming.

Energy Generation and Storage

Energy Storage Systems

The market for energy storage products is also highly competitive. Established companies, such as AES Energy Storage, Siemens, LG Chem and Samsung, as well as various emerging companies, have introduced products that are similar to our product portfolio. There are several companies providing individual components of energy storage systems (such as cells, battery modules, and power electronics) as well as others providing integrated systems. We compete with these companies based on price, energy density and efficiency. We believe that the specifications of our products, our strong brand, and the modular, scalable nature of our Powerpack and Megapack products give us a competitive advantage when marketing our products.

Solar Energy Systems

The primary competitors to our solar energy business are the traditional local utility companies that supply energy to our potential customers. We compete with these traditional utility companies primarily based on price, predictability of price and the ease by which customers can switch to electricity generated by our solar energy systems. We also compete with solar energy companies that provide products and services similar to ours. Many solar energy companies only install solar energy systems, while others only provide financing for these installations. In the residential solar energy system installation market, our primary competitors include Vivint Solar Inc., Sunrun Inc., Trinity Solar, SunPower Corporation, and many smaller local solar companies.

The electricity produced by solar installations still represents a small fraction of total U.S. electricity generation. With tens of millions of single-family homes and businesses in our primary service territories, and many more in other locations, we have a large opportunity to expand and grow this business as we make our retrofit installations more accessible and ramp our innovative Solar Roof. We also believe that residential solar energy generation is gaining favorable regulatory momentum, as exemplified in part by the state of California recently requiring that new homes be built with solar generation starting in 2020.

Intellectual Property

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

Employees

As of December 31, 2019, Tesla, Inc. had 48,016 full-time employees. To date, we have not experienced any work stoppages, and we consider our relationship with our employees to be good.

Available Information

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

ITEM 1A. RISK FACTORS

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

Risks Related to Our Business and Industry

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

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

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

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

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

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

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

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

We continuously evaluate, and as appropriate evolve, our retail operations and product offerings in order to maximize our reach and optimize our costs, vehicle line-up and model differentiation, and purchasing experience. However, there is no guarantee that each step in our evolving strategy will be perceived as intended by prospective customers accustomed to more traditional sales models. In particular, we are targeting with Model 3 and Model Y a global mass demographic with a broad range of potential customers, in which we have limited experience projecting demand and pricing our products. Until we ramp local production at Gigafactory Shanghai and in the future at Gigafactory Berlin, we will have to contend with predominantly single-factory vehicle production at the Fremont Factory for numerous international variants. If our specific demand expectations for these variants prove inaccurate, we may not be able to timely generate sales matched to the specific vehicles that we produce in the same timeframe or that are commensurate with our operations in a given region, which may negatively impact our deliveries and operating results in a particular period. Likewise, as we develop and grow our energy storage product and solar business worldwide, our success will depend on our ability to correctly forecast demand for our products in different markets.

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

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

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

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

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

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

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

In addition, sales of vehicles in the automotive industry tend to be cyclical in many markets, which may expose us to increased volatility, especially as we expand and adjust our operations and retail strategies. Specifically, it is uncertain as to how such macroeconomic factors will impact us as a company that has been experiencing growth and increasing market share in an industry that has globally been experiencing a recent decline in sales.

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

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

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

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

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

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

In order to achieve our volume and gross margin targets for our vehicles and energy storage products, we must continue to sustain and ramp significant cell production at Gigafactory Nevada, which, among other things, requires Panasonic to successfully operate and further ramp its cell production lines at significant volumes. Although Panasonic has a long track record of producing high-quality cells at significant volume at its factories in Japan, it has relatively limited experience with cell production at Gigafactory Nevada. In addition, we produce several components for Model 3 and Model Y, such as battery modules incorporating the lithium-ion cells produced by Panasonic and drive units (including to support Gigafactory Shanghai production), at Gigafactory Nevada. Some of the manufacturing lines for such components took longer than anticipated to ramp to their full capacity. While we have largely overcome this bottleneck after deploying multiple semi-automated lines and improving our original lines, additional bottlenecks may arise as we continue to increase the production rate and introduce new lines. If we are unable to maintain Gigafactory Nevada production, ramp output additionally over time as needed, and do so cost-effectively, or if we or Panasonic are unable to hire and retain a substantial number of highly skilled personnel, our ability to supply battery packs or other components for Model 3, Model Y and our other products could be negatively impacted, which could negatively affect our brand and harm our business, prospects, financial condition and operating results.

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

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

As part of our continuing work to increase production of our vehicles on a sustained basis, and in order to make them affordable in international markets by accessing local supply chains and workforces, we have established Gigafactory Shanghai in China. Currently, we have installed annual production capacity for 150,000 Model 3 vehicles there that we believe we will eventually be able to push to actual rates of production in excess of such number, and we have commenced construction of the next phase of Gigafactory Shanghai to add Model Y manufacturing capacity at least equivalent to that for Model 3. The ramp and further expansion of Gigafactory Shanghai are subject to a number of uncertainties inherent in all new manufacturing operations, including ongoing compliance with regulatory requirements, maintenance of operational licenses and approvals for additional expansion, potential supply chain constraints, hiring, training and retention of qualified employees, and the pace of bringing production equipment and processes online with the capability to manufacture high-quality units at scale. We have limited experience to date with operating manufacturing facilities abroad, and only recently began to sell Model 3 in China. If we experience any issues or delays in meeting our projected timelines, costs, capital efficiency and production capacity for Gigafactory Shanghai, or in maintaining and complying with the terms of local debt financing that we intend will largely fund it, or in generating and maintaining demand locally for the vehicles we manufacture at Gigafactory Shanghai, our business, prospects, operating results and financial condition could be adversely impacted.

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

We offer financing arrangements for our vehicles in North America, Europe and Asia primarily through various financial institutions. We also currently offer leasing directly through our local subsidiaries for Model S. Model X and Model 3 in the U.S. and for Model S and Model X in Canada. Under a lease held directly by us, we typically receive only a very small portion of the total vehicle purchase price at the time of lease, followed by a stream of payments over the term of the lease. The profitability of any vehicles returned to us at the end of their leases depends on our ability to accurately project our vehicles' residual values at the outset of the leases, and such values may fluctuate prior to the end of their terms depending on various factors such as supply and demand of our used vehicles, economic cycles and the pricing of new vehicles. For example, we made certain adjustments to our vehicle prices during 2019 to reflect anticipated changes to our cost structure from periodically optimizing our retail strategy, and as a limited accommodation to customers in consideration of a reduction in the electric vehicle federal tax credit. Such pricing changes may impact the residual values of our vehicles. The leasing program also relies on our ability to secure adequate financing and/or business partners to fund and grow this program, and screen for and manage customer credit risk. We expect the availability of leasing and other financing options will be important for our vehicle customers. If we are unable to adequately fund our leasing program with internal funds, or partners or other external financing sources, and compelling alternative financing programs are not available for our customers, we may be unable to grow our deliveries. Furthermore, if our leasing business grows substantially, our business may suffer if we cannot effectively manage the greater levels of residual and credit risks resulting from growth. Finally, if we do not successfully monitor and comply with applicable national, state and/or local financial regulations and consumer protection laws governing lease transactions, we may become subject to enforcement actions or penalties, either of which may harm our business.

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

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

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

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

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

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

We are party to an operating lease and a research and development agreement through the SUNY Foundation. These agreements provide for the construction and use of our Gigafactory in Buffalo, New York, which we have primarily used for the development and production of our Solar Roof and other solar products and components, energy storage components, and Supercharger components, and for other lessor-approved functions. Under this agreement, we are obligated to, among other things, directly employ specified minimum numbers of personnel in the State of New York and spend or incur \$5.0 billion in combined capital, operational expenses, costs of goods sold and other costs in the State of New York during the 10-year period beginning April 30, 2018. While we expect significant operations at Gigafactory New York and the surrounding Buffalo area to continue, including with our ramp and manufacture of the Solar Roof, if we fail in any year over the course of the term of the agreement to meet these obligations, we would be obligated to pay a "program payment" of \$41.2 million to the SUNY Foundation for such year. Any inability on our part to comply with the requirements of this agreement may result in the payment of significant amounts to the SUNY Foundation, the termination of our lease at Gigafactory New York, and/or the need to adjust certain of our operations, in particular our production ramp of the Solar Roof or Supercharger components. Any of the foregoing events could have a material adverse effect on our business, prospects, financial condition and operating results.

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

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

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

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

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

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

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

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

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

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

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

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

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

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

As a manufacturing company, including with respect to our current facilities such as the Fremont Factory, Gigafactory Nevada, Gigafactory New York and Gigafactory Shanghai and our future facility at Gigafactory Berlin, we are or will be subject to complex environmental, manufacturing, health and safety laws and regulations at numerous jurisdictional levels in the U.S., China, Germany and other locations abroad, including laws relating to the use, handling, storage, recycling, disposal and human exposure to hazardous materials and with respect to constructing, expanding and maintaining our facilities. The costs of compliance, including remediating contamination if any is found on our properties and any changes to our operations mandated by new or amended laws, may be significant. We may also face unexpected delays in obtaining permits and approvals required by such laws in connection with our manufacturing facilities, which would hinder our operation of these facilities. Such costs and delays may adversely impact our business prospects and operating results. Furthermore, any violations of these laws may result in substantial fines and penalties, remediation costs, third party damages, or a suspension or cessation of our operations.

In addition, motor vehicles are subject to substantial regulation under international, federal, state and local laws. We incur significant costs in complying with these regulations and may be required to incur additional costs to comply with any changes to such regulations, and any failures to comply could result in significant expenses, delays or fines. We are subject to laws and regulations applicable to the supply, manufacture, import, sale and service of automobiles internationally. For example, in countries outside of the U.S., we are required to meet standards relating to vehicle safety, fuel economy and emissions, among other things, that are often materially different from requirements in the U.S., thus resulting in additional investment into the vehicles and systems to ensure regulatory compliance in those countries. This process may include official review and certification of our vehicles by foreign regulatory agencies prior to market entry, as well as compliance with foreign reporting and recall management systems requirements.

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

As of December 31, 2019, we and our subsidiaries had outstanding \$12.49 billion in aggregate principal amount of indebtedness (see Note 12, *Debt*, to the consolidated financial statements included elsewhere in this Annual Report on Form 10-K). Our substantial consolidated indebtedness may increase our vulnerability to any generally adverse economic and industry conditions. We and our subsidiaries may, subject to the limitations in the terms of our existing and future indebtedness, incur additional debt, secure existing or future debt or recapitalize our debt.

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

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

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

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

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

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

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

We are cooperating with certain government investigations as discussed in Note 16, *Commitments and Contingencies*, to the consolidated financial statements included elsewhere in this Annual Report on Form 10-K. To our knowledge, no government agency in any such ongoing investigation has concluded that any wrongdoing occurred. However, we cannot predict the outcome or impact of any such ongoing matters, and there exists the possibility that we could be subject to liability, penalties and other restrictive sanctions and adverse consequences if the SEC, the DOJ, or any other government agency were to pursue legal action in the future. Moreover, we expect to incur costs in responding to related requests for information and subpoenas, and if instituted, in defending against any governmental proceedings.

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

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

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

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

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

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

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

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

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

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

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

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

We may be impacted by natural disasters, wars, health epidemics or other events outside of our control. For example, our corporate headquarters, the Fremont Factory and Gigafactory Nevada are located in seismically active regions in Northern California and Nevada, and our Gigafactory Shanghai is located in a flood-prone area. If major disasters such as earthquakes, floods or other events occur, or our information system or communications network breaks down or operates improperly, our headquarters and production facilities may be seriously damaged, or we may have to stop or delay production and shipment of our products. In addition, beginning in late 2019, the media has reported a public health epidemic originating in China, prompting precautionary government-imposed closures of certain travel and business. Gigafactory Shanghai was closed for a brief time as a result, before it reopened in February 2020 and rejoined our U.S. factories, which had continued to operate. It is unknown whether and how global supply chains, particularly for automotive parts, may be affected if such an epidemic persists for an extended period of time. We may incur expenses or delays relating to such events outside of our control, which could have a material adverse impact on our business, operating results and financial condition.

Risks Related to the Ownership of Our Common Stock

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

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

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

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

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

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

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

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

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

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

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

ITEM 1B. UNRESOLVED STAFF COMMENTS

None.

ITEM 2. PROPERTIES

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

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

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

ITEM 3. LEGAL PROCEEDINGS

For a description of our material pending legal proceedings, please see Note 16, *Commitments and Contingencies*, to the consolidated financial statements included elsewhere in this Annual Report on Form 10-K.

In addition, the following matters are being disclosed pursuant to Item 103 of Regulation S-K because they relate to environmental regulations and aggregate civil penalties could potentially exceed \$100,000.

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

We have also received an information request from the U.S. Environmental Protection Agency (the "EPA") under Section 114(a) of the Clean Air Act of 1963, as amended (the "Clean Air Act"). The EPA is reviewing the compliance of our Fremont Factory operations with applicable requirements under the Clean Air Act, and we are working with the EPA in responding to this request. While the outcome of this matter cannot be determined at this time, it is not currently expected to have a material adverse impact on our business.

ITEM 4. MINE SAFETY DISCLOSURES

Not applicable.

PART II

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

Market Information

Our common stock has traded on The NASDAQ Global Select Market under the symbol "TSLA" since it began trading on June 29, 2010. Our initial public offering was priced at \$17.00 per share on June 28, 2010.

Holders

As of February 7, 2020, there were 1,685 holders of record of our common stock. A substantially greater number of holders of our common stock are "street name" or beneficial holders, whose shares are held by banks, brokers and other financial institutions.

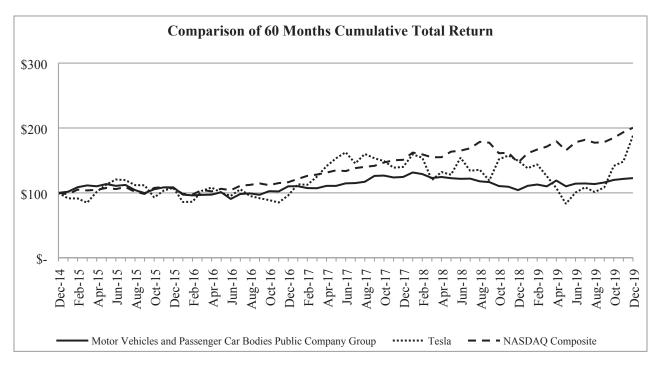
Dividend Policy

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

Stock Performance Graph

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

The following graph shows a comparison, from January 1, 2015 through December 31, 2019, of the cumulative total return on our common stock, The NASDAQ Composite Index and a group of all public companies sharing the same SIC code as us, which is SIC code 3711, "Motor Vehicles and Passenger Car Bodies" (Motor Vehicles and Passenger Car Bodies Public Company Group). Such returns are based on historical results and are not intended to suggest future performance. Data for The NASDAQ Composite Index and the Motor Vehicles and Passenger Car Bodies Public Company Group assumes an investment of \$100 on January 1, 2015 and reinvestment of dividends. We have never declared or paid cash dividends on our common stock nor do we anticipate paying any such cash dividends in the foreseeable future.



Unregistered Sales of Equity Securities

None.

Purchases of Equity Securities by the Issuer and Affiliated Purchasers

None.

ITEM 6. SELECTED CONSOLIDATED FINANCIAL DATA

The following selected consolidated financial data should be read in conjunction with "Management's Discussion and Analysis of Financial Condition and Results of Operations" and the consolidated financial statements and the related notes included elsewhere in this Annual Report on Form 10-K and from the historical consolidated financial statements not included herein to fully understand factors that may affect the comparability of the information presented below (in millions, except per share data).

	Year Ended December 31,										
	2	2019 (3)	2	2018 (2)		2017	2016 (1)			2015	
Consolidated Statements of Operations Data:											
Total revenues	\$	24,578	\$	21,461	\$	11,759	\$	7,000	\$	4,046	
Gross profit	\$	4,069	\$	4,042	\$	2,223	\$	1,599	\$	924	
Loss from operations	\$	(69)	\$	(388)	\$	(1,632)	\$	(667)	\$	(717)	
Net loss attributable to common stockholders	\$	(862)	\$	(976)	\$	(1,962)	\$	(675)	\$	(889)	
Net loss per share of common stock attributable to common stockholders, basic	¢.	(4.02)	¢	(5.72)	¢.	(11.02)	¢.	(4.69)	¢.	((02)	
and diluted	\$	(4.92)	\$	(5.72)	\$	(11.83)	\$	(4.68)	\$	(6.93)	
and diluted		177		171		166		144		128	
	As of December 31,										
		2019 (3)	2	2018 (2)		2017		2016 (1)		2015	
Consolidated Balance Sheet Data:											
Working (deficit) capital	\$	1,436	\$	(1,686)	\$	(1,104)	\$	433	\$	(29)	
Total assets		34,309		29,740		28,655		22,664		8,068	
Total long-term obligations		15,532		13,434		15,348		10,923		4,126	

- (1) We acquired SolarCity Corporation ("SolarCity") on November 21, 2016. SolarCity's financial results have been included in our financial results from the acquisition date as previously reported in our Annual Report on Form 10-K for the year ended December 31, 2016.
- (2) We adopted ASC 606 in 2018. Prior periods have not been revised. See Note 2, *Summary of Significant Accounting Policies*, of the notes to the consolidated financial statements included elsewhere in this Annual Report on Form 10-K for further details.
- (3) Includes the impact of the adoption of the new lease accounting standard in 2019. Prior periods have not been revised. See Note 2, *Summary of Significant Accounting Policies*, of the notes to the consolidated financial statements included elsewhere in this Annual Report on Form 10-K for further details.

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

The following discussion and analysis should be read in conjunction with the consolidated financial statements and the related notes included elsewhere in this Annual Report on Form 10-K. For discussion related to changes in financial condition and the results of operations for fiscal year 2017-related items, refer to Part II, Item 7. Management's Discussion and Analysis of Financial Condition and Results of Operations in our Annual Report on Form 10-K for fiscal year 2018, which was filed with the Securities and Exchange Commission on February 19, 2019.

Overview and 2019 Highlights

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

Automotive

During 2019, we achieved annual vehicle delivery and production records of 367,656 and 365,232 total vehicles, respectively. We also laid the groundwork for our next phase of growth with the commencement of Model 3 production at Gigafactory Shanghai; preparations at the Fremont Factory for Model Y production, which commenced in the first quarter of 2020; the selection of Berlin, Germany as the site for our next factory for the European market; and the unveiling of Cybertruck. We also continued to enhance our user experience through improved Autopilot and FSD features, including the introduction of a new powerful on-board FSD computer and a new Smart Summon feature, and the expansion of a unique set of in-car entertainment options.

Energy Generation and Storage

We revamped key aspects of our solar operations in 2019 by streamlining traditionally complex ordering, permitting, installation and back-end service processes to enhance the customer experience, especially for retrofit solar installations. Our solar deployments grew approximately 48% and 26%, quarter-over-quarter, in the second half of the year. We also deployed 1.65 GWh of energy storage in 2019, more than the aggregate of all prior years. Finally, we further evolved our product offerings by launching the third generation of the Solar Roof, for which we are expanding both our manufacturing and installation capabilities, and Megapack, our largest utility-scale energy storage product to date.

Management Opportunities, Challenges and Risks and 2020 Outlook

Automotive—Production

A key focus in 2020 will be our efforts towards establishing and expanding capacity for vehicle production at volume across three continents. At the Fremont Factory, we commenced Model Y production earlier than anticipated, and combined with Model 3, we have installed annual production capacity for 400,000 vehicles. We expect to further increase this capacity to 500,000 vehicles through the installation of additional equipment.

At Gigafactory Shanghai, we have installed annual production capacity for 150,000 Model 3 vehicles that we believe we will eventually be able to push to actual rates of production in excess of such number, subject to local production of battery packs, which we began ramping there later than other processes. We have commenced construction of the next phase of Gigafactory Shanghai to add Model Y manufacturing capacity at least equivalent to that for Model 3. To finance our construction and expansion, in December 2019 our local subsidiary entered into a RMB 9.0 billion (or the equivalent amount in U.S. dollars) fixed asset term facility and a RMB 2.25 billion (or the equivalent amount in U.S. dollars) working capital revolving facility, part of which was used to repay a RMB 3.5 billion bridge loan entered into in March 2019. We are supplementing such financing with limited direct capital expenditures.

Finally, we have selected Germany as the site of our next factory for manufacturing vehicles for the European market, due to its strong manufacturing and engineering presence. However, the construction of and ramp at Gigafactory Berlin, as well as at Gigafactory Shanghai, are subject to a number of uncertainties inherent in all new manufacturing operations, including ongoing compliance with regulatory requirements, maintenance of operational licenses and approvals for additional expansion, potential supply chain constraints, hiring, training and retention of qualified employees, and the pace of bringing production equipment and processes online with the capability to manufacture high-quality units at scale. Ultimately, achieving increased total vehicle production cost-effectively across all of our manufacturing operations will require that we timely address any bottlenecks that may arise as we ramp, establish and maintain sustained supplier capacity, and successfully utilize manufacturing processes at the maximum output rates that we have planned for them.

Automotive—Demand and Sales

As the automotive industry continues to validate and grow the market for electric vehicles, we are generating demand and new customers even without traditional marketing and with relatively low marketing costs, and in 2019 our orders shifted to originating mostly from new customers without prior reservations. Production at Gigafactory Shanghai allows us to offer Model 3 in China at competitive local pricing and more quickly, which should drive further demand and opportunity in the world's largest market for mid-sized premium sedans, and we expect a similar impact in China for Model Y when we commence production there of this offering in the popular compact SUV segment.

Moreover, the significant interest generated by our unveiling of Cybertruck demonstrated our brand visibility, innovation and viability across an increasing range of vehicle segments. Meanwhile, we are making our existing vehicles incrementally more compelling, including through a planned software update for FSD-enabled vehicles to react to traffic lights and stop signs and navigate city intersections, and additional functionality of both in-vehicle software and the Tesla mobile app.

On the other hand, we may be impacted by trade and environmental policies, political uncertainty and economic cycles involving geographic regions where we have significant operations, which are inherently unpredictable. Sales of vehicles in the automotive industry also tend to be cyclical in many markets, which may expose us to increased volatility. Specifically, it is uncertain as to how such macroeconomic factors will impact us as a company that has been experiencing growth and increasing market share in an industry that has globally been experiencing a recent decline in sales. Finally, we make certain adjustments to our prices from time to time in the ordinary course of business, including as we introduce new vehicles and variants and optimize the pricing among them. Such pricing changes may impact our vehicles' resale values, and in turn our operating results. For example, if price reductions result in an increase to our estimates of the volume of vehicles that may potentially be returned to us under pre-existing resale value guarantees provided to customers and partners for certain financing programs, our gross profits may be reduced.

Automotive—Deliveries and Customer Infrastructure

We continue to optimize our manufacturing and global delivery patterns to address higher volumes of our predominantly single-factory production at the Fremont Factory. We expect to alleviate any related issues through local production at Gigafactory Shanghai and eventually at Gigafactory Berlin.

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

Energy Generation and Storage Demand, Production and Deployment

We expect to continue to grow our retrofit solar system deployments as we execute our new strategy, including through compelling financing options such as a subscription-based offering, which is currently available in California.

We are focused on training our personnel and third party partners to ramp installations of our Solar Roof, and are also hiring rapidly for its ongoing manufacturing ramp at Gigafactory New York. We expect such ramp will support our significant operations and our compliance with minimum hiring and cumulative investment targets under our agreement with the SUNY Foundation related to the construction and use of Gigafactory New York. However, if our expectations as to the costs and timelines of our investment and operations at Buffalo or our production ramp of the Solar Roof prove incorrect, we may incur additional expenses or substantial payments to the SUNY Foundation.

Finally, with the introduction of our 3 MWh Megapack, we now offer an even greater variety of scalable energy storage products with a wide range of markets and applications, and expect this product to drive additional interest from global project developers and utilities.

Trends in Cash Flow, Capital Expenditures and Operating Expenses

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

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

We expect operating expenses as a percentage of revenue to continue to decrease in the future as we focus on increasing operational efficiency and process automation, as well as from increases in expected overall revenues from our expanding sales. In particular, our efforts to scale down and optimize our cost structure relative to the size of our business have already manifested in total operating expenses decreasing from \$4.4 billion to \$4.1 billion from fiscal year 2018 to fiscal year 2019, including restructuring and other charges. Meanwhile, our total revenues increased from \$21.5 billion to \$24.6 billion in the same period.

In March 2018, our stockholders approved the 2018 CEO Performance Award, with vesting contingent on achieving market capitalization and operational milestones. We will incur significant non-cash stock-based compensation expense for each tranche under this award after the related operational milestone initially becomes probable of being met, and if later than the grant date, we will also have to record a cumulative catch-up expense at such time. Such catch-up expense may be material depending on the length of time elapsed from the grant date. For example, in the fourth quarter of 2019, as the result of an additional operational milestone becoming probable of achievement, we recorded a cumulative catch-up expense of \$72 million for service provided from the grant date. Moreover, as the expense for a tranche is recorded over the longer of (i) the expected achievement period of the relevant operational milestone and (ii) only if the related market capitalization milestone has not been achieved, its expected achievement period, the achievement of a market capitalization milestone earlier than expected may accelerate the rate at which such expense is recognized. Upon vesting of a tranche, all remaining associated expense will be recognized immediately. See Note 14, *Equity Incentive Plans—2018 CEO Performance Award*, to the consolidated financial statements included elsewhere in this Annual Report on Form 10-K for further details regarding the stock-based compensation relating to the 2018 CEO Performance Award.

Critical Accounting Policies and Estimates

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

Revenue Recognition

Adoption of new revenue standard

On January 1, 2018, we adopted ASC 606, *Revenue from Contracts with Customers*, ("new revenue standard") using the modified retrospective method. The new revenue standard had a material impact in our consolidated financial statements. For further discussion, refer to Note 2, *Summary of Significant Accounting Policies*, to the consolidated financial statements included elsewhere in this Annual Report on Form 10-K.

Automotive Segment

Automotive Sales Revenue

Automotive Sales without Resale Value Guarantee

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

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

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

Automotive Sales with Resale Value Guarantee or a Buyback Option

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

With the exception of two programs which are discussed within the *Automotive Leasing* section, we recognize revenue when control transfers upon delivery to customers in accordance with the new revenue standard as a sale with a right of return as we do not believe the customer has a significant economic incentive to exercise the resale value guarantee provided to them. The process to determine whether there is a significant economic incentive includes a comparison of a vehicle's estimated market value at the time the option is exercisable with the guaranteed resale value to determine the customer's economic incentive to exercise. The performance obligations and the pattern of recognizing automotive sales with resale value guarantees are consistent with automotive sales without resale value guarantees with the exception of our estimate for sales return reserve. Sales return reserves for automotive sales with resale value guarantees are estimated based on historical experience plus consideration for expected future market values. On a quarterly basis, we assess the estimated market values of vehicles under our buyback options program to determine whether there have been changes to the likelihood of future product returns. As we accumulate more data related to the buyback values of our vehicles or as market conditions change, there may be material changes to their estimated values. The two programs that are still being recorded as operating leases are discussed in further detail below in *Vehicle Sales to Leasing Partners with a Resale Value Guarantee and a Buyback Option* and *Vehicle Sales to Customers with a Resale Value Guarantee where Exercise is Probable*.

Prior to the adoption of the new revenue standard, all transactions with resale value guarantees were recorded as operating leases. The amount of sale proceeds equal to the resale value guarantee was deferred until the guarantee expired or was exercised. For certain transactions that were considered interest bearing collateralized borrowings as required under ASC 840, *Leases* prior to January 1, 2019, we also accrued interest expense based on our borrowing rate. The remaining sale proceeds were deferred and recognized on a straight-line basis over the stated guarantee period to automotive leasing revenue. The guarantee period expired at the earlier of the end of the guarantee period or the pay-off of the initial loan. We capitalized the cost of these vehicles on the consolidated balance sheet as operating lease vehicles, net, and depreciated their value, less estimated residual value, to cost of automotive leasing revenue over the same period.

In cases where our counterparty retained ownership of the vehicle at the end of the guarantee period, the resale value guarantee liability and any remaining deferred revenue balances related to the vehicle were settled to automotive leasing revenue, and the net book value of the leased vehicle was expensed to cost of automotive leasing revenue. If our counterparty returned the vehicle to us during the guarantee period, we purchased the vehicle from our counterparty in an amount equal to the resale value guarantee and settled any remaining deferred balances to automotive leasing revenue, and we reclassified the net book value of the vehicle on the consolidated balance sheet to used vehicle inventory.

Automotive Regulatory Credits

In connection with the production and delivery of our zero emission vehicles in global markets, we have earned and will continue to earn various tradable automotive regulatory credits. We have sold these credits, and will continue to sell future credits, to automotive companies and other regulated entities who can use the credits to comply with emission standards and other regulatory requirements. For example, under California's Zero Emission Vehicle Regulation and those of states that have adopted California's standard, vehicle manufacturers are required to earn or purchase credits, referred to as ZEV credits, for compliance with their annual regulatory requirements. These laws provide that automakers may bank or sell to other regulated parties their excess credits if they earn more credits than the minimum quantity required by those laws. We also earn other types of saleable regulatory credits in the United States and abroad, including greenhouse gas, fuel economy and clean fuels credits. Payments for regulatory credits are typically received at the point control transfers to the customer, or in accordance with payment terms customary to the business. We recognize revenue on the sale of automotive regulatory credits at the time control of the regulatory credits is transferred to the purchasing party as automotive revenue in the consolidated statement of operations.

Automotive Leasing Revenue

Automotive leasing revenue includes revenue recognized under lease accounting guidance for our direct leasing programs as well as the two programs with resale value guarantees which continue to qualify for operating lease treatment. Prior to the adoption of the new revenue standard, all programs with resale value guarantees were accounted for as operating leases.

Direct Vehicle Leasing Program

We have outstanding leases under our direct vehicle leasing programs in the U.S., Canada and in certain countries in Europe. As of December 31, 2019, the direct vehicle leasing program is offered for all new Model S, Model X and Model 3 vehicles in the U.S. and new Model S and Model X vehicles in Canada. Qualifying customers are permitted to lease a vehicle directly from Tesla for up to 48 months. At the end of the lease term, customers are required to return the vehicles to us or for Model S and Model X leases, may opt to purchase the vehicles for a predetermined residual value. We account for these leasing transactions as operating leases. We record leasing revenues to automotive leasing revenue on a straight-line basis over the contractual term, and we record the depreciation of these vehicles to cost of automotive leasing revenue.

We capitalize shipping costs and initial direct costs such as the incremental cost of referral fees and sales commissions from the origination of automotive lease agreements as an element of operating lease vehicles, net, and subsequently amortize these costs over the term of the related lease agreement. Our policy is to exclude taxes collected from a customer from the transaction price of automotive contracts.

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

We offer buyback options in connection with automotive sales with resale value guarantees with certain leasing partner sales in the United States. These transactions entail a transfer of leases, which we have originated with an end-customer, to our leasing partner. As control of the vehicles has not been transferred in accordance with the new revenue standard, these transactions were accounted for as interest bearing collateralized borrowings in accordance with ASC 840, Leases, prior to January 1, 2019. Under this program, cash is received for the full price of the vehicle and the collateralized borrowing value is generally recorded within resale value guarantees and the customer upfront down payment is recorded within deferred revenue. We amortize the deferred revenue amount to automotive leasing revenue on a straight-line basis over the option period and accrue interest expense based on our borrowing rate. We capitalize vehicles under this program to operating lease vehicles, net, on the consolidated balance sheets, and we record depreciation from these vehicles to cost of automotive leasing revenue during the period the vehicle is under a lease arrangement. Cash received for these vehicles, net of revenue recognized during the period, is classified as collateralized lease (repayments) borrowings within cash flows from financing activities in the consolidated statements of cash flows. With the adoption of ASC 842 on January 1, 2019, all new agreements under this program are accounted for as operating leases under ASC 842 and there was no material change in the timing and amount of revenue recognized over the term. Consequently, any cash flows for new agreements are classified as operating cash activities on the consolidated statements of cash flows.

At the end of the lease term, we settle our liability in cash by either purchasing the vehicle from the leasing partner for the buyback option amount or paying a shortfall to the option amount the leasing partner may realize on the sale of the vehicle. Any remaining balances within deferred revenue and resale value guarantee will be settled to automotive leasing revenue. The end customers can extend the lease for a period of up to 6 months. In cases where the leasing partner retains ownership of the vehicle after the end of our option period, we expense the net value of the leased vehicle to cost of automotive leasing revenue.

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

For certain international programs where we have offered resale value guarantees to certain customers who purchased vehicles and where we expect the customer has a significant economic incentive to exercise the resale value guarantee provided to them, we continue to recognize these transactions as operating leases. The process to determine whether there is a significant economic incentive includes a comparison of a vehicle's estimated market value at the time the option is exercisable with the guaranteed resale value to determine the customer's economic incentive to exercise. We have not sold any vehicles under this program since the first half of 2017 and all current period activity relates to the exercise or cancellation of active transactions. The amount of sale proceeds equal to the resale value guarantee is deferred until the guarantee expires or is exercised. The remaining sale proceeds are deferred and recognized on a straight-line basis over the stated guarantee period to automotive leasing revenue. The guarantee period expires at the earlier of the end of the guarantee period or the pay-off of the initial loan. We capitalize the cost of these vehicles on the consolidated balance sheet as operating lease vehicles, net, and depreciate their value, less salvage value, to cost of automotive leasing revenue over the same period.

In cases where a customer retains ownership of a vehicle at the end of the guarantee period, the resale value guarantee liability and any remaining deferred revenue balances related to the vehicle are settled to automotive leasing revenue, and the net book value of the leased vehicle is expensed to cost of automotive leasing revenue. If a customer returns the vehicle to us during the guarantee period, we purchase the vehicle from the customer in an amount equal to the resale value guarantee and settle any remaining deferred balances to automotive leasing revenue, and we reclassify the net book value of the vehicle on the consolidated balance sheets to used vehicle inventory.

Energy Generation and Storage Segment

Energy Generation and Storage Sales

Energy generation and storage sales revenue consists of the sale of solar energy systems and energy storage systems to residential, small commercial, and large commercial and utility grade customers, including solar subscription-based arrangements. Upon adoption of ASC 842, energy generation and storage sales revenue includes agreements for solar energy systems and PPAs that commence after January 1, 2019, as these are now accounted for under the new revenue standard. Sales of solar energy systems to residential and small scale commercial customers consist of the engineering, design, and installation of the system. Post-installation, residential and small scale commercial customers receive a proprietary monitoring system that captures and displays historical energy generation data. Residential and small scale commercial customers pay the full purchase price of the solar energy system upfront. Revenue for the design and installation obligation is recognized when control transfers, which is when we install a solar energy system and the system passes inspection by the utility or the authority having jurisdiction. Revenue for the monitoring service is recognized ratably as a stand-ready obligation over the warranty period of the solar energy system. Sales of energy storage systems to residential and small scale commercial customers consist of the installation of the energy storage system and revenue is recognized when control transfers, which is when the product has been delivered or, if we are performing installation, when installed and commissioned. Payment for such storage systems is made upon invoice or in accordance with payment terms customary to the business.

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

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

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

We record as deferred revenue any non-refundable amounts that are collected from customers related to fees charged for prepayments and remote monitoring service and operations and maintenance service, which is recognized as revenue ratably over the respective customer contract term.

Energy Generation and Storage Leasing

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

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

We record as deferred revenue any amounts that are collected from customers, including lease prepayments, in excess of revenue recognized and operations and maintenance service, which is recognized as revenue ratably over the respective customer contract term. Deferred revenue also includes the portion of rebates and incentives received from utility companies and various local and state government agencies, which is recognized as revenue over the lease term.

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

Inventory Valuation

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

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

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

Warranties

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

Stock-Based Compensation

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

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

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

Income Taxes

We are subject to federal and state taxes in the U.S. and in many foreign jurisdictions. Significant judgment is required in determining our provision for income taxes, our deferred tax assets and liabilities and any valuation allowance recorded against our net deferred tax assets. We make these estimates and judgments about our future taxable income that are based on assumptions that are consistent with our future plans. Tax laws, regulations, and administrative practices may be subject to change due to economic or political conditions including fundamental changes to the tax laws applicable to corporate multinationals. The U.S., many countries in the European Union and a number of other countries are actively considering changes in this regard. As of December 31, 2019, we had recorded a full valuation allowance on our net U.S. deferred tax assets because we expect that it is more likely than not that our U.S. deferred tax assets will not be realized in the foreseeable future. Should the actual amounts differ from our estimates, the amount of our valuation allowance could be materially impacted.

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

Principles of Consolidation

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

Noncontrolling Interests and Redeemable Noncontrolling Interests

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

Results of Operations

Revenues

	Year E	nded Decem	iber 31,	2019 vs. 2018	3 Change	2018 vs. 2017 Change		
(Dollars in millions)	2019	2018	2017	\$	%	\$	%	
Automotive sales	\$19,952	\$17,632	\$ 8,535	\$ 2,320	13%	\$ 9,097	107%	
Automotive leasing	869	883	1,107	(14)	-2%	(224)	-20%	
Total automotive revenues	20,821	18,515	9,642	2,306	12%	8,873	92%	
Services and other	2,226	1,391	1,001	835	60%	390	39%	
Total automotive & services and other segment revenue	23,047	19,906	10,643	3,141	16%	9,263	87%	
Energy generation and								
storage segment revenue	1,531	1,555	1,116	(24)	-2%	439	39%	
Total revenues	\$24,578	\$21,461	\$11,759	\$ 3,117	15%	\$ 9,702	83%	

Automotive & Services and Other Segment

Automotive sales revenue includes revenues related to cash sales of new Model S, Model X and Model 3 vehicles, including access to our Supercharger network, internet connectivity, Autopilot and FSD features and overthe-air software updates, as well as sales of regulatory credits to other automotive manufacturers. Cash deliveries are vehicles that are not subject to lease accounting.

Automotive leasing revenue includes the amortization of revenue for Model S, Model X and Model 3 vehicles under direct lease agreements as well as those sold with resale value guarantees accounted for as operating leases under lease accounting. We began offering direct leasing for Model 3 vehicles in the second quarter of 2019.

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

2019 Compared to 2018

Automotive sales revenue increased \$2.32 billion, or 13%, in the year ended December 31, 2019 as compared to the year ended December 31, 2018, primarily due to an increase of 137,969 Model 3 cash deliveries from production scaling and an increase of \$175 million in sales of regulatory credits to \$594 million. The increase was partially offset by a decrease of 30,487 Model S and Model X cash deliveries. The deliveries in the year ended December 31, 2019 were at lower average selling prices than the prior year due to price adjustments we made to our vehicle offerings and the introduction of lower end Model 3 trims in 2019. Due to the price adjustments, we estimated that there is a greater likelihood that customers will exercise their buyback options that were provided prior to such adjustments. As a result, along with the estimated variable consideration related to normal future product returns for vehicles sold under the buyback options program, we adjusted our sales return reserve on vehicles previously sold under our buyback options program resulting in a reduction of automotive sales revenues of \$555 million. Refer to Note 2, *Summary of Significant Accounting Policies*, to the consolidated statements included elsewhere in this Annual Report on Form 10-K.

Automotive leasing revenue decreased \$14 million, or 2%, in the year ended December 31, 2019 as compared to the year ended December 31, 2018. The decrease was primarily due to a decrease in cumulative vehicles under our resale value guarantee leasing programs which are accounted for as operating leases. The decrease was partially offset by an increase in cumulative vehicles under our direct vehicle leasing program, partially due to the introduction of Model 3 direct leasing in the second quarter of 2019.

Services and other revenue increased \$835 million, or 60%, in the year ended December 31, 2019 as compared to the year ended December 31, 2018. The increase was primarily due to an increase in used vehicle sales from an increased volume of trade-in vehicles, partially offset by lower average selling prices for traded-in Tesla vehicles due to price adjustments we made to our vehicle offerings in 2019. Additionally, there was an increase in non-warranty maintenance services revenue as our fleet continues to grow.

Energy Generation and Storage Segment

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

2019 Compared to 2018

Energy generation and storage revenue decreased by \$24 million, or 2%, in the year ended December 31, 2019 as compared to the year ended December 31, 2018, primarily due to decreases in deployments of solar cash and loan jobs partially offset increases in deployments of Powerwall, Powerpack, and Megapack.

Cost of Revenues and Gross Margin

	Year E	nded Decemb	er 31,	2019 vs. : Chang		2018 vs. 2017 Change		
(Dollars in millions)	2019	2018	2017	\$	%	\$	%	
Cost of revenues								
Automotive sales	\$ 15,939	\$ 13,686	\$6,725	\$ 2,253	16% \$	6,961	104%	
Automotive leasing	459	488	708	(29)	-6% _	(220)	-31%	
Total automotive cost								
of revenues	16,398	14,174	7,433	2,224	16%	6,741	91%	
Services and other	2,770	1,880	1,229	890	47% _	651	53%	
Total automotive & services and other segment cost of								
revenues	19,168	16,054	8,662	3,114	19%	7,392	85%	
Energy generation and	,	-,	-,	- ,		. ,		
storage segment	1,341	1,365	874	(24)	-2%	491	56%	
Total cost of revenues	\$ 20,509	\$ 17,419	\$9,536	\$ 3,090	18% \$	7,883	83%	
Gross profit total automotive			\$2,209 % 23%					
Gross profit total automotive & services and other segment	\$ 3,879 17%							
Gross profit energy generation and storage segment	\$ 190 12%	\$ 190 6 12%	\$ 242 % 22%					
Total gross profit			\$2,223 % 19%					

Automotive & Services and Other Segment

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

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

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

2019 Compared to 2018

Cost of automotive sales revenue increased \$2.25 billion, or 16%, in the year ended December 31, 2019 as compared to the year ended December 31, 2018, primarily due to an increase of 137,969 Model 3 cash deliveries and higher average Model S and Model X costs per unit compared to the prior year due to the discontinuation of lower end trims in 2019. The increases were partially offset by a decrease of 30,487 Model S and Model X cash deliveries and a decrease in average Model 3 costs per unit compared to the prior year primarily due to lower end trims introduced in 2019 and temporary under-utilization of manufacturing capacity at lower production volumes in the first half of 2018. Additionally, due to price adjustments we made to our vehicle offerings in 2019, we estimated that there is a greater likelihood that customers will exercise their buyback options that were provided prior to such adjustments. If customers elect to exercise the buyback options, we expect to be able to subsequently resell the returned vehicles, which resulted in a reduction of automotive cost of sales of \$451 million for the year ended December 31, 2019. Refer to Note 2, Summary of Significant Accounting Policies, to the consolidated statements included elsewhere in this Annual Report on Form 10-K.

Cost of automotive leasing revenue decreased \$29 million, or 6%, in the year ended December 31, 2019 compared to the year ended December 31, 2018. The decrease was primarily due to a decrease in cumulative vehicles under our resale value guarantee leasing programs which are accounted for as operating leases. The decrease was partially offset by an increase in cumulative vehicles under our direct vehicle leasing program, partially due to the introduction of Model 3 leasing in the second quarter of 2019.

Cost of services and other revenue increased \$890 million, or 47%, in the year ended December 31, 2019 as compared to the year ended December 31, 2018. The increase was primarily due to the costs of used vehicle sales from the increased volumes of trade-in vehicles. Additionally, there were increases in the costs of our new service centers, additional service personnel in existing and new service centers, Mobile Service capabilities, parts distribution centers and investment in new body shops to provide maintenance services to our rapidly growing fleet of vehicles.

Gross margin for total automotive decreased from 23% to 21% in the year ended December 31, 2019 as compared to the year ended December 31, 2018, primarily due to lower Model S and Model X margins from lower selling prices due to price adjustments we made to our vehicle offerings in 2019, a higher proportion of Model 3 as a percentage of our total automotive sales compared to the prior period. Additionally, the price adjustments also resulted in a reduction in gross automotive sales profit of \$104 million from the adjustment of our sales return reserve on vehicles previously sold under our buyback options program. The decrease was partially offset by improvement of Model 3 margins compared to the prior year as we achieved additional manufacturing efficiencies in the production of Model 3 and an increase of \$175 million in sales of regulatory credits.

Gross margin for total automotive & services and other segment decreased from 19% to 17% in the year ended December 31, 2019 as compared to the year ended December 31, 2018, primarily due to the automotive gross margin impacts discussed above and a higher proportion of services and other within the segment, which operates at lower gross margins than our automotive business.

Energy Generation and Storage Segment

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

2019 Compared to 2018

Cost of energy generation and storage revenue decreased by \$24 million, or 2%, in the year ended December 31, 2019 as compared to the year ended December 31, 2018. The decrease was primarily due to a decrease in deployments of solar cash and loan jobs, partially offset by increases in deployments of Powerwall, Powerpack, and Megapack.

Gross margin for energy generation and storage remained relatively consistent at 12% in the year ended December 31, 2019 as compared to the year ended December 31, 2018. Energy storage gross margins improved in the current year as a result of lower materials costs, partially offset by lower gross margins in our cash and loan solar business driven by higher costs from temporary manufacturing under-utilization of our Solar Roof ramp.

Research and Development Expense

	Year Er	ided Decemb	oer 31,	2019 vs. Chan		2018 vs Chai	
(Dollars in millions)	2019	2018	2017	\$	%	\$	<u>%</u>
Research and development	\$1,343	\$1,460	\$1,378	\$ (117)	-8% \$	82	6%
As a percentage of revenues	5%	7%	12%	D			

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

R&D expenses as a percentage of revenue decreased from 7% to 5% in the year ended December 31, 2019 as compared to the year ended December 31, 2018. The decrease was primarily from an increase in overall revenues from our expanding sales, as well as from our focus on increasing operational efficiency and process automation, our efforts to scale down and optimize our cost structure relative to the size of our business.

R&D expenses decreased \$117 million, or 8%, in the year ended December 31, 2019 compared to the year ended December 31, 2018. The decrease was primarily due to a \$95 million decrease in employee and labor related expenses from cost efficiency initiatives and a \$26 million decrease in professional and outside service expenses.

Selling, General and Administrative Expense

	W/ TO		21	2019 vs.		2018 vs.	
	Year Ei	nded Decem	per 31,	Chan	<u>ge</u>	Char	nge
(Dollars in millions)	2019	2018	2017	\$	%	\$	
Selling, general and administrative	\$ 2,646	\$ 2,835	\$ 2,477	\$ (189)	-7%\$	358	14%
As a percentage of revenues	11%	13%	21%	o			

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

SG&A expenses as a percentage of revenue decreased from 13% to 11% in year ended December 31, 2019 as compared to the year ended December 31, 2018. The decrease was primarily from an increase in overall revenues from our expanding sales, as well as from our focus on increasing operational efficiency and process automation, our efforts to scale down and optimize our cost structure relative to the size of our business.

SG&A expenses decreased \$189 million, or 7%, in the year ended December 31, 2019 as compared to the year ended December 31, 2018. The decrease was primarily due to a \$302 million decrease in employee and labor related expenses from decreased headcount and cost efficiency initiatives, partially offset by a \$112 million increase in stock-based compensation expense. The increase in stock-based compensation expense was primarily related to the 2018 CEO Performance Award as we recorded a \$72 million cumulative catch-up expense for the service provided from the grant date when an additional operational milestone was considered probable of being met in the fourth quarter of 2019. Additionally, the expense period was shorter in the prior year as it commenced upon the grant approval date of March 21, 2018.

Restructuring and other

							- 2	2019 vs.	2018	2018 vs	. 2017	
		Year E	nded	Decem	ber 3	1,		Char	ige	Cha	nge	_
(Dollars in millions)	2	2019	2	018	_2	017		\$		 \$		_
Restructuring and other	\$	149	\$	135	\$	_	\$	14	10%	\$ 135	N/A	
As a percentage of revenues		1%		1%	ò	0%)					

During the year ended December 31, 2019, we carried out certain restructuring actions in order to reduce costs and improve efficiency. As a result, we recognized \$50 million of costs primarily related to employee termination expenses and losses from closing certain stores impacting both segments. We recognized \$47 million in impairment related to the IPR&D intangible asset as we abandoned further development efforts (refer to Note 4, *Goodwill and Intangible Assets* for details) and \$15 million for the related equipment within the energy generation and storage segment. We also incurred a loss of \$37 million for closing operations in certain facilities. On the statement of cash flows, the amounts were presented in the captions in which such amounts would have been recorded absent the impairment charges. The employee termination expenses were substantially paid by December 31, 2019, while the remaining amounts were non-cash.

During the year ended December 31, 2018, we carried-out certain restructuring actions in order to reduce costs and improve efficiency and recognized \$37 million of employee termination expenses and estimated losses from subleasing a certain facility. The employee termination cash expenses of \$27 million were substantially paid by the end of 2018, while the remaining amounts were non-cash. Also included within restructuring and other activities was \$55 million of expenses (materially all of which were non-cash) from restructuring the energy generation and storage segment, which comprised of disposals of certain tangible assets, the shortening of the useful life of a trade name intangible asset and a contract termination penalty. In addition, we concluded that a small portion of the IPR&D asset is not commercially feasible. Consequently, we recognized an impairment loss of \$13 million. We recognized settlement and legal expenses of \$30 million in the year ended December 31, 2018 for the settlement with the SEC relating to a take-private proposal for Tesla. These expenses were substantially paid by the end of 2018.

Interest Expense

	Year Ended December 31,							019 vs. Chan		2018 vs. 2017 Change		
(Dollars in millions)	_20	19	2	2018		2017		\$	%	\$	%	
Interest expense	\$	685	\$	663	\$	471	\$	22	3%\$	192	41%	
As a percentage of revenues		3%	1	3%)	4%	ó					

Interest expense increased by \$22 million, or 3%, in the year ended December 31, 2019 as compared to the year ended December 31, 2018. The increase was primarily due to an increase in our average outstanding indebtedness at relatively consistent weighted average interest rates as compared to the year ended December 31, 2018.

Other Income (Expense), Net

								2019 vs	. 2018				
	}	Year Ended December 31,						Cha	nge	2	2018 vs. 2017 Cha		
(Dollars in millions)	20	019	_2	018_		2017		\$	%		\$		
												Not	
Other income (expense), net	\$	45	\$	22	\$	(125)	\$	23	105%	\$	147	meaningful	
As a percentage of revenues		0%)	0%)	-1%)						

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

Other income (expense), net, increased by \$23 million, or 105%, in the year ended December 31, 2019 as compared to the year ended December 31, 2018. The change was primarily due to favorable fluctuations in foreign currency exchange rates, offset by losses from interest rate swaps related to our debt facilities year-over-year.

Provision for Income Taxes

							2	019 vs.	. 2018	2018 vs.	2017
		Year Er	ıded	Deceml	er 3	1,		Char	ige	Char	ige
(Dollars in millions)	_2	019	2	018	2()17		\$		\$	
Provision for income taxes	\$	110	\$	58	\$	32	\$	52	90% \$	26	81%
Effective tax rate		-17%		-6%		-1%	0				

Our provision for income taxes increased by \$52 million, or 90%, in the year ended December 31, 2019 as compared to the year ended December 31, 2018, primarily due to the increase in taxable profits in certain foreign jurisdictions year-over-year.

Net Income (Loss) Attributable to Noncontrolling Interests and Redeemable Noncontrolling Interests

	 Year Ei	nded	Decem	ber 31,	2019 vs.	2018 Change	2018 vs. Chan	
(Dollars in millions)	2019	_2	2018	2017	\$	%	\$	%
Net income (loss) attributable								
to noncontrolling interests								
and redeemable								
noncontrolling interests						Not		
in subsidiaries	\$ 87	\$	(87)	\$ (279)	\$ 174	meaningful \$	192	-69%

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

Net income (loss) attributable to noncontrolling interests and redeemable noncontrolling interests changed unfavorably by \$174 million in the year ended December 31, 2019 as compared to the year ended December 31, 2018. The change was primarily due to lower activities in our financing fund arrangements.

Liquidity and Capital Resources

As of December 31, 2019, we had \$6.27 billion of cash and cash equivalents. Balances held in foreign currencies had a U.S. dollar equivalent of \$1.26 billion and consisted primarily of Chinese yuan, euros and Canadian dollars. Our sources of cash are predominantly from our deliveries of vehicles, sales and installations of our energy storage products and solar energy systems, proceeds from debt facilities, proceeds from financing funds and proceeds from equity offerings.

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

As discussed in and subject to the considerations referenced in Part II, Item 7, Management's Discussion and Analysis of Financial Condition and Results of Operations—Management Opportunities, Challenges and Risks and 2020 Outlook—Trends in Cash Flow, Capital Expenditures and Operating Expenses in this Annual Report on Form 10-K, considering the expected pace of the manufacturing ramps for our products, construction and expansion of our factories, and pipeline of projects under development, and consistent with our current strategy of using a partner to manufacture battery cells, as well as considering all other infrastructure growth, we currently expect our average annual capital expenditures in 2020 and the two succeeding fiscal years to be \$2.5 billion to \$3.5 billion.

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

We have an agreement to spend or incur \$5.0 billion in combined capital, operational expenses, costs of goods sold and other costs in the State of New York during the 10-year period following full production at Gigafactory New York. We anticipate meeting these obligations through our operations at this facility and other operations within the State of New York, and we do not believe that we face a significant risk of default.

We expect that our current sources of liquidity together with our projection of cash flows from operating activities will provide us with adequate liquidity over at least the next 12 months. A large portion of our future expenditures is to fund our growth, and we can adjust our capital and operating expenditures by operating segment, including future expansion of our product offerings, retail and service locations, body shops, Mobile Service fleet, and Supercharger network. We may need or want to raise additional funds in the future, and these funds may not be available to us when we need or want them, or at all. If we cannot raise additional funds when we need or want them, our operations and prospects could be negatively affected.

In addition, we had \$3.03 billion of unused committed amounts under our credit facilities and financing funds as of December 31, 2019, some of which are subject to satisfying specified conditions prior to draw-down (such as pledging to our lenders sufficient amounts of qualified receivables, inventories, leased vehicles and our interests in those leases, solar energy systems and the associated customer contracts, our interests in financing funds or various other assets; and contributing or selling qualified solar energy systems and the associated customer contracts or qualified leased vehicles and our interests in those leases into the financing funds). Upon the draw-down of any unused committed amounts, there are no restrictions on use of available funds for general corporate purposes. For details regarding our indebtedness and financing funds, refer to Note 12, *Debt*, and Note 17, *Variable Interest Entity Arrangements*, to the consolidated financial statements included elsewhere in this Annual Report on Form 10-K.

Summary of Cash Flows

	Year Ended December 31,											
(Dollars in millions)		2019		2018	2017							
Net cash provided by (used in) operating activities	\$	2,405	\$	2,098	\$	(61)						
Net cash used in investing activities	\$	(1,436)	\$	(2,337)	\$	(4,196)						
Net cash provided by financing activities	\$	1,529	\$	574	\$	4,415						

Cash Flows from Operating Activities

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

Net cash provided by operating activities increased by \$307 million to \$2.41 billion during the year ended December 31, 2019 from \$2.10 billion during the year ended December 31, 2018. This favorable change was primarily due to the increase in net income, excluding non-cash expenses and gains, of \$902 million, partially offset by the increase in net operating assets and liabilities of \$407 million and \$188 million of the repayment of our 0.25% Convertible Senior Notes due in 2019 which was classified as an operating activity, as this represented an interest payment on the discounted convertible notes. The increase in net operating assets and liabilities was mainly driven by a smaller increase in accounts payable and accrued liabilities in 2019 as compared to 2018, as we were ramping for Model 3 production in 2018 and a larger increase in operating lease vehicles in 2019 as compared to 2018 as we began offering Model 3 leasing in 2019. The increase in net operating assets and liabilities was partially offset by a smaller increase in inventory and a larger increase in deferred revenue in 2019 as compared to 2018.

Cash Flows from Investing Activities

Cash flows from investing activities and their variability across each period related primarily to capital expenditures, which were \$1.33 billion during 2019, mainly for Gigafactory Shanghai construction, Model 3 production, and Model Y preparations, and \$2.10 billion during 2018, mainly for Model 3 production. Design, acquisition and installation of solar energy systems amounted to \$105 million and \$218 million for the years ended December 31, 2019 and 2018, respectively.

Cash Flows from Financing Activities

Cash flows from financing activities during the year ended December 31, 2019 consisted primarily of \$1.82 billion from the issuance of the 2.00% Convertible Senior Notes due in 2024 ("2024 Notes"), net of transaction costs, and \$848 million from the issuance of common stock, net of underwriting discounts, in registered public offerings, \$736 million of net borrowings under loan agreements entered into by certain Chinese subsidiaries, \$394 million of net borrowings for automotive asset-backed notes, and \$174 million from the issuance of warrants in connection with the offering of the 2024 Notes. These cash inflows were partially offset by a \$732 million portion of the repayment of our 0.25% Convertible Senior Notes due in 2019 that was classified as financing activity, a \$566 million repayment of our 1.625% Convertible Senior Notes due in 2019, a purchase of convertible note hedges of \$476 million in connection with the offering of the 2024 Notes, and collateralized lease repayments of \$389 million. See Note 12, *Debt*, and Note 2, *Summary of Significant Accounting Policies*, to the consolidated financial statements included elsewhere in this Annual Report on Form 10-K for further details regarding our debt obligations and collateralized borrowings, respectively.

Cash flows from financing activities during the year ended December 31, 2018 consisted primarily of \$1.18 billion of net borrowings under automobile asset-backed notes, \$431 million of net borrowings under the senior secured asset-based revolving credit agreement (the "Credit Agreement"), \$334 million from the issuance of solar asset-backed notes and \$296 million of proceeds from exercises of stock options and other stock issuances. These cash inflows were partially offset by net repayments of \$582 million under our vehicle lease-backed loan and security agreements (the "Warehouse Agreements"), collateralized lease repayments of \$559 million, repayments of \$230 million of the 2.75% Convertible Senior Notes due on November 1, 2018, and repayments of \$210 million under the revolving aggregation credit facility.

Contractual Obligations

We are party to contractual obligations involving commitments to make payments to third parties, including certain debt financing arrangements and leases, primarily for stores, service centers, certain manufacturing and corporate offices. These also include, as part of our normal business practices, contracts with suppliers for purchases of certain raw materials, components and services to facilitate adequate supply of these materials and services and capacity reservation contracts. The following table sets forth, as of December 31, 2019, certain significant obligations that will affect our future liquidity (in millions):

			Year	End	led Decemb	er 3	31,			
_	Total	2020	2021		2022		2023	2024	Th	ereafter
Operating lease obligations, including imputed interest \$	1,459	\$ 296	\$ 262	\$	210	\$	173	\$ 146	\$	372
Finance lease obligations,										
including imputed interest	1,795	474	478		600		225	5		13
Purchase obligations (1)	16,292	5,729	2,946		3,645		3,948	24		
Debt, including scheduled										
interest (2)	14,031	1,774	2,594		2,287		1,993	2,575		2,808
Total <u>§</u>	33,577	\$ 8,273	\$ 6,280	\$	6,742	\$	6,339	\$ 2,750	\$	3,193

- (1) These amounts represent (i) purchase orders of \$2.50 billion issued under binding and enforceable agreements with all vendors as of December 31, 2019 and (ii) \$13.79 billion in other estimable purchase obligations pursuant to such agreements, primarily relating to the purchase of lithium-ion cells produced by Panasonic at Gigafactory Nevada, including any additional amounts we may have to pay vendors if we do not meet certain minimum purchase obligations. In cases where no purchase orders were outstanding under binding and enforceable agreements as of December 31, 2019, we have included estimated amounts based on our best estimates and assumptions or discussions with the relevant vendors as of such date or, where applicable, on amounts or assumptions included in such agreements for purposes of discussion or reference. In certain cases, such estimated amounts were subject to contingent events. Furthermore, these amounts do not include future payments for purchase obligations that were recorded in accounts payable or accrued liabilities as of December 31, 2019.
- (2) Debt, including scheduled interest, includes our non-recourse indebtedness of \$5.29 billion. Non-recourse debt refers to debt that is recourse to only assets of our subsidiaries. Short-term scheduled interest payments and amortization of convertible senior note conversion features, debt discounts and deferred financing costs for the year ended December 31, 2020 is \$375 million. Long-term scheduled interest payments and amortization of convertible senior note conversion features, debt discounts and deferred financing costs for the years thereafter is \$1.86 billion.

The table above excludes unrecognized tax benefits of \$247 million because if recognized, they would be an adjustment to our deferred tax assets.

We offer resale value guarantees or similar buyback terms to certain customers who purchase and finance their vehicles through one of our specified commercial banking partners and certain leasing partners (refer to *Automotive Sales with Resale Value Guarantee or a Buyback Option* in Note 2, *Significant Accounting Policies*, to the consolidated financial statements included elsewhere in this Annual Report on Form 10-K). The maximum amount we could be required to pay under these programs, should customers exercise their resale value guarantees or buyback options, would be \$1.70 billion over the next five years, of which \$226 million is within a 12-month period from December 31, 2019. We have not included this in the table above as it is unknown how many customers will exercise their options. Additionally, we plan to resell any vehicles which are returned to us and therefore, the actual exposure to us is deemed to be limited.

Off-Balance Sheet Arrangements

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

Recent Accounting Pronouncements

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

ITEM 7A. QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISK Foreign Currency Risk

We transact business globally in multiple currencies and hence have foreign currency risks related to our revenue, costs of revenue and operating expenses denominated in currencies other than the U.S. dollar (primarily the euro, Japanese yen, Canadian dollar, Chinese yuan and Norwegian krone). In general, we are a net receiver of currencies other than the U.S. dollar for our foreign subsidiaries. Accordingly, changes in exchange rates and, in particular, a strengthening of the U.S. dollar have in the past, and may in the future, negatively affect our revenue and other operating results as expressed in U.S. dollars as we do not typically hedge foreign currency.

We have also experienced, and will continue to experience, fluctuations in our net income (loss) as a result of gains (losses) on the settlement and the re-measurement of monetary assets and liabilities denominated in currencies that are not the local currency (primarily consisting of our intercompany and cash and cash equivalents balances). For the year ended December 31, 2019, we recognized a net foreign currency gain of \$48 million in other (expense) income, net, with our largest re-measurement exposures from the U.S. dollar, British pound and Canadian dollar as our subsidiaries are denominated in various local currencies. For the year ended December 31, 2018, we recognized a net foreign currency gain of \$2 million in other (expense) income, net, with our largest re-measurement exposures from the euro. New Taiwan dollar and Canadian dollar.

We considered the historical trends in foreign currency exchange rates and determined that it is reasonably possible that adverse changes in foreign currency exchange rates of 10% for all currencies could be experienced in the near-term. These changes were applied to our total monetary assets and liabilities denominated in currencies other than our local currencies at the balance sheet date to compute the impact these changes would have had on our net income (loss) before income taxes. These changes would have resulted in an adverse impact of \$362 million at December 31, 2019 and \$176 million at December 31, 2018 assuming no foreign currency hedging.

Interest Rate Risk

We are exposed to interest rate risk on our borrowings that bear interest at floating rates. Pursuant to our risk management policies, in certain cases, we utilize derivative instruments to manage some of this risk. We do not enter into derivative instruments for trading or speculative purposes. A hypothetical 10% change in our interest rates would have increased or decreased our interest expense for the years ended December 31, 2019 and 2018 by \$8 million and \$9 million, respectively.

ITEM 8. FINANCIAL STATEMENTS AND SUPPLEMENTARY DATA

Index to Consolidated Financial Statements

	Page
Report of Independent Registered Public Accounting Firm	
Consolidated Balance Sheets	65
Consolidated Statements of Operations	66
Consolidated Statements of Comprehensive Loss	
Consolidated Statements of Redeemable Noncontrolling Interests and Equity	68
Consolidated Statements of Cash Flows	69
Notes to Consolidated Financial Statements	70

Report of Independent Registered Public Accounting Firm

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

Opinions on the Financial Statements and Internal Control over Financial Reporting

We have audited the accompanying consolidated balance sheets of Tesla, Inc. and its subsidiaries (the "Company") as of December 31, 2019 and 2018, and the related consolidated statements of operations, of comprehensive loss, of redeemable noncontrolling interests and equity and of cash flows for each of the three years in the period ended December 31, 2019, including the related notes (collectively referred to as the "consolidated financial statements"). We also have audited the Company's internal control over financial reporting as of December 31, 2019, based on criteria established in *Internal Control - Integrated Framework* (2013) issued by the Committee of Sponsoring Organizations of the Treadway Commission (COSO).

In our opinion, the consolidated financial statements referred to above present fairly, in all material respects, the financial position of the Company as of December 31, 2019 and 2018, and the results of its operations and its cash flows for each of the three years in the period ended December 31, 2019 in conformity with accounting principles generally accepted in the United States of America. Also in our opinion, the Company maintained, in all material respects, effective internal control over financial reporting as of December 31, 2019, based on criteria established in *Internal Control - Integrated Framework* (2013) issued by the COSO.

Changes in Accounting Principles

As discussed in Note 2 to the consolidated financial statements, the Company changed the manner in which it accounts for leases in 2019 and the manner in which it accounts for revenue from contracts with customers in 2018.

Basis for Opinions

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

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

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

Definition and Limitations of Internal Control over Financial Reporting

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

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

Critical Audit Matters

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

Automotive Sales To Customers With a Resale Value Guarantee or Buyback Option

As described in Note 2 to the consolidated financial statements, the sales return reserve related to resale value guarantees or buyback options was \$639 million as of December 31, 2019, of which \$93 million was short-term. The Company offers some customers resale value guarantees or buyback options. Under these programs, the Company receives full payment for the vehicle sales price at the time of delivery and the customer has the option of selling their vehicle back to the Company during the guarantee period for a pre-determined resale value. In circumstances where management does not believe the customer has a significant economic incentive to exercise the resale value guarantee or buyback option provided to them, the Company recognizes revenue when control transfers upon delivery to a customer as a sale with a right of return. In circumstances where management believes the customer has a significant economic incentive to exercise the resale value guarantee or buyback option, the Company recognizes the transaction as an operating lease. Management's determination of whether there is a significant economic incentive includes comparing and considering a vehicle's estimated market value at the time the option is exercisable with the guaranteed resale value. Sales return reserves are estimated based on historical experience plus estimates of expected future market values. On a quarterly basis, management reassesses the estimated future market values of vehicles under these programs, taking into account price adjustments on new vehicles and other changes in market value subsequent to the initial sale to determine the need for changes to the reserve.

The principal considerations for our determination that performing procedures relating to automotive sales to customers with a resale value guarantee or buyback option is a critical audit matter are there was significant judgment by management in determining the sales return reserve when customers do not have a significant economic incentive to exercise their option. This in turn led to high degree of auditor judgment, subjectivity, and effort in performing procedures and evaluating evidence in the sales return reserve when customers do not have a significant economic incentive.

Addressing the matter involved performing procedures and evaluating audit evidence in connection with forming our overall opinion on the consolidated financial statements. These procedures included testing the effectiveness of controls relating to automotive revenue recognition for sales to customers with a resale value guarantee or buyback option as well as the related sales return reserve, including controls over management's estimate of expected future market values and historical experience. These procedures also included, among others, testing management's process for determining whether customers have a significant economic incentive to exercise their put rights under the resale value guarantee and buyback option programs and, if not, the related sales return reserve. This included evaluating the appropriateness of the model applied and the reasonableness of significant assumptions, including historical experience and the estimated expected future market values used in the comparison to guaranteed resale amounts. Evaluating assumptions related to historical experience and estimated expected future market values involved evaluating whether the assumptions used were reasonable considering current and past performance and consistency with evidence obtained in other areas of the audit. Procedures were performed to evaluate the reliability, completeness and relevance of management's data used in the development of the historical experience assumption.

Automotive Warranty Reserve

As described in Note 2 to the consolidated financial statements, total accrued warranty, which primarily relates to the automotive segment, was \$1,089 million as of December 31, 2019. The Company provides a manufacturer's warranty on all new and used Tesla vehicles. As described in Note 2, a warranty reserve is accrued for these products sold, which includes management's best estimate of the projected costs to repair or replace items under warranty, including recalls when identified. These estimates are based on actual claims incurred to date and an estimate of the nature, frequency and costs of future claims.

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

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

/s/PricewaterhouseCoopers LLP

San Jose, California February 13, 2020

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

Tesla, Inc.

Consolidated Balance Sheets (in millions, except per share data)

	Dec	eember 31, 2019	Dec	December 31, 2018		
Assets						
Current assets						
Cash and cash equivalents		6,268	\$	3,686		
Restricted cash		246		193		
Accounts receivable, net	•••	1,324		949		
Inventory		3,552		3,113		
Prepaid expenses and other current assets		713		366		
Total current assets		12,103		8,307		
Operating lease vehicles, net	•••	2,447		2,090		
Solar energy systems, net		6,138		6,271		
Property, plant and equipment, net		10,396		11,330		
Operating lease right-of-use assets	•••	1,218		_		
Intangible assets, net		339		282		
Goodwill		198		68		
MyPower customer notes receivable, net of current portion	•••	393		422		
Restricted cash, net of current portion		269		398		
Other assets		808		572		
Total assets	\$	34,309	\$	29,740		
Liabilities						
Current liabilities						
Accounts payable	\$	3,771	\$	3,405		
Accrued liabilities and other		2,905	Ψ	2,094		
Deferred revenue		1,163		630		
Resale value guarantees		317		503		
Customer deposits		726		793		
Current portion of debt and finance leases		1,785		2,568		
Total current liabilities		10,667		9,993		
Debt and finance leases, net of current portion.		11,634	-	9,404		
Deferred revenue, net of current portion		1,207		991		
Resale value guarantees, net of current portion		36		329		
Other long-term liabilities		2,655		2,710		
Total liabilities		26,199		23,427		
Commitments and contingencies (Note 16)		20,177		23,427		
Redeemable noncontrolling interests in subsidiaries		643		556		
Equity	•••	043		330		
Stockholders' equity						
Preferred stock; \$0.001 par value; 100 shares authorized;						
no shares issued and outstanding						
Common stock; \$0.001 par value; 2,000 shares authorized; 181 and	•••					
173 shares issued and outstanding as of December 31, 2019 and 2018,						
respectively		0		0		
Additional paid-in capital		12,737		10,249		
Accumulated other comprehensive loss		(36)		(8)		
Accumulated deficit		(6,083)		(5,318)		
Total stockholders' equity		6,618		4,923		
Noncontrolling interests in subsidiaries		849		834		
Total liabilities and equity		34,309	\$	29,740		
1 otal navinges and equity	ø	J + ,JU9	Ψ	47,740		

Tesla, Inc.

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

	Year Ended December 31,					
		2019		2018		2017
Revenues						
Automotive sales		19,952	\$	17,632	\$	8,535
Automotive leasing		869		883		1,107
Total automotive revenues		20,821		18,515		9,642
Energy generation and storage		1,531		1,555		1,116
Services and other		2,226		1,391		1,001
Total revenues		24,578		21,461		11,759
Cost of revenues						
Automotive sales		15,939		13,686		6,725
Automotive leasing		459		488		708
Total automotive cost of revenues		16,398		14,174		7,433
Energy generation and storage		1,341		1,365		874
Services and other		2,770		1,880		1,229
Total cost of revenues		20,509		17,419		9,536
Gross profit		4,069		4,042		2,223
Operating expenses						
Research and development		1,343		1,460		1,378
Selling, general and administrative		2,646		2,835		2,477
Restructuring and other		149		135		_
Total operating expenses		4,138		4,430		3,855
Loss from operations		(69)		(388)		(1,632)
Interest income		44		24		19
Interest expense		(685)		(663)		(471)
Other income (expense), net		45		22		(125)
Loss before income taxes		(665)		(1,005)		(2,209)
Provision for income taxes	. <u></u>	110		58		32
Net loss		(775)		(1,063)		(2,241)
Net income (loss) attributable to noncontrolling interests and						
redeemable noncontrolling interests in subsidiaries		87		(87)		(279)
Net loss attributable to common stockholders	. \$	(862)	\$	(976)	\$	(1,962)
Net loss per share of common stock attributable to common stockholders						
Basic		(4.92)	\$	(5.72)	\$	(11.83)
Diluted		(4.92)	\$	(5.72)	\$	(11.83)
Weighted average shares used in computing net loss per						
share of common stock						
Basic		177		171		166
Diluted		177		171	_	166
Diffutor		1//		1 / 1	_	100

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

	Yea	r En	ded December 31	Ι,	
	2019		2018		2017
Net loss	\$ (775)	\$	(1,063) \$	5	(2,241)
Other comprehensive loss:					
Reclassification adjustment for net gains					
on derivatives into net loss	_				(6)
Foreign currency translation adjustment	 (28)		(42)		63
Comprehensive loss	(803)		(1,105)		(2,184)
Less: Comprehensive income (loss) attributable to noncontrolling					
interests and redeemable noncontrolling interests in					
subsidiaries	 87		(87)		(279)
Comprehensive loss attributable to common stockholders	\$ (890)	\$	(1,018) \$	\$	(1,905)

Tesla, Inc.

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

						Accumulated			
	Redeemable Noncontrolling	Commi	Common Stock	Additional Paid-In	Accumulated	Other Comprehensive	Total Stockholders'	Noncontrolling Interests in	Total
	Interests	Shares	Amount	Capital	Deficit	Loss	Equity	Subsidiaries	Equity
Balance as of December 31, 2016	\$ 367	162	0 \$	\$ 7,774	\$ (2,997)	\$ (24)	\$ 4,753	\$ 785	\$ 5,538
Adjustment of prior periods due to adoption of Accounting Standards Update No. 2016-09	1			15	(15)	1	1	1	
Conversion feature of Convertible Senior Notes due in 2022	I		1	146		I	146	I	146
Purchases of convertible note hedges	1			(204)		1	(204)	1	(204)
Sales of warrants	1		1	53	1	1	53	1	53
Exercises of conversion feature of convertible senior notes	1		0	230	1	1	230	1	230
Issuance of common stock for equity incentive awards and acquisitions, net of transaction									
costs		4	0	269			269		269
in March 201									
issuance costs of \$3		2	0	400			400		400
Stock-based compensation				485			485		485
Contributions from noncontrolling interests	193					1		597	597
	(101)							(164)	(164)
Other	(3)			10			10	`	10
Net loss	(58)				(1,962)	I	(1,962)	(221)	(2,183)
Other comprehensive income	Ì				Ì	57	57	<u> </u>	57
Balance as of December 31, 2017	\$ 398	169	8	\$ 9,178	\$ (4.974)	\$ 33	\$ 4,237	266 \$	\$ 5.234
Adjustments for prior periods from adopting ASC 606.	0				623		623	(68)	534
Adjustments for prior periods from adopting Accounting Standards Update No. 2017-05					6		6)	6
Issuance of common stock for equity incentive awards	1	4	0	296	1		296		296
Stock-based compensation			·	775			775	I	775
Contributions from noncontrolling interests	276					1		191	191
Distributions to noncontrol ling interests	(19)		1	1	1		1	(210)	(210)
Other	(3)				1	1	1		
Net 1058	(62)				(926)	1	(926)	(25)	(1001)
Other commedencine loss						(41)	(41)		(41)
Relance as of December 31 2018	955	173	9	\$ 10.249	(5 318)	(8)	4 003	834	157.5.3
A distance for more and form admitted ACC 047				10,01	0.010	0	1,72		0,0
Adjustments for prior bettooks from adopting 492.	l			3	16	l	9/		/67
Conversion reature of Convertible Senior Notes due in 2024				491			491		491
Purchase of convertible note hedges				(476)			(476)		(476)
Sales of warrants.				174			174		174
Issuance of common stock for equity incentive awards and acquisitions, net of transaction costs		٠,	0	482		l	482		482
Issuance of common stock in May 2019 public offering at \$243.00 per share, net of		•	•				}		}
issuance costs of \$15		3	0	848			848		848
Stock-based compensation.	1			973		1	973	1	973
Contributions from noncontrolling interests	105							174	174
Distributions to noncontrolling interests	(65)		1	1	1	I	1	(198)	(198)
Other	(1)			(4)		1	(4)		(4)
Net income (loss)	48				(862)	1	(862)	39	(823)
Other comprehensive loss	I		1	1		(28)	(28)	I	(28)
Balance as of December 31, 2019	\$ 643	181	0	\$ 12.737	\$ (6.083)	(36)	\$ 6.618	\$ 849	\$ 7.467
			,						

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

Tesla, Inc.

Consolidated Statements of Cash Flows (in millions)

	Ye	ar End	led December	31,	
	2019		2018		2017
Cash Flows from Operating Activities					
Net loss	\$ (775)	\$	(1,063)	\$	(2,241)
Adjustments to reconcile net loss to net cash provided by (used in) operating activities:			() /		() ,
Depreciation, amortization and impairment	2,154		1,901		1,636
Stock-based compensation	898		749		467
Amortization of debt discounts and issuance costs	188		159		91
Inventory and purchase commitments write-downs	193		85		132
Loss on disposals of fixed assets	146		162		106
Foreign currency transaction (gains) loss	(48)		(2)		52
Loss related to SolarCity acquisition	_		_		58
Non-cash interest and other operating activities	186		49		135
Operating cash flow related to repayment of discounted convertible notes	(188)		_		_
Changes in operating assets and liabilities, net of effect of business combinations:					
Accounts receivable	(367)		(497)		(25)
Inventory	(429)		(1,023)		(179)
Operating lease vehicles	(764)		(215)		(1,523)
Prepaid expenses and other current assets	(288)		(82)		(72)
Other non-current assets	115		(207)		(15)
Accounts payable and accrued liabilities	682		1,723		388
Deferred revenue	801		406		469
Customer deposits	(58)		(96)		170
Resale value guarantee	(150)		(111)		209
Other long-term liabilities	` /		160		81
Net cash provided by (used in) operating activities			2,098		(61)
Cash Flows from Investing Activities	2,403		2,070		(01)
Purchases of property and equipment excluding finance leases, net of sales	(1,327)		(2,101)		(3,415)
Purchases of solar energy systems	(105)		(218)		(666)
Purchase of intangible assets	(5)		(210)		(000)
	46		_		_
Receipt of government grants			(18)		(115)
Business combinations, net of cash acquired			(2,337)		
Net cash used in investing activities	(1,436)		(2,337)	_	(4,196)
Cash Flows from Financing Activities	0.40				400
Proceeds from issuances of common stock in public offerings, net of underwriting discounts	848				400
Proceeds from issuances of convertible and other debt	10,669		6,176		7,138
Repayments of convertible and other debt	(9,161)		(5,247)		(3,996)
Repayments of borrowings issued to related parties	(200)		(100)		(165)
Collateralized lease repayments	(389)		(559)		511
Proceeds from exercises of stock options and other stock issuances	263		296		259
Principal payments on finance leases	(321)		(181)		(103)
Common stock and debt issuance costs	(37)		(15)		(63)
Purchase of convertible note hedges	(476)		_		(204)
Proceeds from settlement of convertible note hedges	_		_		287
Proceeds from issuance of warrants	174		_		53
Payments for settlements of warrants	_		_		(230)
Proceeds from investments by noncontrolling interests in subsidiaries	279		437		790
Distributions paid to noncontrolling interests in subsidiaries			(227)		(262)
Payments for buy-outs of noncontrolling interests in subsidiaries			(6)		
Net cash provided by financing activities	1,529		574		4,415
Effect of exchange rate changes on cash and cash equivalents and restricted cash	8		(23)		40
Net increase in cash and cash equivalents and restricted cash	2,506		312		198
Cash and cash equivalents and restricted cash, beginning of period	4,277		3,965		3,767
Cash and cash equivalents and restricted cash, end of period	\$ 6,783	\$	4,277	\$	3,965
Supplemental Non-Cash Investing and Financing Activities					
Equity issued in connection with business combination	\$ 207	\$	_	\$	_
Acquisitions of property and equipment included in liabilities.		\$	249	\$	914
Estimated fair value of facilities under build-to-suit leases		\$	94	\$	313
Supplemental Disclosures	7	4	7 1	¥	515
Cash paid during the period for interest, net of amounts capitalized	\$ 455	\$	381	\$	183
Cash paid during the period for taxes, net of refunds		\$	35	\$	66
Cush para during the period for taxes, not or retuinds	Ψ 34	Ψ	33	ψ	00

Tesla, Inc.

Notes to Consolidated Financial Statements

Note 1 – Overview

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

Note 2 – Summary of Significant Accounting Policies

Principles of Consolidation

The accompanying consolidated financial statements have been prepared in conformity with U.S. generally accepted accounting principles ("GAAP") and reflect our accounts and operations and those of our subsidiaries in which we have a controlling financial interest. In accordance with the provisions of Accounting Standards Codification ("ASC") 810, Consolidation, we consolidate any variable interest entity ("VIE") of which we are the primary beneficiary. We form VIEs with financing fund investors in the ordinary course of business in order to facilitate the funding and monetization of certain attributes associated with solar energy systems and leases under our direct vehicle leasing programs. The typical condition for a controlling financial interest ownership is holding a majority of the voting interests of an entity; however, a controlling financial interest may also exist in entities, such as VIEs, through arrangements that do not involve controlling voting interests. ASC 810 requires a variable interest holder to consolidate a VIE if that party has the power to direct the activities of the VIE that most significantly impact the VIE's economic performance and the obligation to absorb losses of the VIE that could potentially be significant to the VIE or the right to receive benefits from the VIE that could potentially be significant to the VIE. We do not consolidate a VIE in which we have a majority ownership interest when we are not considered the primary beneficiary. We have determined that we are the primary beneficiary of all the VIEs (see Note 17, Variable Interest Entity Arrangements). We evaluate our relationships with all the VIEs on an ongoing basis to ensure that we continue to be the primary beneficiary. All intercompany transactions and balances have been eliminated upon consolidation.

Use of Estimates

The preparation of financial statements in conformity with GAAP requires management to make estimates and assumptions that affect the reported amounts of assets, liabilities and disclosures in the accompanying notes. Estimates are used for, but not limited to, determining the transaction price of products and services in arrangements with multiple performance obligations and determining the amortization period of these obligations, significant economic incentive for residual value guarantee arrangements, sales return reserves, the collectability of accounts receivable, inventory valuation, fair value of long-lived assets, goodwill, fair value of financial instruments, residual value of operating lease vehicles, depreciable lives of property and equipment and solar energy systems, fair value and residual value of solar energy systems subject to leases, warranty liabilities, income taxes, contingencies, determining lease pass-through financing obligations, the valuation of build-to-suit lease assets, fair value of interest rate swaps and inputs used to value stock-based compensation. In addition, estimates and assumptions are used for the accounting for business combinations, including the fair values and useful lives of acquired assets, assumed liabilities and noncontrolling interests. Management bases its estimates on historical experience and on various other assumptions believed to be reasonable, the results of which form the basis for making judgments about the carrying values of assets and liabilities. Actual results could differ from those estimates.

Revenue Recognition

Adoption of new accounting standards

ASU 2014-09, Revenue - Revenue from Contracts with Customers. On January 1, 2018, we adopted the new accounting standard ASC 606, Revenue from Contracts with Customers and all the related amendments ("new revenue standard") using the modified retrospective method. As a policy election, the new revenue standard was applied only to contracts that were not substantially completed as of the date of adoption. We recognized the cumulative effect of initially applying the new revenue standard as an adjustment to the January 1, 2018 opening balance of accumulated deficit. The prior period consolidated financial statements have not been retrospectively adjusted and continue to be reported under the accounting standards in effect for those periods.

A majority of our automotive sales revenue is recognized when control transfers upon delivery to customers. For certain vehicle sales where revenue was previously deferred as an in-substance operating lease, such as certain vehicle sales to customers or leasing partners with a resale value guarantee, we recognize revenue when the vehicles are delivered as a sale with a right of return. As a result, the corresponding operating lease asset, deferred revenue, and resale value guarantee balances as of December 31, 2017, were reclassified to accumulated deficit as part of our adoption entry. Furthermore, the warranty liability related to such vehicles has been accrued as a result of the change from in-substance operating leases to vehicle sales. Prepayments on contracts that can be cancelled without significant penalties, such as vehicle maintenance plans, have been reclassified from deferred revenue to customer deposits. Refer to the *Automotive Sales Revenue* and *Automotive Leasing Revenue* sections below for further discussion of the impact on various categories of vehicle sales.

Automotive Segment

Automotive Sales Revenue

Automotive Sales without Resale Value Guarantee

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

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

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

Automotive Sales with Resale Value Guarantee or a Buyback Option

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

With the exception of two programs which are discussed within the Automotive Leasing section, we recognize revenue when control transfers upon delivery to customers in accordance with the new revenue standard as a sale with a right of return as we do not believe the customer has a significant economic incentive to exercise the resale value guarantee provided to them. The process to determine whether there is a significant economic incentive includes a comparison of a vehicle's estimated market value at the time the option is exercisable with the guaranteed resale value to determine the customer's economic incentive to exercise. The performance obligations and the pattern of recognizing automotive sales with resale value guarantees are consistent with automotive sales without resale value guarantees with the exception of our estimate for sales return reserve. Sales return reserves for automotive sales with resale value guarantees are estimated based on historical experience plus consideration for expected future market values. On a quarterly basis, we assess the estimated market values of vehicles under our buyback options program to determine whether there have been changes to the likelihood of future product returns. As we accumulate more data related to the buyback values of our vehicles or as market conditions change, there may be material changes to their estimated values. Due to price adjustments we made to our vehicle offerings during 2019, we estimated that there is a greater likelihood that customers will exercise their buyback options that were provided prior to such adjustments. As a result, along with the estimated variable consideration related to normal future product returns for vehicles sold under the buyback options program, we adjusted our sales return reserve on vehicles previously sold under our buyback options program resulting in a reduction of automotive sales revenues of \$555 million for the year ended December 31, 2019. If customers elect to exercise the buyback option, we expect to be able to subsequently resell the returned vehicles, which resulted in a corresponding reduction in cost of automotive sales of \$451 million for the year ended December 31, 2019. The net impact was \$104 million reduction in gross profit for the year ended December 31, 2019. The total sales return reserve on vehicles previously sold under our buyback options program was \$639 million as of December 31, 2019, of which \$93 million was short term. The two programs that are still being recorded as operating leases are discussed in further detail below in Vehicle Sales to Leasing Partners with a Resale Value Guarantee and a Buyback Option and Vehicle Sales to Customers with a Resale Value Guarantee where Exercise is Probable.

Prior to the adoption of the new revenue standard, all transactions with resale value guarantees were recorded as operating leases. The amount of sale proceeds equal to the resale value guarantee was deferred until the guarantee expired or was exercised. For certain transactions that were considered interest bearing collateralized borrowings as required under ASC 840, *Leases* prior to January 1, 2019, we also accrued interest expense based on our borrowing rate. The remaining sale proceeds were deferred and recognized on a straight-line basis over the stated guarantee period to automotive leasing revenue. The guarantee period expired at the earlier of the end of the guarantee period or the pay-off of the initial loan. We capitalized the cost of these vehicles on the consolidated balance sheet as operating lease vehicles, net, and depreciated their value, less estimated residual value, to cost of automotive leasing revenue over the same period.

In cases where our counterparty retained ownership of the vehicle at the end of the guarantee period, the resale value guarantee liability and any remaining deferred revenue balances related to the vehicle were settled to automotive leasing revenue, and the net book value of the leased vehicle was expensed to cost of automotive leasing revenue. If our counterparty returned the vehicle to us during the guarantee period, we purchased the vehicle from our counterparty in an amount equal to the resale value guarantee and settled any remaining deferred balances to automotive leasing revenue, and we reclassified the net book value of the vehicle on the consolidated balance sheet to used vehicle inventory.

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

	Year ended December 31,			
	2019		2018	
Deferred revenue on automotive sales with and without				
resale value guarantee— beginning of period	\$ 883	\$	476	
Additions	880		532	
Net changes in liability for pre-existing contracts	9		(13)	
Revenue recognized	 (300)		(112)	
Deferred revenue on automotive sales with and without				
resale value guarantee— end of period	\$ 1,472	\$	883	

Deferred revenue is equivalent to the total transaction price allocated to the performance obligations that are unsatisfied, or partially unsatisfied, as of December 31, 2019. From the deferred revenue balance as of December 31, 2018, revenue recognized during the year ended December 31, 2019 was \$220 million. From the deferred revenue balance as of January 1, 2018, revenue recognized during the year ended December 31, 2018 was \$81 million. Of the total deferred revenue on automotive sales with and without resale value guarantees as of December 31, 2019, we expect to recognize \$751 million of revenue in the next 12 months. The remaining balance will be recognized over the performance period as discussed above in *Automotive Sales without Resale Value Guarantee*.

Automotive Regulatory Credits

In connection with the production and delivery of our zero emission vehicles in global markets, we have earned and will continue to earn various tradable automotive regulatory credits. We have sold these credits, and will continue to sell future credits, to automotive companies and other regulated entities who can use the credits to comply with emission standards and other regulatory requirements. For example, under California's Zero Emission Vehicle Regulation and those of states that have adopted California's standard, vehicle manufacturers are required to earn or purchase credits, referred to as ZEV credits, for compliance with their annual regulatory requirements. These laws provide that automakers may bank or sell to other regulated parties their excess credits if they earn more credits than the minimum quantity required by those laws. We also earn other types of saleable regulatory credits in the United States and abroad, including greenhouse gas, fuel economy and clean fuels credits. Payments for regulatory credits are typically received at the point control transfers to the customer, or in accordance with payment terms customary to the business.

We recognize revenue on the sale of automotive regulatory credits at the time control of the regulatory credits is transferred to the purchasing party as automotive revenue in the consolidated statements of operations. Revenue from the sale of automotive regulatory credits totaled \$594 million, \$419 million and \$360 million for the years ended December 31, 2019, 2018 and 2017, respectively. Deferred revenue related to sales of automotive regulatory credits was \$140 million and \$0 as of December 31, 2019 and 2018, respectively. We expect to recognize the deferred revenue as of December 31, 2019 in the next 12 months.

Automotive Leasing Revenue

Automotive leasing revenue includes revenue recognized under lease accounting guidance for our direct leasing programs as well as the two programs with resale value guarantees which continue to qualify for operating lease treatment. Prior to the adoption of the new revenue standard, all programs with resale value guarantees were accounted for as operating leases.

Direct Vehicle Leasing Program

We have outstanding leases under our direct vehicle leasing programs in the U.S., Canada and in certain countries in Europe. As of December 31, 2019, the direct vehicle leasing program is offered for all new Model S, Model X and Model 3 vehicles in the U.S. and for new Model S and Model X vehicles in Canada. Qualifying customers are permitted to lease a vehicle directly from Tesla for up to 48 months. At the end of the lease term, customers are required to return the vehicles to us or for Model S and Model X leases, may opt to purchase the vehicles for a pre-determined residual value. We account for these leasing transactions as operating leases. We record leasing revenues to automotive leasing revenue on a straight-line basis over the contractual term, and we record the depreciation of these vehicles to cost of automotive leasing revenue. For the years ended December 31, 2019, 2018 and 2017, we recognized \$532 million, \$393 million and \$221 million of direct vehicle leasing revenue, respectively. As of December 31, 2019 and 2018, we had deferred \$218 million and \$110 million, respectively, of lease-related upfront payments, which will be recognized on a straight-line basis over the contractual terms of the individual leases.

We capitalize shipping costs and initial direct costs such as the incremental cost of referral fees and sales commissions from the origination of automotive lease agreements as an element of operating lease vehicles, net, and subsequently amortize these costs over the term of the related lease agreement. Our policy is to exclude taxes collected from a customer from the transaction price of automotive contracts. Total capitalized costs were immaterial as of December 31, 2019 and 2018.

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

We offer buyback options in connection with automotive sales with resale value guarantees with certain leasing partner sales in the United States. These transactions entail a transfer of leases, which we have originated with an end-customer, to our leasing partner. As control of the vehicles has not been transferred in accordance with the new revenue standard, these transactions were accounted for as interest bearing collateralized borrowings in accordance with ASC 840, Leases, prior to January 1, 2019. Under this program, cash is received for the full price of the vehicle and the collateralized borrowing value is generally recorded within resale value guarantees and the customer upfront down payment is recorded within deferred revenue. We amortize the deferred revenue amount to automotive leasing revenue on a straight-line basis over the option period and accrue interest expense based on our borrowing rate. The option period expires at the earlier of the end of the contractual option period or the pay-off of the initial loan. We capitalize vehicles under this program to operating lease vehicles, net, on the consolidated balance sheets, and we record depreciation from these vehicles to cost of automotive leasing revenue during the period the vehicle is under a lease arrangement. Cash received for these vehicles, net of revenue recognized during the period, is classified as collateralized lease (repayments) borrowings within cash flows from financing activities in the consolidated statements of cash flows. Following the adoption of ASC 842 on January 1, 2019, all new agreements under this program are accounted for as operating leases and there was no material change in the timing and amount of revenue recognized over the term. Consequently, any cash flows for new agreements are classified as operating cash activities on the consolidated statements of cash flows.

At the end of the lease term, we settle our liability in cash by either purchasing the vehicle from the leasing partner for the buyback option amount or paying a shortfall to the option amount the leasing partner may realize on the sale of the vehicle. Any remaining balances within deferred revenue and resale value guarantee will be settled to automotive leasing revenue. The end customers can extend the lease for a period of up to 6 months. In cases where the leasing partner retains ownership of the vehicle after the end of our option period, we expense the net value of the leased vehicle to cost of automotive leasing revenue. The maximum amount we could be required to pay under this program, should we decide to repurchase all vehicles, was \$214 million and \$480 million as of December 31, 2019 and 2018, respectively, including \$178 million within a 12-month period from December 31, 2019. As of December 31, 2019 and 2018, we had \$238 million and \$558 million, respectively, of such borrowings recorded in resale value guarantees and \$29 million and \$93 million, respectively, recorded in deferred revenue liability. For the year ended December 31, 2019 and 2018, we recognized \$186 million and \$332 million, respectively, of leasing revenue related to this program. The net carrying amount of operating lease vehicles under this program was \$190 million and \$469 million, respectively, as of December 31, 2019 and 2018.

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

For certain international programs where we have offered resale value guarantees to certain customers who purchased vehicles and where we expect the customer has a significant economic incentive to exercise the resale value guarantee provided to them, we continue to recognize these transactions as operating leases. The process to determine whether there is a significant economic incentive includes a comparison of a vehicle's estimated market value at the time the option is exercisable with the guaranteed resale value to determine the customer's economic incentive to exercise. We have not sold any vehicles under this program since the first half of 2017 and all current period activity relates to the exercise or cancellation of active transactions. The amount of sale proceeds equal to the resale value guarantee is deferred until the guarantee expires or is exercised. The remaining sale proceeds are deferred and recognized on a straight-line basis over the stated guarantee period to automotive leasing revenue. The guarantee period expires at the earlier of the end of the guarantee period or the pay-off of the initial loan. We capitalize the cost of these vehicles on the consolidated balance sheet as operating lease vehicles, net, and depreciate their value, less salvage value, to cost of automotive leasing revenue over the same period.

In cases where a customer retains ownership of a vehicle at the end of the guarantee period, the resale value guarantee liability and any remaining deferred revenue balances related to the vehicle are settled to automotive leasing revenue, and the net book value of the leased vehicle is expensed to cost of automotive leasing revenue. If a customer returns the vehicle to us during the guarantee period, we purchase the vehicle from the customer in an amount equal to the resale value guarantee and settle any remaining deferred balances to automotive leasing revenue, and we reclassify the net book value of the vehicle on the consolidated balance sheets to used vehicle inventory. As of December 31, 2019 and 2018, \$115 million and \$150 million, respectively, of the guarantees were exercisable by customers within the next 12 months. For the year ended December 31, 2019 and 2018, we recognized \$150 million and \$158 million, respectively, of leasing revenue related to this program. The net carrying amount of operating lease vehicles under this program was \$83 million and \$212 million, respectively, as of December 31, 2019 and 2018.

Services and Other Revenue

Services and other revenue consists of non-warranty after-sales vehicle services, sales of used vehicles, retail merchandise, sales by our acquired subsidiaries to third party customers, and vehicle insurance revenue. There were no significant changes to the timing or amount of revenue recognition as a result of our adoption of the new revenue standard.

Revenues related to repair and maintenance services are recognized over time as services are provided and extended service plans are recognized over the performance period of the service contract as the obligation represents a stand-ready obligation to the customer. We sell used vehicles, services, service plans, vehicle components and merchandise separately and thus use standalone selling prices as the basis for revenue allocation to the extent that these items are sold in transactions with other performance obligations. Payment for used vehicles, services, and merchandise are typically received at the point when control transfers to the customer or in accordance with payment terms customary to the business. Payments received for prepaid plans are refundable upon customer cancellation of the related contracts and are included within customer deposits on the consolidated balance sheet. Deferred revenue related to services and other revenue was immaterial as of December 31, 2019 and 2018.

Energy Generation and Storage Segment

Energy Generation and Storage Sales

Energy generation and storage sales revenue consists of the sale of solar energy systems and energy storage systems to residential, small commercial, and large commercial and utility grade customers. Upon adoption of the new lease standard (refer to Leases section below for details), energy generation and storage sales revenue includes agreements for solar energy systems and power purchase agreements ("PPAs") that commence after January 1, 2019, as these are now accounted for under the new revenue standard. Sales of solar energy systems to residential and small scale commercial customers consist of the engineering, design, and installation of the system. Post installation, residential and small scale commercial customers receive a proprietary monitoring system that captures and displays historical energy generation data. Residential and small scale commercial customers pay the full purchase price of the solar energy system upfront. Revenue for the design and installation obligation is recognized when control transfers, which is when we install a solar energy system and the system passes inspection by the utility or the authority having jurisdiction. Revenue for the monitoring service is recognized ratably as a stand-ready obligation over the warranty period of the solar energy system. Sales of energy storage systems to residential and small scale commercial customers consist of the installation of the energy storage system and revenue is recognized when control transfers, which is when the product has been delivered or, if we are performing installation, when installed and commissioned. Payment for such storage systems is made upon invoice or in accordance with payment terms customary to the business.

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

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

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

We record as deferred revenue any non-refundable amounts that are collected from customers related to fees charged for prepayments and remote monitoring service and operations and maintenance service, which is recognized as revenue ratably over the respective customer contract term. As of December 31, 2019 and 2018, deferred revenue related to such customer payments amounted to \$156 million and \$149 million, respectively. Revenue recognized from the deferred revenue balance as of December 31, 2018 was \$41 million for the year ended December 31, 2019. Revenue recognized from the deferred revenue balance as of January 1, 2018 was \$41 million for the year ended December 31, 2018. We have elected the practical expedient to omit disclosure of the amount of the transaction price allocated to remaining performance obligations for energy generation and storage sales with an original expected contract length of one year or less and the amount that we have the right to invoice when that amount corresponds directly with the value of the performance to date. As of December 31, 2019, total transaction price allocated to performance obligations that were unsatisfied or partially unsatisfied for contracts with an original expected length of more than one year was \$103 million. Of this amount, we expect to recognize \$5 million in the next 12 months and the remaining over a period up to 28 years.

Energy Generation and Storage Leasing

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

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

We record as deferred revenue any amounts that are collected from customers, including lease prepayments, in excess of revenue recognized and operations and maintenance service, which is recognized as revenue ratably over the respective customer contract term. As of December 31, 2019 and 2018, deferred revenue related to such customer payments amounted to \$226 million and \$225 million, respectively. Deferred revenue also includes the portion of rebates and incentives received from utility companies and various local and state government agencies, which is recognized as revenue over the lease term. As of December 31, 2019 and December 31, 2018, deferred revenue from rebates and incentives amounted to \$36 million and \$37 million, respectively.

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

Revenue by source

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

	Year Ended December 31,				
		2019		2018	
Automotive sales without resale value guarantee	\$	19,212	\$	15,810	
Automotive sales with resale value guarantee (1)		146		1,403	
Automotive regulatory credits		594		419	
Energy generation and storage sales (2)		1,000		1,056	
Services and other		2,226		1,391	
Total revenues from sales and services		23,178		20,079	
Automotive leasing		869		883	
Energy generation and storage leasing (2)		531		499	
Total revenues.	\$	24,578	\$	21,461	

- (1) We made pricing adjustments to our vehicle offerings in 2019, which resulted in a reduction of automotive sales with resale value guarantee revenues. Refer to *Automotive Sales with Resale Value Guarantee* section above for details. The amount presented represents automotive sales with resale value guarantee in year ended December 31, 2019 net of such pricing adjustments impact.
- (2) Under ASC 842, *Leases*, solar energy system sales and PPAs that commence after January 1, 2019, where we are the lessor and were previously accounted for as leases, no longer meet the definition of a lease and are instead accounted for in accordance with the new revenue standard (refer to the *Leases* section below for details).

Cost of Revenues

Automotive Segment

Automotive Sales

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

Automotive Leasing

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

Services and Other

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

Energy Generation and Storage Segment

Energy Generation and Storage

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

Leases

In February 2016, the FASB issued ASU No. 2016-02 ("ASC 842"), Leases, to require lessees to recognize all leases, with certain exceptions, on the balance sheet, while recognition on the statement of operations will remain similar to lease accounting under ASC 840. Subsequently, the FASB issued ASU No. 2018-10, Codification Improvements to Topic 842, Leases, ASU No. 2018-11, Targeted Improvements, ASU No. 2018-20, Narrow-Scope Improvements for Lessors, and ASU 2019-01, Codification Improvements, to clarify and amend the guidance in ASU No. 2016-02. ASC 842 eliminates real estate-specific provisions and modifies certain aspects of lessor accounting. We adopted ASC 842 as of January 1, 2019 using the cumulative effect adjustment approach ("adoption of the new lease standard"). In addition, we elected the package of practical expedients permitted under the transition guidance within the new standard, which allowed us to carry forward the historical determination of contracts as leases, lease classification and not reassess initial direct costs for historical lease arrangements. Accordingly, previously reported financial statements, including footnote disclosures, have not been recast to reflect the application of the new standard to all comparative periods presented. The finance lease classification under ASC 842 includes leases previously classified as capital leases under ASC 840.

Agreements for solar energy system leases and PPAs (solar leases) that commence after January 1, 2019, where we are the lessor and were previously accounted for as operating leases no longer meet the definition of a lease upon the adoption of ASC 842 and are instead accounted for in accordance with the revenue standard. Under these two types of arrangements, the customer is not responsible for the design of the energy system but rather approved the energy system benefits in terms of energy capacity and production to be received over the term. Accordingly, the revenue from solar leases commencing after January 1, 2019 are now recognized as earned, based on the amount of capacity provided or electricity delivered at the contractual billing rates, assuming all other revenue recognition criteria have been met. Under the practical expedient available under ASC 606-10-55-18, we recognize revenue based on the value of the service which is consistent with the billing amount.

We have lease agreements with lease and non-lease components, and have elected to utilize the practical expedient to account for lease and non-lease components together as a single combined lease component, from both a lessee and lessor perspective. From a lessor perspective, the timing and pattern of transfer are the same for the non-lease components and associated lease component and, the lease component, if accounted for separately, would be classified as an operating lease. Additionally, leases previously identified as build-to-suit leasing arrangements under legacy lease accounting (ASC 840), were derecognized pursuant to the transition guidance provided for build-to-suit leases in ASC 842. Accordingly, these leases have been reassessed as operating leases as of the adoption date under ASC 842, and are included on the consolidated balance sheet as of December 31, 2019.

Operating lease assets are included within operating lease right-of-use assets, and the corresponding operating lease liabilities are included within accrued liabilities and other for the current portion, and within other long-term liabilities for the long-term portion on our consolidated balance sheet as of December 31, 2019. Finance lease assets are included within property, plant and equipment, net, and the corresponding finance lease liabilities are included within current portion of long-term debt and finance leases for the current portion, and within long-term debt and finance leases, net of current portion for the long-term portion on our consolidated balance sheet as of December 31, 2019.

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

Adoption of the new lease standard on January 1, 2019 had a material impact on our consolidated financial statements. The most significant impacts related to the (i) recognition of right-of-use ("ROU") assets of \$1.29 billion and lease liabilities of \$1.24 billion for operating leases on the consolidated balance sheet, and (ii) de-recognition of build-to-suit lease assets and liabilities of \$1.62 billion and \$1.74 billion, respectively, with the net impact of \$97 million recorded to accumulated deficit, as of January 1, 2019. We also reclassified prepaid expenses and other current asset balances of \$142 million and deferred rent balance, including tenant improvement allowances, and other liability balances of \$70 million relating to our existing lease arrangements as of December 31, 2018, into the ROU asset balance as of January 1, 2019. ROU assets represent our right to use an underlying asset for the lease term and lease liabilities represent our obligation to make lease payments arising from the lease. The standard did not materially impact our consolidated statement of operations and consolidated statement of cash flows.

The cumulative effect of the changes made to our consolidated balance sheet as of January 1, 2019 for the adoption of the new lease standard was as follows (in millions):

		Adjustments from Adoption	
	Balances at December 31, 2018	of New Lease Standard	Balances at January 1, 2019
Assets	<u>December 31, 2016</u>	Standard	January 1, 2019
Prepaid expenses and other current			
assets	\$ 366	s —	\$ 366
Property, plant and equipment, net	11,330	(1,617)	9,713
Operating lease right-of-use assets		1,286	1,286
Other assets	572	(141)	431
Liabilities			
Accrued liabilities and other	2,094	118	2,212
Current portion of long-term debt and			
finance leases	2,568		2,568
Long-term debt and finance leases, net of			
current portion	9,404		9,404
Other long-term liabilities	2,710	(687)	2,023
Equity			
Accumulated deficit	(5,318)	97	(5,221)

Research and Development Costs

Research and development costs are expensed as incurred.

Marketing, Promotional and Advertising Costs

Marketing, promotional and advertising costs are expensed as incurred and are included as an element of selling, general and administrative expense in the consolidated statement of operations. We incurred marketing, promotional and advertising costs of \$27 million, \$32 million and \$37 million in the years ended December 31, 2019, 2018 and 2017, respectively, of which the majority is related to promotional activities.

Income Taxes

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

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

Comprehensive Income (Loss)

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

Stock-Based Compensation

We recognize compensation expense for costs related to all share-based payments, including stock options, restricted stock units ("RSUs") and our employee stock purchase plan (the "ESPP"). The fair value of stock option awards with only service and/or performance conditions and the ESPP is estimated on the grant or offering date using the Black-Scholes option-pricing model. The fair value of RSUs is measured on the grant date based on the closing fair market value of our common stock. Stock-based compensation expense is recognized on a straight-line basis over the requisite service period, net of actual forfeitures in the period.

For performance-based awards, stock-based compensation expense is recognized over the expected performance achievement period of individual performance milestones when the achievement of each individual performance milestone becomes probable. For performance-based awards with a vesting schedule based entirely on the attainment of both performance and market conditions, stock-based compensation expense associated with each tranche is recognized over the longer of (i) the expected achievement period for the operational milestone for such tranche and (ii) the expected achievement period for the related market capitalization milestone determined on the grant date, beginning at the point in time when the relevant operational milestone is considered probable of being met. If such operational milestone becomes probable any time after the grant date, we will recognize a cumulative catch-up expense from the grant date to that point in time. If the related market capitalization milestone is achieved earlier than its expected achievement period and the achievement of the related operational milestone, then the stock-based compensation expense will be recognized over the expected achievement period for the operational milestone, which may accelerate the rate at which such expense is recognized. The fair value of such awards is estimated on the grant date using Monte Carlo simulations (see Note 14, *Equity Incentive Plans*).

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

Noncontrolling Interests and Redeemable Noncontrolling Interests

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

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

Basic net income (loss) per share of common stock attributable to common stockholders is calculated by dividing net income (loss) attributable to common stockholders by the weighted-average shares of common stock outstanding for the period. During the year ended December 31, 2019, we increased net loss attributable to common stockholders by \$8 million to arrive at the numerator used to calculate net loss per share. This adjustment represents the difference between the cash we paid to a financing fund investor for their noncontrolling interest in one of our subsidiaries and the carrying amount of the noncontrolling interest on our consolidated balance sheet, in accordance with ASC 260, Earnings per Share. Potentially dilutive shares, which are based on the weighted-average shares of common stock underlying outstanding stock-based awards, warrants and convertible senior notes using the treasury stock method or the if-converted method, as applicable, are included when calculating diluted net income (loss) per share of common stock attributable to common stockholders when their effect is dilutive. Since we intend to settle or have settled in cash the principal outstanding under our 0.25% Convertible Senior Notes due in 2019, 1.25% Convertible Senior Notes due in 2021, 2.375% Convertible Senior Notes due in 2022, 2.00% Convertible Senior Notes due in 2024 and 5.50% Convertible Senior Notes due in 2022 (assumed in our Maxwell Technologies, Inc. acquisition), we use the treasury stock method when calculating their potential dilutive effect, if any. Furthermore, in connection with the offerings of our notes, we entered into convertible note hedges and warrants (see Note 12, Debt). However, our convertible note hedges are not included when calculating potentially dilutive shares since their effect is always anti-dilutive. Warrants which have a strike price above our share price were out of the money and have not been included in the table below.

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

_	Year Ended December 31,					
	2019	2018	2017			
Stock-based awards	10	10	10			
Convertible senior notes	1	1	2			
Warrants	_	_	1			

Business Combinations

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

Cash and Cash Equivalents

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

Restricted Cash

We maintain certain cash balances restricted as to withdrawal or use. Our restricted cash is comprised primarily of cash as collateral for our sales to lease partners with a resale value guarantee, letters of credit, real estate leases, insurance policies, credit card borrowing facilities and certain operating leases. In addition, restricted cash includes cash received from certain fund investors that have not been released for use by us and cash held to service certain payments under various secured debt facilities.

The following table totals cash and cash equivalents and restricted cash as reported on the consolidated balance sheets; the sums are presented in the consolidated statements of cash flows (in millions):

	De	cember 31, 2019	De	cember 31, 2018	De	cember 31, 2017	De	cember 31, 2016
Cash and cash equivalents	\$	6,268	\$	3,686	\$	3,368	\$	3,393
Restricted cash, current portion		246		193		155		106
Restricted cash, net of current								
portion		269		398		442		268
Total as presented in the								
consolidated statements of cash								
flows	\$	6,783	\$	4,277	\$	3,965	\$	3,767

Accounts Receivable and Allowance for Doubtful Accounts

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

We typically do not carry significant accounts receivable related to our vehicle and related sales as customer payments are due prior to vehicle delivery, except for amounts due from commercial financial institutions for approved financing arrangements between our customers and the financial institutions.

MyPower Customer Notes Receivable

We have customer notes receivable under the legacy MyPower loan program. MyPower was offered by SolarCity to provide residential customers with the option to finance the purchase of a solar energy system through a 30-year loan. The outstanding balances, net of any allowance for potentially uncollectible amounts, are presented on the consolidated balance sheet as a component of prepaid expenses and other current assets for the current portion and as MyPower customer notes receivable, net of current portion, for the long-term portion. In determining the allowance and credit quality for customer notes receivable, we identify significant customers with known disputes or collection issues and also consider our historical level of credit losses and current economic trends that might impact the level of future credit losses. Customer notes receivable that are individually impaired are charged-off as a write-off of the allowance for losses. Since acquisition, there have been no new significant customers with known disputes or collection issues, and the amount of potentially uncollectible amounts has been insignificant. In addition, there were no material non-accrual or past due customer notes receivable as of December 31, 2019.

Concentration of Risk

Credit Risk

Financial instruments that potentially subject us to a concentration of credit risk consist of cash, cash equivalents, restricted cash, accounts receivable, convertible note hedges, and interest rate swaps. Our cash balances are primarily invested in money market funds or on deposit at high credit quality financial institutions in the U.S. These deposits are typically in excess of insured limits. As of December 31, 2019 and 2018, no entity represented 10% or more of our total accounts receivable balance. The risk of concentration for our interest rate swaps is mitigated by transacting with several highly-rated multinational banks.

Supply Risk

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

Inventory Valuation

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

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

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

Operating Lease Vehicles

Vehicles that are leased as part of our direct vehicle leasing program, vehicles delivered to leasing partners with a resale value guarantee and a buyback option, and vehicles delivered to customers with resale value guarantee where exercise is probable are classified as operating lease vehicles as the related revenue transactions are treated as operating leases under ASC 842 (refer to the *Automotive Leasing Revenue* section above for details). Operating lease vehicles are recorded at cost less accumulated depreciation. We generally depreciate their value, less salvage value, using the straight-line-method to cost of automotive leasing revenue over the contractual period. The total cost of operating lease vehicles recorded on the consolidated balance sheets as of December 31, 2019 and 2018 was \$2.85 billion and \$2.55 billion, respectively. Accumulated depreciation related to leased vehicles as of December 31, 2019 and 2018 was \$406 million and \$458 million, respectively.

Solar Energy Systems, Net

We are the lessor of solar energy systems. Prior to January 1, 2019, these leases were accounted for as operating leases in accordance with ASC 840. Under ASC 840, to determine lease classification, we evaluated the lease terms to determine whether there was a transfer of ownership or bargain purchase option at the end of the lease, whether the lease term was greater than 75% of the useful life or whether the present value of the minimum lease payments exceeded 90% of the fair value at lease inception. As discussed in the *Leases* section above, agreements for solar energy system leases and PPAs that commence after January 1, 2019 no longer meet the definition of a lease upon the adoption of ASC 842 and are instead accounted for in accordance with the new revenue standard. We utilize periodic appraisals to estimate useful lives and fair values at lease inception and residual values at lease termination. Solar energy systems are stated at cost less accumulated depreciation.

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

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

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

Property, Plant and Equipment, net

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

Machinery, equipment, vehicles and office	
furniture	2 to 12 years
Building and building improvements	15 to 30 years
Computer equipment and software	3 to 10 years

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

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

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

Prior to the adoption of the new lease standard, we were deemed to be the owner, for accounting purposes, during the construction phase of certain long-lived assets under build-to-suit lease arrangements because of our involvement with the construction, our exposure to any potential cost overruns or our other commitments under the arrangements. In accordance with ASC 840, we recognized build-to-suit lease assets under construction and corresponding build-to-suit lease liabilities on the consolidated balance sheet. Once construction was completed, if a lease met certain "sale-leaseback" criteria, we removed the asset and liability and accounted for the lease as an operating lease. Otherwise, the lease was accounted for as a capital lease. As a result of the adoption of the new lease standard on January 1, 2019, we have de-recognized all build-to-suit lease assets and have reassessed these leases to be operating lease right-of-use assets within the consolidated balance sheet as of December 31, 2019 (refer to *Leases* section above for details).

Long-Lived Assets Including Acquired Intangible Assets

We review our property, plant and equipment, long-term prepayments and intangible assets for impairment whenever events or changes in circumstances indicate that the carrying amount of an asset (or asset group) may not be recoverable. We measure recoverability by comparing the carrying amount to the future undiscounted cash flows that the asset is expected to generate. If the asset is not recoverable, its carrying amount would be adjusted-down to its fair value. For the years ended December 31, 2019 and 2018, we have recognized certain impairments of our long-lived assets (refer to Note 4, *Goodwill and Intangible Assets* and Note 22, *Restructuring and Other*, for further details). For the year ended December 31, 2017, we have recognized no material impairments of our long-lived assets.

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

Goodwill

We assess goodwill for impairment annually in the fourth quarter, or more frequently if events or changes in circumstances indicate that it might be impaired, by comparing its carrying value to the reporting unit's fair value. For the years ended December 31, 2019, 2018, and 2017, we had not recognized any impairment of goodwill.

Capitalization of Software Costs

For costs incurred in development of internal use software, we capitalize costs incurred during the application development stage. Costs related to preliminary project activities and post-implementation activities are expensed as incurred. Internal use software is amortized on a straight-line basis over its estimated useful life of three to ten years. We evaluate the useful lives of these assets on an annual basis, and we test for impairment whenever events or changes in circumstances occur that could impact the recoverability of these assets.

Foreign Currency

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

Foreign currency transaction gains and losses are a result of the effect of exchange rate changes on transactions denominated in currencies other than the functional currency. Transaction gains and losses are recognized in other income (expense), net, in the consolidated statements of operations. For the years ended December 31, 2019, 2018 and 2017, we recorded foreign currency transaction gains of \$48 million, gains of \$2 million and losses of \$52 million, respectively.

Warranties

We provide a manufacturer's warranty on all new and used vehicles and production powertrain components and systems we sell. In addition, we also provide a warranty on the installation and components of the energy generation and storage systems we sell for periods typically between 10 to 25 years. We accrue a warranty reserve for the products sold by us, which includes our best estimate of the projected costs to repair or replace items under warranties and recalls when identified. These estimates are based on actual claims incurred to date and an estimate of the nature, frequency and costs of future claims. These estimates are inherently uncertain given our relatively short history of sales, and changes to our historical or projected warranty experience may cause material changes to the warranty reserve in the future. The warranty reserve does not include projected warranty costs associated with our vehicles subject to lease accounting and our solar energy systems under lease contracts or PPAs, as the costs to repair these warranty claims are expensed as incurred. The portion of the warranty reserve expected to be incurred within the next 12 months is included within accrued liabilities and other, while the remaining balance is included within other long-term liabilities on the consolidated balance sheets. Warranty expense is recorded as a component of cost of revenues in the consolidated statements of operations. Due to the magnitude of our automotive business, accrued warranty balance as of December 31, 2019 was primarily related to our automotive segment. Accrued warranty activity consisted of the following (in millions):

	Year Ended December 31,					
	2019		2018			2017
Accrued warranty—beginning of period	\$	748	\$	402	\$	267
Assumed warranty liability from acquisition						5
Warranty costs incurred		(250)		(209)		(123)
Net changes in liability for pre-existing warranties, including expirations and foreign exchange						
impact		36		(26)		4
Additional warranty accrued from adoption of the						
new revenue standard				37		
Provision for warranty		555		544		249
Accrued warranty—end of period	\$	1,089	\$	748	\$	402

For the years ended December 31, 2019 and 2018, and 2017, warranty costs incurred for vehicles accounted for as operating leases were \$20 million, \$22 million and \$36 million, respectively.

Solar Renewable Energy Credits

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

Deferred Investment Tax Credit Revenue

We have solar energy systems that are eligible for ITCs that accrue to eligible property under the Internal Revenue Code ("IRC"). Under Section 50(d)(5) of the IRC and the related regulations, a lessor of qualifying property may elect to treat the lessee as the owner of such property for the purposes of claiming the ITCs associated with such property. These regulations enable the ITCs to be separated from the ownership of the property and allow the transfer of the ITCs. Under our lease pass-through fund arrangements, we can make a tax election to pass-through the ITCs to the investors, who are the legal lessee of the property. Therefore, we are able to monetize these ITCs to the investors who can utilize them in return for cash payments. We consider the monetization of ITCs to constitute one of the key elements of realizing the value associated with solar energy systems. Consequently, we consider the proceeds from the monetization of ITCs to be a component of revenue generated from solar energy systems.

Under the new revenue standard, we recognize revenue upon the delivery of ITCs to investors under our lease pass-through fund arrangements as this is the point in time that control of ITCs has transferred.

We indemnify the investors for any recapture of ITCs due to our non-compliance. We have concluded that the likelihood of a recapture event is remote, and consequently, we have not recognized a liability for this indemnification on the consolidated balance sheets.

Nevada Tax Incentives

We had entered into agreements with the State of Nevada and Storey County in Nevada that provide abatements for sales, use, real property, personal property and employer excise taxes, discounts to the base tariff energy rates and transferable tax credits. These incentives are available for the applicable periods beginning on October 17, 2014 and ending on either June 30, 2024 or June 30, 2034 (depending on the incentive). Under these agreements, we were eligible for a maximum of \$195 million of transferable tax credits, subject to capital investments by us and our partners for Gigafactory Nevada of at least \$3.50 billion, which we exceeded during 2017, and specified hiring targets for Gigafactory Nevada, which we exceeded during 2018. We recorded these credits as earned when we had evidence there was a market for their sale. Credits were applied as a cost offset to either employee expense or to capital assets, depending on the source of the credits. Credits earned from employee hires or capital spending by our partners at Gigafactory Nevada were recorded as a reduction to operating expenses. As of December 31, 2019 and 2018, we had earned the maximum of \$195 million of transferable tax credits under these agreements.

Recent Accounting Pronouncements

Recently issued accounting pronouncements not yet adopted

In June 2016, the FASB issued ASU No. 2016-13, Measurement of Credit Losses on Financial Instruments, to require financial assets carried at amortized cost to be presented at the net amount expected to be collected based on historical experience, current conditions and forecasts. Subsequently, the FASB issued ASU No. 2018-19, Codification Improvements to Topic 326, to clarify that receivables arising from operating leases are within the scope of lease accounting standards. Further, the FASB issued ASU No. 2019-04, ASU No. 2019-05, ASU 2019-10 and ASU 2019-11 to provide additional guidance on the credit losses standard. The ASUs are effective for interim and annual periods beginning after December 15, 2019, with early adoption permitted. Adoption of the ASUs is on a modified retrospective basis. We plan to adopt the ASUs on January 1, 2020. The ASUs are currently not expected to have a material impact on our consolidated financial statements.

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

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

In December 2019, the FASB issued ASU No. 2019-12, Simplifying the Accounting for Income Taxes, as part of its initiative to reduce complexity in accounting standards. The amendments in the ASU are effective for fiscal years beginning after December 15, 2020, including interim periods therein. Early adoption of the standard is permitted, including adoption in interim or annual periods for which financial statements have not yet been issued. We have not early adopted this ASU for 2019. The ASU is currently not expected to have a material impact on our consolidated financial statements.

Recently adopted accounting pronouncements

In February 2016, the FASB issued ASU No. 2016-02, Leases, to require lessees to recognize all leases, with limited exceptions, on the balance sheet, while recognition on the statement of operations will remain similar to legacy lease accounting, ASC 840. The ASU also eliminates real estate-specific provisions and modifies certain aspects of lessor accounting. Subsequently, the FASB issued ASU No. 2018-10, Codification Improvements to Topic 842, ASU No. 2018-11, Targeted Improvements, ASU No. 2018-20, Narrow-Scope Improvements for Lessors, and ASU 2019-01, Codification Improvements, to clarify and amend the guidance in ASU No. 2016-02. We adopted the ASUs on January 1, 2019 on a modified retrospective basis through a cumulative adjustment to our beginning accumulated deficit balance. Prior comparative periods have not been recast under this method, and we adopted all available practical expedients, as applicable. Further, solar leases that commence on or after January 1, 2019, where we are the lessor and which were accounted for as leases under ASC 840, will no longer meet the definition of a lease. Instead, solar leases commencing on or after January 1, 2019 will be accounted for under the new revenue standard. In addition to recognizing operating leases that were previously not recognized on the consolidated balance sheet, our build-to-suit leases were also de-recognized with a net decrease of approximately \$97 million to our beginning accumulated deficit after income tax effects, as our build-to-suit leases no longer qualify for build-to-suit accounting and are instead recognized as operating leases. Upon adoption, our consolidated balance sheet include an overall reduction in assets of \$473 million and a reduction in liabilities of \$570 million. The adoption of the ASUs did not have a material impact on the consolidated statement of operations or the consolidated statement of cash flows.

In August 2017, the FASB issued ASU No. 2017-12, *Targeted Improvements to Accounting for Hedging Activities*, to simplify the application of current hedge accounting guidance. The ASU expands and refines hedge accounting for both non-financial and financial risk components and aligns the recognition and presentation of the effects of the hedging instrument and the hedged item in the financial statements. We adopted the ASU prospectively on January 1, 2019, and the ASU did not have a material impact on the consolidated financial statements.

In January 2018, the FASB issued ASU No. 2018-01, *Land Easement Practical Expedient Transition to Topic 842*, to permit an entity to elect a practical expedient to not re-evaluate land easements that existed or expired before the entity's adoption of ASU No. 2016-02, *Leases*, and that were not accounted for as leases. The ASU did not have a material impact on the consolidated financial statements.

Note 3 – Business Combinations

Maxwell Acquisition

On May 16, 2019 (the "Acquisition Date"), we completed our strategic acquisition of Maxwell Technologies, Inc. ("Maxwell"), an energy storage and power delivery products company, for its complementary technology and workforce. Pursuant to the related Agreement and Plan of Merger (the "Merger Agreement"), each issued and outstanding share of Maxwell common stock was converted into 0.0193 (the "Exchange Ratio") shares of our common stock. In addition, Maxwell's stock option awards and restricted stock unit awards were assumed by us and converted into corresponding equity awards in respect of our common stock based on the Exchange Ratio, with the awards retaining the same vesting and other terms and conditions as in effect immediately prior to the acquisition.

Fair Value of Purchase Consideration

The Acquisition Date fair value of the purchase consideration was \$207 million (902,968 shares issued at \$229.49 per share, the opening price of our common stock on the Acquisition Date).

Fair Value of Assets Acquired and Liabilities Assumed

We accounted for the acquisition using the purchase method of accounting for business combinations under ASC 805, *Business Combinations*. The total purchase price is allocated to the tangible and identifiable intangible assets acquired and liabilities based on their estimated fair values as of the Acquisition Date.

Fair value estimates are based on a complex series of judgments about future events and uncertainties and rely heavily on estimates and assumptions. The judgments used to determine the estimated fair value assigned to each class of assets acquired and liabilities assumed, as well as asset lives and the expected future cash flows and related discount rates, can materially impact our consolidated financial statements. Significant inputs used for the model included the amount of cash flows, the expected period of the cash flows and the discount rates. In 2019, we finalized our estimate of the Acquisition Date fair values of the assets acquired and the liabilities assumed and there were no changes to the fair values of the assets acquired and the liabilities assumed.

The allocation of the purchase price is based on management's estimate of the Acquisition Date fair values of the assets acquired and liabilities assumed, as follows (in millions):

Assets acquired:	
Cash and cash equivalents	\$ 32
Accounts receivable	24
Inventory	32
Property, plant and equipment, net	27
Operating lease right-of-use assets	10
Intangible assets	105
Prepaid expenses and other assets, current and non-current	 3
Total assets acquired	233
Liabilities and equity assumed:	
Accounts payable	(10)
Accrued liabilities and other	(28)
Debt and finance leases, current and non-current	(44)
Deferred revenue, current	(1)
Other long-term liabilities	(14)
Additional paid-in capital	 (8)
Total liabilities and equity assumed	(105)
Net assets acquired	128
Goodwill	79
Total purchase price	\$ 207

Goodwill represented the excess of the purchase price over the fair value of the net assets acquired and was primarily attributable to the expected synergies from integrating Maxwell's technology into our automotive segment as well as the acquired talent. Goodwill is not deductible for U.S. income tax purposes and is not amortized.

Identifiable Intangible Assets Acquired

The determination of the fair value of identified intangible assets and their respective useful lives are as follows (in millions, except for estimated useful life):

	Fa	ir Value	Useful Life (in years)
Developed technology	\$	102	9
Customer relations		2	9
Trade name		1	10
Total intangible assets	\$	105	

Maxwell's results of operations since the Acquisition Date have been included within the automotive segment. Standalone and pro forma results of operations have not been presented because they were not material to the consolidated financial statements.

Other Acquisitions

During the year ended December 31, 2019, we completed various other acquisitions generally for the related technology and workforce. Total consideration for these acquisitions was \$96 million, of which \$80 million was paid in cash. In aggregate, \$36 million was attributed to intangible assets, \$51 million was attributed to goodwill within the automotive segment, and \$9 million was attributed to net assets assumed. Goodwill is not deductible for U.S. income tax purposes. The identifiable intangible assets were related to purchased technology, with estimated useful lives of one to nine years.

Standalone and pro forma results of operations have not been presented because they were not material to the consolidated financial statements, either individually or in aggregate.

Note 4 – Goodwill and Intangible Assets

Goodwill increased \$130 million from \$68 million as of December 31, 2018 to \$198 million as of December 31, 2019 primarily due to completed business combinations during the year ended December 31, 2019 (see Note 3, *Business Combinations*). There were no accumulated impairment losses as of December 31, 2019 and 2018.

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

	December 31, 2019				December 31, 2018			
	Gross Carrying Amount	Accumulated Amortization	Other	Net Carrying Amount	Gross Carrying Amount	Accumulated Amortization	Other	Net Carrying Amount
Finite-lived intangible assets:								
Developed technology	\$ 291	\$ (72)	\$ 1	\$ 220	\$ 152	\$ (40)	\$ 1	\$ 113
Trade names	3	(1)	1	3	45	(44)	_	1
Favorable contracts and								
leases, net	113	(24)	_	89	113	(17)		96
Other	38	(16)		22	36	(12)	1	25
Total finite-lived intangible assets	445	(113)	2	334	346	(113)	2	235
Indefinite-lived intangible assets: Gigafactory Nevada								
water rights In-process research and development	5	_	_	5	_	_	_	_
("IPR&D")	60		(60)		60		(13)	47
Total indefinite-lived								
intangible assets	65		(60)	5	60		(13)	47
Total intangible assets	\$ 510	<u>\$ (113)</u>	<u>\$ (58</u>)	\$ 339	\$ 406	<u>\$ (113)</u>	<u>\$ (11)</u>	\$ 282

During 2019, the Company determined to abandon further development efforts on the IPR&D and therefore impaired the remaining \$47 million in restructuring and other expenses in the consolidated statement of operations. Amortization expense during the years ended December 31, 2019, 2018 and 2017 was \$44 million, \$66 million and \$40 million, respectively.

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

2020	\$ 50
2021	49
2022	48
2023	42
2024	27
Thereafter	118
Total	\$ 334

Note 5 – Fair Value of Financial Instruments

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

	December 31, 2019								December 31, 2018							
	Fair	Value	Level I	Le	vel II	Lev	el III	Fai	ir Value	Level I	Le	vel II	Lev	el III		
Money market funds (cash and																
cash equivalents &																
restricted cash)	\$	1,632	\$ 1,632	\$	_	\$	—	\$	1,813	\$ 1,813	\$		\$	—		
Interest rate swap asset		1			1		—		12	_		12				
Interest rate swap liability		(27)			(27)				(1)			(1)				
Total	\$	1,606	\$ 1,632	\$	(26)	\$		\$	1,824	\$ 1,813	\$	11	\$			

All of our money market funds were classified within Level I of the fair value hierarchy because they were valued using quoted prices in active markets. Our interest rate swaps were classified within Level II of the fair value hierarchy because they were valued using alternative pricing sources or models that utilized market observable inputs, including current and forward interest rates. During the year ended December 31, 2019, there were no transfers between the levels of the fair value hierarchy.

Interest Rate Swaps

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

		De	cember 31, 2019	9	December 31, 2018							
	Aggreg	ate Notional	Gross Asset at	Gross Liability at	Aggregate Notion	al Gross	Asset at	Gross Liability at				
	A	mount	Fair Value	Fair Value	Amount	Fair	· Value	Fair Value				
Interest rate swaps	\$	821	\$ 1	\$ 27	\$ 80	0.8	12	\$ 1				

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

	Year Ended December 31,										
	20	19		2018		2017					
Gross gains	\$	11	\$	22	\$	7					
Gross losses	\$	51	\$	12	\$	13					

Disclosure of Fair Values

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

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

		December 3	31, 2	019	December 31, 2018				
	Carry	ing Value	Fa	ir Value	Car	rying Value	Fa	ir Value	
Convertible Senior Notes	\$	3,686	\$	6,067	\$	3,661	\$	4,347	
5.30% Senior Notes due in 2025	\$	1,782	\$	1,748	\$	1,779	\$	1,575	
Solar asset-backed notes	\$	1,155	\$	1,211	\$	1,183	\$	1,207	
Solar loan-backed notes	\$	175	\$	189	\$	203	\$	212	

Note 6 – Inventory

Our inventory consisted of the following (in millions):

	De	cember 31, 2019	December 31, 2018		
Raw materials	\$	1,428	\$	932	
Work in process		362		297	
Finished goods (1)		1,356		1,581	
Service parts		406		303	
Total	\$	3,552	\$	3,113	

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

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

We write-down inventory for any excess or obsolete inventories or when we believe that the net realizable value of inventories is less than the carrying value. During the years ended December 31, 2019, 2018 and 2017, we recorded write-downs of \$138 million, \$78 million and \$124 million, respectively, in cost of revenues.

Note 7 – Solar Energy Systems, Net

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

	Dec	ember 31, 2019	December 31, 2018		
Solar energy systems in service	\$	6,682	\$	6,431	
Initial direct costs related to customer solar energy					
system lease acquisition costs		102		99	
		6,784		6,530	
Less: accumulated depreciation and amortization (1)		(723)		(496)	
		6,061		6,034	
Solar energy systems under construction		18		68	
Solar energy systems pending interconnection		59		169	
Solar energy systems, net (2)	\$	6,138	\$	6,271	

- (1) Depreciation and amortization expense during the years ended December 31, 2019, 2018 and 2017 was \$227 million, \$276 million, and \$213 million, respectively.
- (2) As of December 31, 2019 and 2018, solar energy systems, net, included \$36 million of gross finance leased assets with accumulated depreciation and amortization of \$6 million and \$4 million, respectively.

Note 8 - Property, Plant and Equipment, Net

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

	De	cember 31, 2019	De	cember 31, 2018
Machinery, equipment, vehicles and office furniture	\$	7,167	\$	6,329
Tooling		1,493		1,398
Leasehold improvements		1,087		961
Land and buildings		3,024		4,047
Computer equipment, hardware and software		595		487
Construction in progress		764		807
		14,130		14,029
Less: Accumulated depreciation		(3,734)		(2,699)
Total	\$	10,396	\$	11,330

As of December 31, 2018, the table above included \$1.69 billion of gross build-to-suit lease assets. As a result of the adoption of the new lease standard on January 1, 2019, we have de-recognized all build-to-suit lease assets and have reassessed these leases to be operating lease right-of-use assets within the consolidated balance sheet as of December 31, 2019 (see Note 2, Summary of Significant Accounting Policies).

Construction in progress is primarily comprised of tooling and equipment related to the manufacturing of our products and Gigafactory Shanghai construction. Completed assets are transferred to their respective asset classes, and depreciation begins when an asset is ready for its intended use. Interest on outstanding debt is capitalized during periods of significant capital asset construction and amortized over the useful lives of the related assets. During the years ended December 31, 2019 and 2018, we capitalized \$31 million and \$55 million, respectively, of interest.

Depreciation expense during the years ended December 31, 2019, 2018 and 2017 was \$1.37 billion, \$1.11 billion and \$769 million, respectively. Gross property plant and equipment under finance leases as of December 31, 2019 and 2018 was \$2.08 billion and \$1.52 billion, respectively. Accumulated depreciation on property, plant and equipment under finance leases as of these dates was \$483 million and \$232 million, respectively.

Panasonic has partnered with us on Gigafactory Nevada with investments in the production equipment that it uses to manufacture and supply us with battery cells. Under our arrangement with Panasonic, we plan to purchase the full output from their production equipment at negotiated prices. As the terms of the arrangement convey a finance lease under ASC 842, *Leases*, we account for their production equipment as leased assets when production commences. This results in us recording the cost of their production equipment within property, plant and equipment, net, on the consolidated balance sheets with a corresponding liability recorded to debt and finance leases. As of December 31, 2019 and 2018, we had cumulatively capitalized costs of \$1.73 billion and \$1.24 billion, respectively, on the consolidated balance sheets in relation to the production equipment under our Panasonic arrangement. We had cumulatively capitalized total costs for Gigafactory Nevada, including costs under our Panasonic arrangement, of \$5.27 billion and \$4.62 billion as of December 31, 2019 and 2018, respectively.

In 2019, the Shanghai government agreed to provide \$85 million of certain incentives in connection with us making certain manufacturing equipment investments at Gigafactory Shanghai, of which \$46 million was received in cash and the remaining \$39 million was in the form of assets and services contributed by the government. These incentives were taken as a reduction to property, plant and equipment, net, on the consolidated balance sheet.

Note 9 - Accrued Liabilities and Other

As of December 31, 2019 and 2018, accrued liabilities and other current liabilities consisted of the following (in millions):

	Dec	cember 31, 2019	De	cember 31, 2018
Accrued purchases (1)	\$	638	\$	394
Payroll and related costs		466		449
Taxes payable (2)		611		348
Accrued interest		86		78
Financing obligation, current portion		57		62
Accrued warranty, current portion		344		201
Sales return reserve, current portion		272		108
Build-to-suit lease liability, current portion				82
Operating lease right-of-use liabilities, current portion		228		_
Other current liabilities		203		372
Total	\$	2,905	\$	2,094

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

Due to price adjustments we made to our vehicle offerings during 2019, we increased our sales return reserve significantly on vehicles previously sold under our buyback options program. See Note 2, *Summary of Significant Accounting Policies* for details.

As of December 31, 2018, the table above included \$82 million of current build-to-suit lease liabilities. As a result of the adoption of the new lease standard on January 1, 2019, we have de-recognized all build-to-suit lease liabilities and have reassessed these leases to be operating lease right-of-use liabilities as of December 31, 2019.

Note 10 – Other Long-Term Liabilities

As of December 31, 2019 and 2018, other long-term liabilities consisted of the following (in millions):

	De	cember 31, 2019	De	cember 31, 2018
Accrued warranty reserve	\$	745	\$	547
Build-to-suit lease liability		_		1,662
Operating lease right-of-use liabilities		956		_
Deferred rent expense		_		59
Financing obligation		37		50
Sales return reserve		545		84
Other noncurrent liabilities		372		308
Total other long-term liabilities	\$	2,655	\$	2,710

As of December 31, 2018, the table above included \$1.66 billion of non-current build-to-suit lease liabilities. As a result of the adoption of the new lease standard on January 1, 2019, we have de-recognized all build-to-suit lease liabilities and have reassessed these leases to be operating lease right-of-use liabilities as of December 31, 2019.

Due to price adjustments we made to our vehicle offerings during 2019, we increased our sales return reserve significantly on vehicles previously sold under our buyback options program. Refer to Note 2, *Summary of Significant Accounting Policies*, for details on these transactions.

Note 11 – Customer Deposits

Customer deposits primarily consisted of cash payments from customers at the time they place an order or reservation for a vehicle or an energy product and any additional payments up to the point of delivery or the completion of installation, including the fair values of any customer trade-in vehicles that are applicable toward a new vehicle purchase. Customer deposits also include prepayments on contracts that can be cancelled without significant penalties, such as vehicle maintenance plans. Customer deposit amounts and timing vary depending on the vehicle model, the energy product and the country of delivery. In the case of a vehicle, customer deposits are fully refundable. In the case of an energy generation or storage product, customer deposits are fully refundable prior to the entry into a purchase agreement or in certain cases for a limited time thereafter (in accordance with applicable laws). Customer deposits are included in current liabilities until refunded or until they are applied towards the customer's purchase balance. As of December 31, 2019 and December 31, 2018, we held \$726 million and \$793 million, respectively, in customer deposits.

Note 12 – Debt

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

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

The following is a summary of our debt as of December 31, 2018 (in millions):

	Unp	aid					U	nused		
	Princ	cipal		Net Carry	ing Va	alue	Cor	nmitted	Contractual	Contractual
	Bala	nce	Cu	ırrent	Lon	ıg-Term	Am	ount (1)	Interest Rates	Maturity Date
Recourse debt:										
0.25% Convertible Senior Notes due in 2019										
("2019 Notes")	\$	920	\$	913	\$	_	\$	_	0.25%	March 2019
2021 Notes		1,380		_		1,244		_	1.25%	March 2021
2022 Notes		978		_		871		_	2.375%	March 2022
2025 Notes		1,800		_		1,779		_	5.30%	August 2025
									1% plus	
Credit Agreement		1,540		_		1,540		231	LIBOR	June 2020
1.625% Convertible Senior Notes due										
in 2019		566		541		_		_	1.625%	November 2019
Zero-Coupon Convertible Senior Notes due in										
2020		103		_		92		_	0.0%	December 2020
Vehicle, Solar Bonds and other Loans		101		1		100			1.8%-7.6%	January 2019-January 2031
Total recourse debt		7,388		1,455		5,626		231		
Non-recourse debt:										
										September 2024-February
Solar Asset-backed Notes		1,214		28		1,155		_	4.0%-7.7%	2048
Automotive Asset-backed Notes		1,178		468		704		_	2.3%-7.9%	December 2019-June 2022
Cash Equity Debt		467		11		442		_	5.3%-5.8%	July 2033-January 2035
Solar Term Loans		350		188		162		_	6.0%-6.1%	January 2019-January 2021
										September 2048-September
Solar Loan-backed Notes		210		10		193		_	4.8%-7.5%	2049
Warehouse Agreements		92		14		78		1,008	3.9%-4.2%	September 2020
Canada Credit Facility		73		32		41		_	3.6%-5.9%	November 2022
Solar Renewable Energy Credit and										
other Loans		27		16		10		18	5.1%-7.9%	December 2019-July 2021
Total non-recourse debt		3,611		767		2,785		1,026		
Total debt	\$	10,999	\$	2,222	\$	8,411	\$	1,257		

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

Recourse debt refers to debt that is recourse to our general assets. Non-recourse debt refers to debt that is recourse to only assets of our subsidiaries. The differences between the unpaid principal balances and the net carrying values are due to convertible senior note conversion features, debt discounts or deferred financing costs. As of December 31, 2019, we were in material compliance with all financial debt covenants, which include minimum liquidity and expense-coverage balances and ratios.

2019 Notes, 2021 Notes, Bond Hedges and Warrant Transactions

In March 2014, we issued \$800 million in aggregate principal amount of 0.25% Convertible Senior Notes due in March 2019 and \$1.20 billion in aggregate principal amount of 1.25% Convertible Senior Notes due in March 2021 in a public offering. In April 2014, we issued an additional \$120 million in aggregate principal amount of the 2019 Notes and \$180 million in aggregate principal amount of the 2021 Notes, pursuant to the exercise in full of the overallotment options by the underwriters. The total net proceeds from the issuances, after deducting transaction costs, were \$906 million for the 2019 Notes and \$1.36 billion for the 2021 Notes.

Each \$1,000 of principal of these notes is initially convertible into 2.7788 shares of our common stock, which is equivalent to an initial conversion price of \$359.87 per share, subject to adjustment upon the occurrence of specified events. Holders of these notes had the option to convert on or after December 1, 2018 for the 2019 Notes and may elect to convert on or after December 1, 2020 for the 2021 Notes. The settlement of such an election to convert the 2019 Notes was in cash and/or shares of our common stock, which we settled in cash on the maturity date. The settlement of such an election to convert the 2021 Notes would be in cash for the principal amount and, if applicable, cash and/or shares of our common stock for any conversion premium at our election. Further, holders of these notes may convert, at their option, prior to the respective dates above only under the following circumstances: (1) during a quarter in which the closing price of our common stock for at least 20 trading days (whether or not consecutive) during the last 30 consecutive trading days immediately preceding the quarter is greater than or equal to 130% of the conversion price; (2) during the five-business day period following any five-consecutive trading day period in which the trading price of these notes is less than 98% of the product of the closing price of our common stock and the applicable conversion rate for each day during such five-consecutive trading day period, or (3) if we make specified distributions to holders of our common stock or if specified corporate transactions occur. Upon such a conversion of the 2019 Notes, we would pay or deliver (as applicable) cash, shares of our common stock or a combination thereof, at our election. Upon such a conversion of the 2021 Notes, we would pay cash for the principal amount and, if applicable, deliver shares of our common stock (subject to our right to deliver cash in lieu of all or a portion of such shares of our common stock) based on a daily conversion value. If a fundamental change occurs prior to the applicable maturity date, holders of these notes may require us to repurchase all or a portion of their notes for cash at a repurchase price equal to 100% of the principal amount plus any accrued and unpaid interest. In addition, if specific corporate events occur prior to the applicable maturity date, we would increase the conversion rate for a holder who elects to convert their notes in connection with such an event in certain circumstances. As of December 31, 2019, none of the conditions permitting the holders of 2021 to early convert had been met. Therefore, the 2021 Notes are classified as long-term.

In accordance with GAAP relating to embedded conversion features, we initially valued and bifurcated the conversion features associated with these notes. We recorded to stockholders' equity \$188 million for the 2019 Notes' conversion feature and \$369 million for the 2021 Notes' conversion feature. The resulting debt discounts are being amortized to interest expense at an effective interest rate of 4.89% and 5.96%, respectively.

In connection with the offering of these notes in March and April 2014, we entered into convertible note hedge transactions whereby we had the option to purchase 2.6 million shares of our common stock for the 2019 Notes and have the option to purchase initially (subject to adjustment for certain specified events) 3.8 million shares of our common stock for the 2021 Notes at a price of \$359.87 per share. The total cost of the convertible note hedge transactions was \$604 million. In addition, we sold warrants whereby the holders of the warrants had the option to purchase 2.6 million shares of our common stock at a price of \$512.66 per share for the 2019 Notes and have the option to purchase initially (subject to adjustment for certain specified events) 3.8 million shares of our common stock at a price of \$560.64 per share for the 2021 Notes. We received \$389 million in total cash proceeds from the sales of these warrants. Taken together, the purchases of the convertible note hedges and the sales of the warrants are intended to reduce potential dilution and/or cash payments from the conversion of these notes and to effectively increase the overall conversion price from \$359.87 to \$512.66 per share for the 2019 Notes and from \$359.87 to \$560.64 per share for the 2021 Notes. As these transactions meet certain accounting criteria, the convertible note hedges and warrants are recorded in stockholders' equity and are not accounted for as derivatives. The net cost incurred in connection with the convertible note hedge and warrant transactions was recorded as a reduction to additional paid-in capital on the consolidated balance sheet.

During the first quarter of 2019, we repaid the \$920 million in aggregate principal amount of the 2019 Notes. As of December 31, 2019, the convertible note hedges and warrants associated with the 2019 Notes have expired.

As of December 31, 2019, the if-converted value of the 2021 Notes exceeds the outstanding principal amount by \$224 million.

2022 Notes, Bond Hedges and Warrant Transactions

In March 2017, we issued \$978 million in aggregate principal amount of 2.375% Convertible Senior Notes due in March 2022 in a public offering. The net proceeds from the issuance, after deducting transaction costs, were \$966 million.

Each \$1,000 of principal of the 2022 Notes is initially convertible into 3.0534 shares of our common stock, which is equivalent to an initial conversion price of \$327.50 per share, subject to adjustment upon the occurrence of specified events. Holders of the 2022 Notes may convert, at their option, on or after December 15, 2021. Further, holders of the 2022 Notes may convert, at their option, prior to December 15, 2021 only under the following circumstances: (1) during any quarter beginning after June 30, 2017, if the closing price of our common stock for at least 20 trading days (whether or not consecutive) during the last 30 consecutive trading days immediately preceding the quarter is greater than or equal to 130% of the conversion price; (2) during the five-business day period following any five-consecutive trading day period in which the trading price of the 2022 Notes is less than 98% of the product of the closing price of our common stock and the applicable conversion rate for each day during such five-consecutive trading day period or (3) if we make specified distributions to holders of our common stock or if specified corporate transactions occur. Upon a conversion, we would pay cash for the principal amount and, if applicable, deliver shares of our common stock (subject to our right to deliver cash in lieu of all or a portion of such shares of our common stock) based on a daily conversion value. If a fundamental change occurs prior to the maturity date, holders of the 2022 Notes may require us to repurchase all or a portion of their 2022 Notes for cash at a repurchase price equal to 100% of the principal amount plus any accrued and unpaid interest. In addition, if specific corporate events occur prior to the maturity date, we would increase the conversion rate for a holder who elects to convert its 2022 Notes in connection with such an event in certain circumstances. As of December 31, 2019, none of the conditions permitting the holders of the 2022 Notes to early convert had been met. Therefore, the 2022 Notes are classified as long-term.

In accordance with GAAP relating to embedded conversion features, we initially valued and bifurcated the conversion feature associated with the 2022 Notes. We recorded to stockholders' equity \$146 million for the conversion feature. The resulting debt discount is being amortized to interest expense at an effective interest rate of 6.00%.

In connection with the offering of the 2022 Notes, we entered into convertible note hedge transactions whereby we have the option to purchase initially (subject to adjustment for certain specified events) 3.0 million shares of our common stock at a price of \$327.50 per share. The cost of the convertible note hedge transactions was \$204 million. In addition, we sold warrants whereby the holders of the warrants have the option to purchase initially (subject to adjustment for certain specified events) 3.0 million shares of our common stock at a price of \$655.00 per share. We received \$53 million in cash proceeds from the sale of these warrants. Taken together, the purchase of the convertible note hedges and the sale of the warrants are intended to reduce potential dilution from the conversion of the 2022 Notes and to effectively increase the overall conversion price from \$327.50 to \$655.00 per share. As these transactions meet certain accounting criteria, the convertible note hedges and warrants are recorded in stockholders' equity and are not accounted for as derivatives. The net cost incurred in connection with the convertible note hedge and warrant transactions was recorded as a reduction to additional paid-in capital on the consolidated balance sheet.

As of December 31, 2019, the if-converted value of the notes exceeds the outstanding principal amount by \$271 million.

2024 Notes, Bond Hedges and Warrant Transactions

In May 2019, we issued \$1.84 billion in aggregate principal amount of 2.00% Convertible Senior Notes due in May 2024 in a public offering. The net proceeds from the issuance, after deducting transaction costs, were \$1.82 billion.

Each \$1,000 of principal of the 2024 Notes is initially convertible into 3.2276 shares of our common stock, which is equivalent to an initial conversion price of \$309.83 per share, subject to adjustment upon the occurrence of specified events. Holders of the 2024 Notes may convert, at their option, on or after February 15, 2024. Further, holders of the 2024 Notes may convert, at their option, prior to February 15, 2024 only under the following circumstances: (1) during any calendar quarter commencing after September 30, 2019 (and only during such calendar quarter), if the last reported sale price of our common stock for at least 20 trading days (whether or not consecutive) during a period of 30 consecutive trading days ending on the last trading day of immediately preceding calendar quarter is greater than or equal to 130% of the conversion price on each trading day; (2) during the fivebusiness day period after any five-consecutive trading day period in which the trading price per \$1,000 principal amount of the 2024 Notes for each trading day of such period is less than 98% of the product of the last reported sale price of our common stock and the conversion rate on each such trading day, or (3) if specified corporate events occur. Upon conversion, the 2024 Notes will be settled in cash, shares of our common stock or a combination thereof, at our election. If a fundamental change occurs prior to the maturity date, holders of the 2024 Notes may require us to repurchase all or a portion of their 2024 Notes for cash at a repurchase price equal to 100% of the principal amount plus any accrued and unpaid interest. In addition, if specific corporate events occur prior to the maturity date, we would increase the conversion rate for a holder who elects to convert its 2024 Notes in connection with such an event in certain circumstances. As of December 31, 2019, none of the conditions permitting the holders of the 2024 Notes to early convert had been met. Therefore, the 2024 Notes are classified as long-term.

In accordance with GAAP relating to embedded conversion features, we initially valued and bifurcated the conversion feature associated with the 2024 Notes. We recorded to stockholders' equity \$491 million for the conversion feature. The resulting debt discount is being amortized to interest expense at an effective interest rate of 8.68%

In connection with the offering of the 2024 Notes, we entered into convertible note hedge transactions whereby we have the option to purchase initially (subject to adjustment for certain specified events) 5.9 million shares of our common stock at a price of \$309.83 per share. The cost of the convertible note hedge transactions was \$476 million. In addition, we sold warrants whereby the holders of the warrants have the option to purchase initially (subject to adjustment for certain specified events) 5.9 million shares of our common stock at a price of \$607.50 per share. We received \$174 million in cash proceeds from the sale of these warrants. Taken together, the purchase of the convertible note hedges and the sale of the warrants are intended to reduce potential dilution from the conversion of the 2024 Notes and to effectively increase the overall conversion price from \$309.83 to \$607.50 per share. As these transactions meet certain accounting criteria, the convertible note hedges and warrants are recorded in stockholders' equity and are not accounted for as derivatives. The net cost incurred in connection with the convertible note hedge and warrant transactions was recorded as a reduction to additional paid-in capital on the consolidated balance sheet.

As of December 31, 2019, the if-converted value of the notes exceeds the outstanding principal amount by \$644 million.

2025 Notes

In August 2017, we issued \$1.80 billion in aggregate principal amount of unsecured 5.30% Senior Notes due in August 2025 pursuant to Rule 144A and Regulation S under the Securities Act. The net proceeds from the issuance, after deducting transaction costs, were \$1.77 billion.

Credit Agreement

In June 2015, we entered into a senior asset-based revolving credit agreement (as amended from time to time, the "Credit Agreement") with a syndicate of banks. Borrowed funds bear interest, at our option, at an annual rate of (a) 1% plus LIBOR or (b) the highest of (i) the federal funds rate plus 0.50%, (ii) the lenders' "prime rate" or (iii) 1% plus LIBOR. The fee for undrawn amounts is 0.25% per annum. The Credit Agreement is secured by certain of our accounts receivable, inventory and equipment. Availability under the Credit Agreement is based on the value of such assets, as reduced by certain reserves.

In March 2019, we amended and restated the Credit Agreement to increase the total lender commitments by \$500 million to \$2.425 billion and extend the term of substantially all of the total commitments to July 2023.

1.625% Convertible Senior Notes due in 2019

In 2014, SolarCity issued \$566 million in aggregate principal amount of 1.625% Convertible Senior Notes due on November 1, 2019 in a private placement.

Each \$1,000 of principal of the convertible senior notes was convertible into 1.3169 shares of our common stock, which is equivalent to a conversion price of \$759.36 per share (subject to adjustment upon the occurrence of specified events related to dividends, tender offers or exchange offers). The maximum conversion rate was capped at 1.7449 shares for each \$1,000 of principal of the convertible senior notes, which is equivalent to a minimum conversion price of \$573.10 per share. The convertible senior notes did not have a cash conversion option and the convertible senior note holders could require us to repurchase their convertible senior notes for cash only under certain defined fundamental changes.

In November 2019, we fully repaid \$566 million in aggregate principal amount of the Notes.

Zero-Coupon Convertible Senior Notes due in 2020

In December 2015, SolarCity issued \$113 million in aggregate principal amount of Zero-Coupon Convertible Senior Notes due on December 1, 2020 in a private placement. \$13 million of the convertible senior notes were issued to related parties (see Note 20, *Related Party Transactions*).

Each \$1,000 of principal of the convertible senior notes is now convertible into 3.3333 shares of our common stock, which is equivalent to a conversion price of \$300.00 per share (subject to adjustment upon the occurrence of specified events related to dividends, tender offers or exchange offers). The maximum conversion rate is capped at 4.2308 shares for each \$1,000 of principal of the convertible senior notes, which is equivalent to a minimum conversion price of \$236.36 per share. The convertible senior notes do not have a cash conversion option. The convertible senior note holders may require us to repurchase their convertible senior notes for cash only under certain defined fundamental changes. On or after June 30, 2017, the convertible senior notes are redeemable by us in the event that the closing price of our common stock exceeds 200% of the conversion price for 45 consecutive trading days ending within three trading days of such redemption notice at a redemption price equal to 100% of the principal amount plus any accrued and unpaid interest.

As of December 31, 2019, the if-converted value of the notes exceeds the outstanding principal amount by \$41 million.

Solar Bonds and other Loans

Solar Bonds are senior unsecured obligations that are structurally subordinate to the indebtedness and other liabilities of our subsidiaries. Solar Bonds were issued under multiple series with various terms and interest rates. Additionally, we have assumed the 5.50% Convertible Senior Notes due in 2022 issued by Maxwell, which are convertible into shares of our common stock as a result of our acquisition of Maxwell.

Automotive Asset-backed Notes

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

In November 2019, we issued \$861 million in aggregate principal amount of Automotive Asset-backed Notes. The proceeds from the issuance, net of discounts and fees, were \$857 million.

Solar Asset-backed Notes

From time to time, our subsidiaries pool and transfer either qualifying solar energy systems and the associated customer contracts or our interests in certain financing funds into Special Purpose Entities ("SPEs") and issue Solar Asset-backed Notes backed by these solar assets or interests to investors. The SPEs are wholly owned by us and are consolidated in the financial statements. The cash flows generated by these solar assets or distributed by the underlying financing funds to certain SPEs are used to service the principal and interest payments on the Solar Asset-backed Notes and satisfy the SPEs' expenses, and any remaining cash is distributed to us. We recognize revenue earned from the associated customer contracts in accordance with our revenue recognition policy. The SPEs' assets and cash flows are not available to our other creditors, and the creditors of the SPEs, including the Solar Asset-backed Note holders, have no recourse to our other assets. We contracted with the SPEs to provide operations & maintenance and administrative services for the solar energy systems. As of December 31, 2019, solar assets pledged as collateral for Solar Asset-backed Notes had a carrying value of \$690 million and are included within solar energy systems, net, on the consolidated balance sheets.

China Loan Agreements

In March 2019, one of our subsidiaries entered into a loan agreement with a syndicate of lenders in China for a bridge loan to be used for expenditures related to the construction of and production at our Gigafactory Shanghai. The loan agreement was terminated in December 2019.

In September 2019, one of our subsidiaries entered into a loan agreement with a lender in China for an unsecured 12-month revolving facility of up to RMB 5.0 billion (or the equivalent drawn in U.S. dollars), to finance vehicles in-transit to China. Borrowed funds bear interest at an annual rate no greater than 90% of the one-year rate published by the People's Bank of China. The loan facility is non-recourse to our assets.

In December 2019, one of our subsidiaries entered into loan agreements with a syndicate of lenders in China for: (i) a secured term loan facility of up to RMB 9.0 billion or the equivalent amount drawn in U.S. dollars (the "Fixed Asset Facility") and (ii) an unsecured revolving loan facility of up to RMB 2.25 billion or the equivalent amount drawn in U.S. dollars (the "Working Capital Facility"), in each case to be used in connection with our construction of and production at our Gigafactory Shanghai. Outstanding borrowings pursuant to the Fixed Asset Facility accrue interest at a rate equal to: (i) for RMB-denominated loans, the market quoted interest rate published by the People's Bank of China minus 0.7625%, and (ii) for U.S. dollar-denominated loans, the sum of one-year LIBOR plus 1.3%. Outstanding borrowings pursuant to the Working Capital Facility accrue interest at a rate equal to: (i) for RMB-denominated loans, the market quoted interest rate published by the People's Bank of China minus 0.4525%, and (ii) for U.S. dollar-denominated loans, the sum of one-year LIBOR plus 0.8%. The Fixed Asset Facility is secured by the land and buildings at Gigafactory Shanghai and both facilities are non-recourse to our other assets.

Cash Equity Debt

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

Solar Loan-backed Notes

In January 2016 and January 2017, our subsidiaries pooled and transferred certain MyPower customer notes receivable into two SPEs and issued \$330 million in aggregate principal amount of Solar Loan-backed Notes, backed by these notes receivable to investors. Accordingly, we did not recognize a gain or loss on the transfer of these notes receivable. The SPEs are wholly owned by us and are consolidated in the financial statements. The payments received by the SPEs from these notes receivable are used to service the semi-annual principal and interest payments on the Solar Loan-backed Notes and satisfy the SPEs' expenses, and any remaining cash is distributed to us. The SPEs' assets and cash flows are not available to our other creditors, and the creditors of the SPEs, including the Solar Loan-backed Note holders, have no recourse to our other assets.

Warehouse Agreements

In August 2016, our subsidiaries entered into a loan and security agreement (the "2016 Warehouse Agreement") for borrowings secured by the future cash flows arising from certain leases and the associated leased vehicles. On August 17, 2017, the 2016 Warehouse Agreement was amended to modify the interest rates and extend the availability period and the maturity date, and our subsidiaries entered into another loan and security agreement (the "2017 Warehouse Agreement") with substantially the same terms as and that shares the same committed amount with the 2016 Warehouse Agreement. On August 16, 2018, the 2016 Warehouse Agreement and 2017 Warehouse Agreement were amended to extend the availability period from August 17, 2018 to August 16, 2019 and extend the maturity date from September 2019 to September 2020. On December 28, 2018, our subsidiaries terminated the 2017 Warehouse Agreement after having fully repaid all obligations thereunder, and entered into a third loan and security agreement with substantially the same terms as and that shares the same committed amount with the 2016 Warehouse Agreement. We refer to these agreements together as the "Warehouse Agreements." Amounts drawn under the Warehouse Agreements generally bear interest at a fixed margin above (i) LIBOR or (ii) the commercial paper rate. The Warehouse Agreements are non-recourse to our other assets.

Pursuant to the Warehouse Agreements, an undivided beneficial interest in the future cash flows arising from certain leases and the related leased vehicles has been sold for legal purposes but continues to be reported in the consolidated financial statements. The interest in the future cash flows arising from these leases and the related vehicles is not available to pay the claims of our creditors other than pursuant to obligations to the lenders under the Warehouse Agreements. Any excess cash flows not required to pay obligations under the Warehouse Agreements are available for distributions.

In August 2019, our subsidiaries amended the Warehouse Agreements to extend the availability period from August 16, 2019 to August 14, 2020 and extend the maturity date from September 2020 to September 2021.

In November 2019, we repaid \$723 million of the principal outstanding under the Warehouse Agreements.

Solar Term Loans

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

During the fourth quarter of 2019, we fully repaid the \$159 million in aggregate principal of one term loan.

Canada Credit Facility

In December 2016, one of our subsidiaries entered into a credit agreement (the "Canada Credit Facility") with a bank for borrowings secured by our interests in certain vehicle leases. In December 2017 and December 2018, the Canada Credit Facility was amended to add our interests in additional vehicle leases as collateral, allowing us to draw additional funds. Amounts drawn under the Canada Credit Facility bear interest at fixed rates. The Canada Credit Facility is non-recourse to our other assets.

Solar Renewable Energy Credit and other Loans

We have entered into various solar renewable energy credit and other loan agreements with various financial institutions, including a solar revolving credit facility. The solar renewable energy credit loan facility is secured by substantially all of the assets of one of our wholly owned subsidiaries, including its rights under forward contracts to sell SRECs, and is non-recourse to our other assets. The solar revolving credit facility is secured by certain assets of the subsidiary and is non-recourse to our other assets.

Interest Expense

The following table presents the interest expense related to the contractual interest coupon, the amortization of debt issuance costs and the amortization of debt discounts on our convertible senior notes with cash conversion features, which include the 1.50% Convertible Senior Notes due in 2018, the 2019 Notes, the 2021 Notes, the 2022 Notes and the 2024 Notes (in millions):

	Year Ended December 31,								
		2019		2018		2017			
Contractual interest coupon	\$	65	\$	43	\$	39			
Amortization of debt issuance costs		7		7		7			
Amortization of debt discounts		148		123		114			
Total	\$	220	\$	173	\$	160			

Pledged Assets

As of December 31, 2019 and 2018, we had pledged or restricted \$5.72 billion and \$5.23 billion of our assets (consisted principally of restricted cash, receivables, inventory, SRECs, solar energy systems, operating lease vehicles, land use rights, property and equipment, and equity interests in certain SPEs) as collateral for our outstanding debt.

Schedule of Principal Maturities of Debt

The future scheduled principal maturities of debt as of December 31, 2019 were as follows (in millions):

	Recourse debt Non-recourse debt		Total		
2020	\$ 259	\$	1,155	\$	1,414
2021	1,382		909		2,291
2022	1,024		1,013		2,037
2023	1,586		199		1,785
2024	1,840		558		2,398
Thereafter	1,807		760		2,567
Total	\$ 7,898	\$	4,594	\$	12,492

Note 13 – Leases

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

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

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

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

	Decen	ber 31, 2019
Operating leases:		
Operating lease right-of-use assets	\$	1,218
Accrued liabilities and other	\$	228
Other long-term liabilities		956
Total operating lease liabilities	\$	1,184
Finance leases:		
Solar energy systems, net	\$	30
Property, plant and equipment, net		1,600
Total finance lease assets	\$	1,630
Current portion of long-term debt and finance leases	\$	386
Long-term debt and finance leases, net of current portion		1,232
Total finance lease liabilities	\$	1,618

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

		Year Ended
	De	ecember 31, 2019
Operating lease expense:		
Operating lease expense (1)	\$	426
Finance lease expense:		
Amortization of leased assets	\$	299
Interest on lease liabilities		104
Total finance lease expense	\$	403
Total lease expense	\$	829

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

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

	December 31, 2019
Weighted-average remaining lease term:	
Operating leases	6.2 years
Finance leases	3.9 years
Weighted-average discount rate:	
Operating leases	6.5%
Finance leases	6.5%

Because most of our leases do not provide an implicit rate of return, we used our incremental borrowing rate based on the information available at lease commencement date in determining the present value of lease payments.

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

	Year Ended		
	Decem	per 31, 2019	
Cash paid for amounts included in the measurement of lease liabilities:			
Operating cash outflows from operating leases	\$	396	
Operating cash outflows from finance leases (interest payments)	\$	104	
Financing cash outflows from finance leases	\$	321	
Leased assets obtained in exchange for finance lease liabilities	\$	616	
Leased assets obtained in exchange for operating lease liabilities	\$	202	

As of December 31, 2019, the maturities of our operating and finance lease liabilities (excluding short-term leases) are as follows (in millions):

	Operating Leases	Finance Leases
2020	\$ 296	\$ 474
2021	262	478
2022	210	600
2023	174	224
2024	146	5
Thereafter	372	13
Total minimum lease payments	1,460	1,794
Less: Interest	276	176
Present value of lease obligations	1,184	1,618
Less: Current portion		386
Long-term portion of lease obligations	\$ 956	\$ 1,232

Under legacy lease accounting (ASC 840), future minimum lease payments under non-cancellable leases as of December 31, 2018 are as follows (in millions):

	Operating Leases	 Finance Leases
2019	\$ 276	\$ 417
2020	257	503
2021	230	506
2022	183	24
2023	158	5
Thereafter	524	6
Total minimum lease payments	\$ 1,628	1,461
Less: Interest		 122
Present value of lease obligations		1,339
Less: Current portion		 346
Long-term portion of lease obligations		\$ 993

Non-cancellable Operating Lease Receivables

Under the new lease standard, we are the lessor of certain vehicle arrangements as described in Note 2, *Summary of Significant Accounting Policies*. Following the adoption of the new lease standard, solar energy system leases and PPAs that commenced after January 1, 2019, where we are the lessor and were previously accounted for as leases, no longer meet the definition of a lease and are therefore not included in the table as of December 31, 2019 (refer to Note 2, *Summary of Significant Accounting Policies*). As of December 31, 2019, maturities of our operating lease receivables from customers for each of the next five years and thereafter were as follows (in millions):

2020	\$ 644
2021	494
2022	317
2023	190
2024	191
Thereafter	2,294
Total	\$ 4,130

Under legacy lease accounting (ASC 840), future minimum lease payments to be received from customers under non-cancellable leases as of December 31, 2018 are as follows (in millions):

2019	\$ 502
2020	418
2021	271
2022	187
2023	189
Thereafter	2,469
Total	\$ 4,036

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

Note 14 – Equity Incentive Plans

In June 2019, we adopted the 2019 Equity Incentive Plan (the "2019 Plan"), and simultaneously terminated the 2010 Equity Incentive Plan (the "2010 Plan"). No new awards have been granted under the 2010 Plan following the adoption of the 2019 Plan, but such termination did not affect outstanding awards under the 2010 Plan. The 2019 Plan has similar terms as the 2010 Plan and provides for the granting of stock options, restricted stock, RSUs, stock appreciation rights, performance units and performance shares to our employees, directors and consultants. Stock options granted under the 2019 Plan may be either incentive stock options or nonstatutory stock options. Incentive stock options may only be granted to our employees. Nonstatutory stock options may be granted to our employees, directors and consultants. Generally, our stock options and RSUs vest over four years and our stock options are exercisable over a maximum period of 10 years from their grant dates. Vesting typically terminates when the employment or consulting relationship ends.

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

The following table summarizes our stock option and RSU activity:

		Stock O	ptions		RSU	s
			Weighted-			Weighted-
		Weighted-	0	Aggregate		Average
	Number of Options	Average Exercise	Remaining Contractual	Intrinsic Value	Number of RSUs	Grant Date Fair
	(in thousands)	Price			(in thousands)	Value
Balance,						
December 31, 2018	31,208	\$ 273.40			4,659	\$ 294.63
Granted	1,473	\$ 265.26			3,752	\$ 282.74
Exercised or released	(1,441)	\$ 106.68			(1,949)	\$ 277.13
Cancelled	(1,245)	\$ 310.57			(1,656)	\$ 295.05
Balance,						
December 31, 2019	29,995	\$ 279.49	6.89	\$ 4.17	4,806	\$ 291.06
Vested and expected to vest,						
December 31, 2019	15,860	\$ 228.29	6.05	\$ 3.02	4,804	\$ 291.05
Exercisable and vested,						
December 31, 2019	7,025	\$ 94.07	3.39	\$ 2.28		

The weighted-average grant date fair value of RSUs in the years ended December 31, 2019, 2018, and 2017 was \$282.74, \$316.46 and \$308.71, respectively. The aggregate release date fair value of RSUs in the years ended December 31, 2019, 2018 and 2017 was \$502 million, \$546 million and \$491 million, respectively.

The aggregate intrinsic value of options exercised in the years ended December 31, 2019, 2018, and 2017 was \$237 million, \$293 million and \$544 million, respectively.

Fair Value Assumptions

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

	Year Ended December 31,					! ,	
		2019		2018		2017	
Risk-free interest rate:							
Stock options		2.4%	o	2.5%	6	1.8%	
ESPP		2.2%	o	2.0%	6	1.1%	
Expected term (in years):							
Stock options		4.5		4.7		5.1	
ESPP		0.5		0.5		0.5	
Expected volatility:							
Stock options		48%	0	42%		42%	
ESPP		53%	ó	43%		35%	
Dividend yield:							
Stock options		0.0%	ó	0.0%		0.0%	
ESPP		0.0%		0.0%		0.0%	
Grant date fair value per share:							
Stock options	\$	111.59	\$	121.92	\$	122.25	
ESPP	\$	78.25	\$	84.37	\$	75.05	

The fair value of RSUs with service or service and performance conditions is measured on the grant date based on the closing fair market value of our common stock. The risk-free interest rate is based on the U.S. Treasury yield for zero-coupon U.S. Treasury notes with maturities approximating each grant's expected life. Prior to the fourth quarter of 2017, given our then limited history with employee grants, we used the "simplified" method in estimating the expected term of our employee grants; the simplified method utilizes the average of the time-to-vesting and the contractual life of the employee grant. Beginning with the fourth quarter of 2017, we use our historical data in estimating the expected term of our employee grants. The expected volatility is based on the average of the implied volatility of publicly traded options for our common stock and the historical volatility of our common stock.

2018 CEO Performance Award

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

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

As of December 31, 2019, two operational milestones have been achieved: (i) \$20.0 billion total annualized revenue and (ii) \$1.5 billion annualized adjusted EBITDA, each subject to the formal certification by our Board of Directors, while no market capitalization milestones have been achieved. Consequently, no shares subject to the 2018 CEO Performance Award have vested as of the date of this filing.

As of December 31, 2019, the following operational milestones were considered probable of achievement:

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

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

The market capitalization milestone period and the valuation of each tranche are determined using a Monte Carlo simulation and is used as the basis for determining the expected achievement period. The probability of meeting an operational milestone is based on a subjective assessment of our future financial projections. No tranches of the 2018 CEO Performance Award will vest unless a market capitalization and a matching operational milestone are both achieved. The first tranche of the 2018 CEO Performance Award will not vest unless our market capitalization were to approximately double from the initial level at the time the award was approved, based on both a six calendar month trailing average and a 30 calendar day trailing average (counting only trading days). Upon vesting of a tranche, all unamortized expense for the tranche will be recognized immediately. Additionally, stock-based compensation represents a non-cash expense and is recorded as a selling, general, and administrative operating expense in our consolidated statement of operations.

As of December 31, 2019, we had \$527 million of total unrecognized stock-based compensation expense for the operational milestones that were considered probable of achievement, which will be recognized over a weighted-average period of 2.72 years. As of December 31, 2019, we had unrecognized stock-based compensation expense of \$1.29 billion for the operational milestones that were considered not probable of achievement. For the year ended December 31, 2019, we recorded stock-based compensation expense of \$296 million related to the 2018 CEO Performance Award. From March 21, 2018, when the grant was approved by our stockholders, through December 31, 2018, we recorded stock-based compensation expense of \$175 million related to this award. The increase in stock-based compensation expense was primarily related to a \$72 million cumulative catch-up expense for the service provided from the grant date when an additional operational milestone was considered probable of being met in the fourth quarter of 2019 and a shorter expense period in the prior year.

2014 Performance-Based Stock Option Awards

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

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

As of December 31, 2019, the following performance milestones had been achieved:

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

We begin recognizing stock-based compensation expense as each performance milestone becomes probable of achievement. As of December 31, 2019, we had unrecognized stock-based compensation expense of \$5 million for the performance milestone that was considered not probable of achievement. For the years ended December 31, 2019 and 2018, we did not record any additional stock-based compensation related to these awards. For the year ended December 2017, we recorded stock-based compensation expense of \$7 million related to these awards.

2012 CEO Performance Award

In August 2012, our Board of Directors granted 5,274,901 stock option awards to our CEO (the "2012 CEO Performance Award"). The 2012 CEO Performance Award consists of 10 vesting tranches with a vesting schedule based entirely on the attainment of both performance conditions and market conditions, assuming continued employment and service through each vesting date. Each vesting tranche requires a combination of a pre-determined performance milestone and an incremental increase in our market capitalization of \$4.00 billion, as compared to our initial market capitalization of \$3.20 billion at the time of grant. As of December 31, 2019, the market capitalization conditions for all of the vesting tranches and the following performance milestones had been achieved:

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

We begin recognizing stock-based compensation expense as each milestone becomes probable of achievement. As of December 31, 2019, we had unrecognized stock-based compensation expense of \$6 million for the performance milestone that was considered not probable of achievement. For the year ended December 31, 2019, we recorded no stock-based compensation expense related to the 2012 CEO Performance Award. For the year ended December 31, 2018, the stock-based compensation we recorded related to this award was immaterial. For the year ended December 31, 2017, we recorded stock-based compensation expense of \$5 million related to this award.

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

Summary Stock-Based Compensation Information

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

	Year Ended December 31,					1,
		2019		2018		2017
Cost of revenues	\$	128	\$	109	\$	64
Research and development		285		261		218
Selling, general and administrative		482		375		185
Restructuring and other		3		4		
Total	\$	898	\$	749	\$	467

We realized no income tax benefit from stock option exercises in each of the periods presented due to cumulative losses and valuation allowances. As of December 31, 2019, we had \$1.57 billion of total unrecognized stock-based compensation expense related to non-performance awards, which will be recognized over a weighted-average period of 2.91 years.

ESPP

Our employees are eligible to purchase our common stock through payroll deductions of up to 15% of their eligible compensation, subject to any plan limitations. The purchase price would be 85% of the lower of the fair market value on the first and last trading days of each six-month offering period. During the years ended December 31, 2019, 2018 and 2017, we issued 0.5 million, 0.4 million and 0.4 million shares under the ESPP with an associated expense of \$40 million, \$109 million and \$71 million, respectively. There were 7 million shares available for issuance under the ESPP as of December 31, 2019.

Note 15 – Income Taxes

A provision for income taxes of \$110 million, \$58 million and \$32 million has been recognized for the years ended December 31, 2019, 2018 and 2017, respectively, related primarily to our subsidiaries located outside of the U.S. Our loss before provision for income taxes for the years ended December 31, 2019, 2018 and 2017 was as follows (in millions):

	Year Ended December 31,					1,
		2019 2018			2017	
Domestic	\$	287	\$	412	\$	993
Noncontrolling interest and redeemable						
noncontrolling interest		(87)		87		279
Foreign		465		506		937
Loss before income taxes	\$	665	\$	1,005	\$	2,209

The components of the provision for income taxes for the years ended December 31, 2019, 2018 and 2017 consisted of the following (in millions):

	Year Ended December 31,				
	2019	2018	2017		
Current:					
Federal	\$ —	\$ (1)	\$ (10)		
State	5	3	2		
Foreign	86	24	43		
Total current	91	26	35		
Deferred:					
Federal	(4)				
State			_		
Foreign	23	32	(3)		
Total deferred	19	32	(3)		
Total provision for income taxes	\$ 110	\$ 58	\$ 32		

On December 22, 2017, the 2017 Tax Cuts and Jobs Act ("Tax Act") was enacted into law making significant changes to the Internal Revenue Code. Changes include, but are not limited to, a federal corporate tax rate decrease from 35% to 21% for tax years beginning after December 31, 2017, the transition of U.S. international taxation from a worldwide tax system to a territorial system and a one-time transition tax on the mandatory deemed repatriation of foreign earnings. We were required to recognize the effect of the tax law changes in the period of enactment, such as re-measuring our U.S. deferred tax assets and liabilities as well as reassessing the net realizability of our deferred tax assets and liabilities. The Tax Act did not give rise to any material impact on the consolidated balance sheets and consolidated statements of operations due to our historical worldwide loss position and the full valuation allowance on our net U.S. deferred tax assets.

Deferred tax assets (liabilities) as of December 31, 2019 and 2018 consisted of the following (in millions):

	December 31, 2019	December 31, 2018
Deferred tax assets:		
Net operating loss carry-forwards	\$ 1,846	\$ 1,760
Research and development credits	486	377
Other tax credits	126	128
Deferred revenue	301	156
Inventory and warranty reserves	243	165
Stock-based compensation	102	102
Operating lease right-of-use liabilities	290	
Accruals and others	16	28
Total deferred tax assets	3,410	2,716
Valuation allowance	(1,956)	(1,806)
Deferred tax assets, net of valuation allowance	1,454	910
Deferred tax liabilities:		
Depreciation and amortization	(1,185)	(861)
Investment in certain financing funds	(17)	(33)
Operating lease right-of-use assets	(263)	
Other	(24)	(24)
Total deferred tax liabilities	(1,489)	(918)
Deferred tax liabilities, net of valuation allowance		
and deferred tax assets	\$ (35)	<u>\$ (8)</u>

As of December 31, 2019, we recorded a valuation allowance of \$1.96 billion for the portion of the deferred tax asset that we do not expect to be realized. The valuation allowance on our net deferred taxes increased by \$150 million, decreased by \$38 million, and increased by \$821 million during the years ended December 31, 2019, 2018 and 2017, respectively. The changes in valuation allowance are primarily due to additional U.S. deferred tax assets and liabilities incurred in the respective year. We have net \$151 million of deferred tax assets in foreign jurisdictions, which management believes are more-likely-than-not to be fully realized given the expectation of future earnings in these jurisdictions. We continue to monitor the realizability of the U.S. deferred tax assets taking into account multiple factors, including the results of operations and magnitude of excess tax deductions for stock-based compensation. We intend to continue maintaining a full valuation allowance on our U.S. deferred tax assets until there is sufficient evidence to support the reversal of all or some portion of these allowances. Release of all, or a portion, of the valuation allowance would result in the recognition of certain deferred tax assets and a decrease to income tax expense for the period the release is recorded.

The reconciliation of taxes at the federal statutory rate to our provision for income taxes for the years ended December 31, 2019, 2018 and 2017 was as follows (in millions):

	Year Ended December 31,						
	2019	2018	2017				
Tax at statutory federal rate	\$ (139)	\$ (211)	\$ (773)				
State tax, net of federal benefit	5	3	2				
Nondeductible expenses	94	65	30				
Excess tax benefits related to stock based							
compensation (1)	(7)	(44)	(1,013)				
Foreign income rate differential	189	161	365				
U.S. tax credits	(107)	(80)	(110)				
Noncontrolling interests and redeemable							
noncontrolling interests adjustment	(29)	32	66				
Effect of U.S. tax law change			723				
Bargain in purchase gain		_	20				
Convertible debt	(4)	_	_				
Unrecognized tax benefits	17	1	3				
Change in valuation allowance	91	131	719				
Provision for income taxes	\$ 110	\$ 58	\$ 32				

(1) As of January 1, 2017, upon the adoption of ASU No. 2016-09, Improvements to Employee Share-based Payment Accounting, excess tax benefits from share-based award activity incurred from the prior and current years are reflected as a reduction of the provision for income taxes. The excess tax benefits result in an increase to our gross U.S. deferred tax assets that is offset by a corresponding increase to our valuation allowance.

As of December 31, 2019, we had \$7.51 billion of federal and \$6.16 billion of state net operating loss carry-forwards available to offset future taxable income, which will not begin to significantly expire until 2024 for federal and 2028 for state purposes. A portion of these losses were generated by SolarCity prior to our acquisition in 2016 and, therefore, are subject to change of control provisions, which limit the amount of acquired tax attributes that can be utilized in a given tax year. We do not expect these change of control limitations to significantly impact our ability to utilize these attributes.

As of December 31, 2019, we had research and development tax credits of \$320 million and \$284 million for federal and state income tax purposes, respectively. If not utilized, the federal research and development tax credits will expire in various amounts beginning in 2024. However, the state research and development tax credits can be carried forward indefinitely. In addition, we have other general business tax credits of \$125 million for federal income tax purposes, which will not begin to significantly expire until 2033.

No deferred tax liabilities for foreign withholding taxes have been recorded relating to the earnings of our foreign subsidiaries since all such earnings are intended to be indefinitely reinvested. The amount of the unrecognized deferred tax liability associated with these earnings is immaterial.

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

Uncertain Tax Positions

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

Decreases in balances related to prior year tax positions	December 31, 2016	\$ 204
positions		(31)
Changes in balances related to effect of U.S. tax law change		0.4
change (58) December 31, 2017 199 Decreases in balances related to prior year tax positions 60 Increases in balances related to current year tax positions 50 December 31, 2018 253 Decreases in balances related to prior year tax positions (39) Increases in balances related to current year tax positions (39) Increases in balances related to current year tax positions (39)	positions	84
December 31, 2017	Changes in balances related to effect of U.S. tax law	
Decreases in balances related to prior year tax positions	change	(58)
Decreases in balances related to prior year tax positions	December 31, 2017	199
Increases in balances related to current year tax positions		
positions	positions	(6)
December 31, 2018	Increases in balances related to current year tax	
Decreases in balances related to prior year tax positions	positions	 60
positions	December 31, 2018	253
Increases in balances related to current year tax positions	Decreases in balances related to prior year tax	
positions	positions	(39)
	Increases in balances related to current year tax	
	positions	59
· · · · · · · · · · · · · · · · · · ·	December 31, 2019	\$ 273

As of December 31, 2019, accrued interest and penalties related to unrecognized tax benefits are classified as income tax expense and were immaterial. Unrecognized tax benefits of \$247 million, if recognized, would not affect our effective tax rate since the tax benefits would increase a deferred tax asset that is currently fully offset by a full valuation allowance.

We file income tax returns in the U.S., California and various state and foreign jurisdictions. We are currently under examination by the IRS for the years 2015 and 2016. Additional tax years within the period 2004 to 2018 remain subject to examination for federal income tax purposes, and tax years 2004 to 2018 remain subject to examination for California income tax purposes. All net operating losses and tax credits generated to date are subject to adjustment for U.S. federal and California income tax purposes. Tax years 2008 to 2018 remain subject to examination in other U.S. state and foreign jurisdictions.

The potential outcome of the current examination could result in a change to unrecognized tax benefits within the next twelve months. However, we cannot reasonably estimate possible adjustments at this time.

The U.S. Tax Court issued a decision in *Altera Corp v. Commissioner* related to the treatment of stock-based compensation expense in a cost-sharing arrangement. On June 7, 2019, the Court reversed the Tax Court decision and upheld the validity of Treas. Reg. Section 1.482-7A(d)(2), requiring stock-based compensation costs be included in the costs shared under a cost sharing agreement. Given that the current active decision can still be appealed because Altera has the option to petition up to the Supreme Court, Tesla's position is to continue to include stock-based compensation in cost sharing allocation agreement. If and when the current tax court's decision is overturned, we will treat the amount previously shared as a pre-payment to future cost sharing agreement costs. Because we have a full valuation allowance in the U.S., any potential tax benefits would increase our U.S. deferred tax asset and would not have a material impact to our financials.

Note 16 - Commitments and Contingencies

Operating Lease Arrangement in Buffalo, New York

We have an operating lease through the Research Foundation for the State University of New York (the "SUNY Foundation") for a manufacturing facility constructed on behalf of the SUNY Foundation and which was substantially completed in April 2018. We use this facility, referred to as Gigafactory New York, primarily for the development and production of our Solar Roof and other solar products and components, energy storage components, and Supercharger components, and for other lessor-approved functions. Under the lease and a related research and development agreement, on behalf of the SUNY Foundation, we have and will continue to install certain utilities and other improvements and acquire certain equipment designated by us to be used in the manufacturing facility. The SUNY Foundation covered (i) construction costs related to the manufacturing facility up to \$350 million, (ii) the acquisition and commissioning of the manufacturing equipment in an amount up to \$275 million and (iii) \$125 million for additional specified scope costs, in cases (i) and (ii) only, subject to the maximum funding allocation from the State of New York; and we were responsible for any construction or equipment costs in excess of such amounts. The SUNY Foundation owns the manufacturing facility and the manufacturing equipment purchased by the SUNY Foundation. Following completion of the manufacturing facility, we have commenced leasing of the manufacturing facility and the manufacturing equipment owned by the SUNY Foundation for an initial period of 10 years, with an option to renew, for \$2.00 per year plus utilities. Following the adoption of ASC 842, we no longer recognize the build-to-suit asset and related depreciation expense or the corresponding financing liability and related amortization for Gigafactory New York in our consolidated financial statements.

Under the terms of the operating lease arrangement, we are required to achieve specific operational milestones during the initial lease term; which include employing a certain number of employees at the manufacturing facility, within western New York and within the State of New York within specified periods following the completion of the manufacturing facility. We are also required to spend or incur \$5.00 billion in combined capital, operational expenses and other costs in the State of New York within 10 years following the achievement of full production. On an annual basis during the initial lease term, as measured on each anniversary of the commissioning of the manufacturing facility, if we fail to meet these specified investment and job creation requirements, then we would be obligated to pay a \$41 million "program payment" to the SUNY Foundation for each year that we fail to meet these requirements. Furthermore, if the arrangement is terminated due to a material breach by us, then additional amounts might become payable by us. As of December 31, 2019, we have met the targets as of the applicable measurement dates and anticipate meeting the remaining obligations through our operations at this facility and other operations within the State of New York.

Operating Lease Arrangement in Shanghai, China

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

Legal Proceedings

Securities Litigation Relating to the SolarCity Acquisition

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

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

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

Securities Litigation Relating to Production of Model 3 Vehicles

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

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

Litigation Relating to 2018 CEO Performance Award

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

Securities Litigation Relating to Potential Going Private Transaction

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

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

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

Settlement with SEC related to Potential Going Private Transaction

On October 16, 2018, the U.S. District Court for the Southern District of New York entered a final judgment approving the terms of a settlement filed with the Court on September 29, 2018, in connection with the actions taken by the U.S. Securities and Exchange Commission (the "SEC") relating to Elon Musk's prior statement that he was considering taking Tesla private. Without admitting or denying any of the SEC's allegations, and with no restriction on Mr. Musk's ability to serve as an officer or director on the Board (other than as its Chair), among other things, we and Mr. Musk paid civil penalties of \$20 million each and agreed that an independent director will serve as Chair of the Board for at least three years, and we appointed such an independent Chair of the Board and two additional independent directors to the Board, and further enhanced our disclosure controls and other corporate governance-related matters. On April 26, 2019, the settlement was amended to modify certain of the previously-agreed disclosure procedures to clarify the application of such procedures, which was subsequently approved by the Court. All other terms of the prior settlement were reaffirmed without modification.

Certain Investigations and Other Matters

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

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

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

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

Indemnification and Guaranteed Returns

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

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

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

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

Letters of Credit

As of December 31, 2019, we had \$282 million of unused letters of credit outstanding.

Note 17 – Variable Interest Entity Arrangements

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

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

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

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

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

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

	December 31, 2019	December 31, 2018
Assets		
Current assets		
Cash and cash equivalents	\$ 106	\$ 75
Restricted cash	90	131
Accounts receivable, net	27	19
Prepaid expenses and other current assets	10	10
Total current assets	233	235
Operating lease vehicles, net	1,183	155
Solar energy systems, net	5,030	5,117
Restricted cash, net of current portion	69	65
Other assets	87	56
Total assets	\$ 6,602	\$ 5,628
Liabilities		
Current liabilities		
Accrued liabilities and other	80	133
Deferred revenue	78	21
Customer deposits	9	
Current portion of long-term debt and finance leases	608	663
Total current liabilities	775	817
Deferred revenue, net of current portion	264	178
Long-term debt and finance leases, net of current portion	1,516	1,238
Other long-term liabilities	22	26
Total liabilities	\$ 2,577	\$ 2,259

Note 18 – Lease Pass-Through Financing Obligation

Through December 31, 2019, we had entered into eight transactions referred to as "lease pass-through fund arrangements". Under these arrangements, our wholly owned subsidiaries finance the cost of solar energy systems with investors through arrangements contractually structured as master leases for an initial term ranging between 10 and 25 years. These solar energy systems are subject to lease or PPAs with customers with an initial term not exceeding 25 years. These solar energy systems are included within solar energy systems, net on the consolidated balance sheets.

The cost of the solar energy systems under lease pass-through fund arrangements as of December 31, 2019 and 2018 was \$1.05 billion. The accumulated depreciation on these assets as of December 31, 2019 and 2018 was \$101 million and \$66 million, respectively. The total lease pass-through financing obligation as of December 31, 2019 was \$94 million, of which \$57 million is classified as a current liability. The total lease pass-through financing obligation as of December 31, 2018 was \$112 million, of which \$62 million was classified as a current liability. Lease pass-through financing obligation is included in accrued liabilities and other for the current portion and other long-term liabilities for the long-term portion on the consolidated balance sheets.

Under a lease pass-through fund arrangement, the investor makes a large upfront payment to the lessor, which is one of our subsidiaries, and in some cases, subsequent periodic payments. We allocate a portion of the aggregate investor payments to the fair value of the assigned ITCs, which is estimated by discounting the projected cash flow impact of the ITCs using a market interest rate and is accounted for separately (see Note 2, *Summary of Significant Accounting Policies*). We account for the remainder of the investor payments as a borrowing by recording the proceeds received as a lease pass-through financing obligation, which is repaid from the future customer lease payments and any incentive rebates. A portion of the amounts received by the investor is allocated to interest expense using the effective interest rate method.

The lease pass-through financing obligation is non-recourse once the associated solar energy systems have been placed in-service and the associated customer arrangements have been assigned to the investors. However, we are required to comply with certain financial covenants specified in the contractual agreements, which we had met as of December 31, 2019. In addition, we are responsible for any warranties, performance guarantees, accounting and performance reporting. Furthermore, we continue to account for the customer arrangements and any incentive rebates in the consolidated financial statements, regardless of whether the cash is received by us or directly by the investors.

As of December 31, 2019, the future minimum master lease payments to be received from investors, for each of the next five years and thereafter, were as follows (in millions):

2020	\$ 42
2021	41
2022	33
2023	26
2024	18
Thereafter	450
Total	\$ 610

For two of the lease pass-through fund arrangements, our subsidiaries have pledged its assets to the investors as security for its obligations under the contractual agreements.

Each lease pass-through fund arrangement has a one-time master lease prepayment adjustment mechanism that occurs when the capacity and the placed-in-service dates of the associated solar energy systems are finalized or on an agreed-upon date. As part of this mechanism, the master lease prepayment amount is updated, and we may be obligated to refund a portion of a master lease prepayment or entitled to receive an additional master lease prepayment. Any additional master lease prepayments are recorded as an additional lease pass-through financing obligation while any master lease prepayment refunds would reduce the lease pass-through financing obligation.

Note 19 – Defined Contribution Plan

We have a 401(k) savings plan that is intended to qualify as a deferred salary arrangement under Section 401(k) of the Internal Revenue Code. Under the 401(k) savings plan, participating employees may elect to contribute up to 100% of their eligible compensation, subject to certain limitations. Participants are fully vested in their contributions. We did not make any contributions to the 401(k) savings plan during the years ended December 31, 2019, 2018 and 2017 (other than employee deferrals of eligible compensation).

Note 20 - Related Party Transactions

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

	December 31,		December 31,	
	2019		2	018
Convertible senior notes due to related parties	\$	3	\$	3

Our convertible senior notes are not re-measured at fair value (refer to Note 5, *Fair Value of Financial Instruments*). As of December 31, 2019 and 2018, the unpaid principal balance of convertible senior notes due to related parties is \$3 million.

In March 2017, our CEO purchased from us 95,420 shares of our common stock in a public offering at the public offering price for an aggregate \$25 million.

In April 2017, our CEO exercised his right under the indenture to convert all of his Zero-Coupon Convertible Senior Notes due in 2020, which had an aggregate principal amount of \$10 million. As a result, on April 26, 2017, we issued 33,333 shares of our common stock to our CEO in accordance with the specified conversion rate, and we recorded an increase to additional paid-in capital of \$10 million.

In November 2018, our CEO purchased from us 56,915 shares of our common stock in a private placement at a per share price equal to the last closing price of our stock prior to the execution of the purchase agreement for an aggregate \$20 million.

In May 2019, our CEO purchased from us 102,880 shares of our common stock in a public offering at the public offering price for an aggregate \$25 million.

Note 21 - Segment Reporting and Information about Geographic Areas

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

	Year Ended December 31,					1,
	2019		2018			2017
Automotive segment						
Revenues	\$	23,047	\$	19,906	\$	10,643
Gross profit	\$	3,879	\$	3,852	\$	1,981
Energy generation and storage segment						
Revenues	\$	1,531	\$	1,555	\$	1,116
Gross profit	\$	190	\$	190	\$	242

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

	Year Ended December 31,								
		2019		2018	2017				
United States	\$	12,653	\$	14,872	\$	6,221			
China		2,979		1,757		2,027			
Netherlands		1,590		965		331			
Norway		1,201		813		823			
Other		6,155		3,054		2,357			
Total	\$	24,578	\$	21,461	\$	11,759			

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

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

	De	cember 31, 2019	December 31, 2018		
United States	\$	15,644	\$	16,741	
International		890		860	
Total	\$	16,534	\$	17,601	

Note 22 – Restructuring and Other

During the year ended December 31, 2019, we carried out certain restructuring actions in order to reduce costs and improve efficiency. As a result, we recognized \$50 million of costs primarily related to employee termination expenses and losses from closing certain stores impacting both segments. We recognized \$47 million in impairment related to the IPR&D intangible asset as we abandoned further development efforts (refer to Note 4, *Goodwill and Intangible Assets* for details) and \$15 million for the related equipment within the energy generation and storage segment. We also incurred a loss of \$37 million for closing operations in certain facilities. On the statement of cash flows, the amounts were presented in the captions in which such amounts would have been recorded absent the impairment charges. The employee termination expenses were substantially paid by December 31, 2019, while the remaining amounts were non-cash.

During the year ended December 31, 2018, we carried-out certain restructuring actions in order to reduce costs and improve efficiency and recognized \$37 million of employee termination expenses and estimated losses from subleasing a certain facility. The employee termination cash expenses of \$27 million were substantially paid by the end of 2018, while the remaining amounts were non-cash. Also included within restructuring and other activities was \$55 million of expenses (materially all of which were non-cash) from restructuring the energy generation and storage segment, which comprised of disposals of certain tangible assets, the shortening of the useful life of a trade name intangible asset and a contract termination penalty. In addition, we concluded that a small portion of the IPR&D asset is not commercially feasible. Consequently, we recognized an impairment loss of \$13 million. We recognized settlement and legal expenses of \$30 million in the year ended December 31, 2018 for the settlement with the SEC relating to a take-private proposal for Tesla. These expenses were substantially paid by the end of 2018.

Note 23 – Quarterly Results of Operations (Unaudited)

The following table presents selected quarterly results of operations data for the years ended December 31, 2019 and 2018 (in millions, except per share amounts):

	Three Months Ended							
	M	arch 31		June 30	September 30		De	cember 31
2019								
Total revenues	\$	4,541	\$	6,350	\$	6,303	\$	7,384
Gross profit	\$	566	\$	921	\$	1,191	\$	1,391
Net (loss) income attributable to common								
stockholders	\$	(702)	\$	(408)	\$	143	\$	105
Net (loss) income per share of common stock								
attributable to common stockholders, basic	\$	(4.10)	\$	(2.31)	\$	0.80	\$	0.58
Net (loss) income per share of common stock								
attributable to common stockholders, diluted	\$	(4.10)	\$	(2.31)	\$	0.78	\$	0.56
2018								
Total revenues	\$	3,409	\$	4,002	\$	6,824	\$	7,226
Gross profit	\$	456	\$	619	\$	1,524	\$	1,443
Net (loss) income attributable to common								
stockholders	\$	(709)	\$	(718)	\$	311	\$	140
Net (loss) income per share of common stock								
attributable to common stockholders, basic	\$	(4.19)	\$	(4.22)	\$	1.82	\$	0.81
Net (loss) income per share of common stock								
attributable to common stockholders, diluted	\$	(4.19)	\$	(4.22)	\$	1.75	\$	0.78

ITEM 9. CHANGES IN AND DISAGREEMENTS WITH ACCOUNTANTS ON ACCOUNTING AND FINANCIAL DISCLOSURE

None.

ITEM 9A. CONTROLS AND PROCEDURES

Evaluation of Disclosure Controls and Procedures

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

Based on this evaluation, our Chief Executive Officer and our Chief Financial Officer concluded that, as of December 31, 2019, our disclosure controls and procedures were designed at a reasonable assurance level and were effective to provide reasonable assurance that the information we are required to disclose in reports that we file or submit under the Exchange Act is recorded, processed, summarized and reported within the time periods specified in the Securities and Exchange Commission rules and forms, and that such information is accumulated and communicated to our management, including our Chief Executive Officer and our Chief Financial Officer, as appropriate, to allow timely decisions regarding required disclosures.

Management's Report on Internal Control over Financial Reporting

Our management is responsible for establishing and maintaining adequate internal control over financial reporting. Internal control over financial reporting is a process designed by, or under the supervision of, our Chief Executive Officer and Chief Financial Officer to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles and includes those policies and procedures that (1) pertain to the maintenance of records that in reasonable detail accurately and fairly reflect the transactions and dispositions of our assets; (2) provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with generally accepted accounting principles, and that our receipts and expenditures are being made only in accordance with authorizations of our management and directors and (3) provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use or disposition of our assets that could have a material effect on the financial statements.

Under the supervision and with the participation of our management, including our Chief Executive Officer and Chief Financial Officer, we conducted an evaluation of the effectiveness of our internal control over financial reporting based on criteria established in *Internal Control – Integrated Framework (2013)* issued by the Committee of Sponsoring Organizations of the Treadway Commission ("COSO"). Our management concluded that our internal control over financial reporting was effective as of December 31, 2019.

Our independent registered public accounting firm, PricewaterhouseCoopers LLP, has audited the effectiveness of our internal control over financial reporting as of December 31, 2019, as stated in their report which is included herein.

Limitations on the Effectiveness of Controls

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

Changes in Internal Control over Financial Reporting

There was no change in our internal control over financial reporting that occurred during the fourth fiscal quarter of the year ended December 31, 2019, which has materially affected, or is reasonably likely to materially affect, our internal control over financial reporting.

ITEM 9B. OTHER INFORMATION

None.

PART III

ITEM 10. DIRECTORS, EXECUTIVE OFFICERS AND CORPORATE GOVERNANCE

The information required by this Item 10 of Form 10-K will be included in our 2020 Proxy Statement to be filed with the Securities and Exchange Commission in connection with the solicitation of proxies for our 2020 Annual Meeting of Stockholders and is incorporated herein by reference. The 2020 Proxy Statement will be filed with the Securities and Exchange Commission within 120 days after the end of the fiscal year to which this report relates.

ITEM 11. EXECUTIVE COMPENSATION

The information required by this Item 11 of Form 10-K will be included in our 2020 Proxy Statement and is incorporated herein by reference.

ITEM 12. SECURITY OWNERSHIP OF CERTAIN BENEFICIAL OWNERS AND MANAGEMENT AND RELATED STOCKHOLDER MATTERS

The information required by this Item 12 of Form 10-K will be included in our 2020 Proxy Statement and is incorporated herein by reference.

ITEM 13. CERTAIN RELATIONSHIPS AND RELATED TRANSACTIONS AND DIRECTOR INDEPENDENCE

The information required by this Item 13 of Form 10-K will be included in our 2020 Proxy Statement and is incorporated herein by reference.

ITEM 14. PRINCIPAL ACCOUNTANT FEES AND SERVICES

The information required by this Item 14 of Form 10-K will be included in our 2020 Proxy Statement and is incorporated herein by reference.

ITEM 15. EXHIBITS AND FINANCIAL STATEMENT SCHEDULES

- 1. Financial statements (see *Index to Consolidated Financial Statements* in Part II, Item 8 of this report)
- 2. All financial statement schedules have been omitted since the required information was not applicable or was not present in amounts sufficient to require submission of the schedules, or because the information required is included in the consolidated financial statements or the accompanying notes
- 3. The exhibits listed in the following *Index to Exhibits* are filed or incorporated by reference as part of this report

INDEX TO EXHIBITS

Exhibit	Fulthia Description		Incorporated by Reference File No. Exhibit Filing Date			
Number	Exhibit Description	Form		<u>Exhibit</u>	Filing Date	Herewith
3.1	Amended and Restated Certificate of Incorporation of the Registrant.	10-K	001-34756	3.1	March 1, 2017	
3.2	Certificate of Amendment to the Amended and Restated Certificate of Incorporation of the Registrant.	10-K	001-34756	3.2	March 1, 2017	
3.3	Amended and Restated Bylaws of the Registrant.	8-K	001-34756	3.2	February 1, 2017	
4.1	Specimen common stock certificate of the Registrant.	10-K	001-34756	4.1	March 1, 2017	
4.2	Fifth Amended and Restated Investors' Rights Agreement, dated as of August 31, 2009, between Registrant and certain holders of the Registrant's capital stock named therein.	S-1	333-164593	4.2	January 29, 2010	
4.3	Amendment to Fifth Amended and Restated Investors' Rights Agreement, dated as of May 20, 2010, between Registrant and certain holders of the Registrant's capital stock named therein.	S-1/A	333-164593	4.2A	May 27, 2010	
4.4	Amendment to Fifth Amended and Restated Investors' Rights Agreement between Registrant, Toyota Motor Corporation and certain holders of the Registrant's capital stock named therein.	S-1/A	333-164593	4.2B	May 27, 2010	
4.5	Amendment to Fifth Amended and Restated Investor's Rights Agreement, dated as of June 14, 2010, between Registrant and certain holders of the Registrant's capital stock named therein.	S-1/A	333-164593	4.2C	June 15, 2010	
4.6	Amendment to Fifth Amended and Restated Investor's Rights Agreement, dated as of November 2, 2010, between Registrant and certain holders of the Registrant's capital stock named therein.	8-K	001-34756	4.1	November 4, 2010	
4.7	Waiver to Fifth Amended and Restated Investor's Rights Agreement, dated as of May 22, 2011, between Registrant and certain holders of the Registrant's capital stock named therein.	S-1/A	333-174466	4.2E	June 2, 2011	
4.8	Amendment to Fifth Amended and Restated Investor's Rights Agreement, dated as of May 30, 2011, between Registrant and certain holders of the Registrant's capital stock named therein.	8-K	001-34756	4.1	June 1, 2011	

Exhibit			Incorporated	l by Referenc	ee	Filed
Number	Exhibit Description	Form	File No.	Exhibit	Filing Date	Herewith
4.9	Sixth Amendment to Fifth Amended and Restated Investors' Rights Agreement, dated as of May 15, 2013 among the Registrant, the Elon Musk Revocable Trust dated July 22, 2003 and certain other holders of the capital stock of the Registrant named therein.	8-K	001-34756	4.1	May 20, 2013	
4.10	Waiver to Fifth Amended and Restated Investor's Rights Agreement, dated as of May 14, 2013, between the Registrant and certain holders of the capital stock of the Registrant named therein.	8-K	001-34756	4.2	May 20, 2013	
4.11	Waiver to Fifth Amended and Restated Investor's Rights Agreement, dated as of August 13, 2015, between the Registrant and certain holders of the capital stock of the Registrant named therein.	8-K	001-34756	4.1	August 19, 2015	
4.12	Waiver to Fifth Amended and Restated Investors' Rights Agreement, dated as of May 18, 2016, between the Registrant and certain holders of the capital stock of the Registrant named therein.	8-K	001-34756	4.1	May 24, 2016	
4.13	Waiver to Fifth Amended and Restated Investors' Rights Agreement, dated as of March 15, 2017, between the Registrant and certain holders of the capital stock of the Registrant named therein.	8-K	001-34756	4.1	March 17, 2017	
4.14	Waiver to Fifth Amended and Restated Investors' Rights Agreement, dated as of May 1, 2019, between the Registrant and certain holders of the capital stock of the Registrant named therein.	8-K	001-34756	4.1	May 3, 2019	
4.15	Indenture, dated as of May 22, 2013, by and between the Registrant and U.S. Bank National Association.	8-K	001-34756	4.1	May 22, 2013	
4.16	Third Supplemental Indenture, dated as of March 5, 2014, by and between the Registrant and U.S. Bank National Association.	8-K	001-34756	4.4	March 5, 2014	
4.17	Form of 1.25% Convertible Senior Note Due March 1, 2021 (included in Exhibit 4.19).	8-K	001-34756	4.4	March 5, 2014	
4.18	Fourth Supplemental Indenture, dated as of March 22, 2017, by and between the Registrant and U.S. Bank National Association.	8-K	001-34756	4.2	March 22, 2017	
4.19	Form of 2.375% Convertible Senior Note Due March 15, 2022 (included in Exhibit 4.21).	8-K	001-34756	4.2	March 22, 2017	

Exhibit				d by Referenc		Filed
Number 4.20	Exhibit Description Indenture, dated as of August 18, 2017, by and among the Registrant, SolarCity, and U.S. Bank National Association, as	Form 8-K	File No. 001-34756	Exhibit 4.1	August 23, 2017	Herewith
4.21	trustee. Form of 5.30% Senior Note due August 15, 2025.	8-K	001-34756	4.2	August 23, 2017	
4.22	Indenture, dated as of September 30, 2014, between SolarCity and Wells Fargo Bank, National Association	8-K(1)	001-35758	4.1	October 6, 2014	
4.23	First Supplemental Indenture, dated as of November 21, 2016, between SolarCity and Wells Fargo Bank, National Association, as trustee to the Indenture, dated as of September 30, 2014, between SolarCity and Wells Fargo Bank, National Association, as trustee.	8-K	001-34756	4.2	November 21, 2016	
4.24	Indenture, dated as of December 7, 2015, between SolarCity and Wells Fargo Bank, National Association	8-K(1)	001-35758	4.1	December 7, 2015	
4.25	First Supplemental Indenture, dated as of November 21, 2016, between SolarCity and Wells Fargo Bank, National Association, as trustee to the Indenture, dated as of December 7, 2015, between SolarCity and Wells Fargo Bank, National Association, as trustee.	8-K	001-34756	4.3	November 21, 2016	
4.26	Indenture, dated as of October 15, 2014, between SolarCity and U.S. Bank National Association, as trustee.	S-3ASR(1)	333-199321	4.1	October 15, 2014	
4.27	Fifth Supplemental Indenture, dated as of May 7, 2019, by and between Registrant and U.S. Bank National Association, related to 2.00% Convertible Senior Notes due May 15, 2024.	8-K	001-34756	4.2	May 8, 2019	
4.28	Form of 2.00% Convertible Senior Notes due May 15, 2024 (included in Exhibit 4.27).	8-K	001-34756	4.3	May 8, 2019	
4.29	Fourth Supplemental Indenture, dated as of October 15, 2014, by and between SolarCity and the Trustee, related to SolarCity's 4.00% Solar Bonds, Series 2014/4-7.	8-K(1)	001-35758	4.5	October 15, 2014	
4.30	Eighth Supplemental Indenture, dated as of January 29, 2015, by and between SolarCity and the Trustee, related to SolarCity's 4.00% Solar Bonds, Series 2015/4-7.	8-K(1)	001-35758	4.5	January 29, 2015	

Exhibit			Incorporate	d by Referen	ce	Filed
Number	Exhibit Description	Form	File No.	Exhibit	Filing Date	Herewith
4.31	Ninth Supplemental Indenture, dated as of March 9, 2015, by and between SolarCity and the Trustee, related to SolarCity's 4.00% Solar Bonds, Series 2015/5-5.	8-K(1)	001-35758	4.2	March 9, 2015	
4.32	Tenth Supplemental Indenture, dated as of March 9, 2015, by and between SolarCity and the Trustee, related to SolarCity's 5.00% Solar Bonds, Series 2015/6-10.	8-K(1)	001-35758	4.3	March 9, 2015	
4.33	Eleventh Supplemental Indenture, dated as of March 9, 2015, by and between SolarCity and the Trustee, related to SolarCity's 5.75% Solar Bonds, Series 2015/7-15.	8-K(1)	001-35758	4.4	March 9, 2015	
4.34	Fourteenth Supplemental Indenture, dated as of March 19, 2015, by and between SolarCity and the Trustee, related to SolarCity's 3.60% Solar Bonds, Series 2015/C3-5.	8-K(1)	001-35758	4.4	March 19, 2015	
4.35	Fifteenth Supplemental Indenture, dated as of March 19, 2015, by and between SolarCity and the Trustee, related to SolarCity's 4.70% Solar Bonds, Series 2015/C4-10.	8-K(1)	001-35758	4.5	March 19, 2015	
4.36	Sixteenth Supplemental Indenture, dated as of March 19, 2015, by and between SolarCity and the Trustee, related to SolarCity's 5.45% Solar Bonds, Series 2015/C5-15.	8-K(1)	001-35758	4.6	March 19, 2015	
4.37	Nineteenth Supplemental Indenture, dated as of March 26, 2015, by and between SolarCity and the Trustee, related to SolarCity's 3.60% Solar Bonds, Series 2015/C8-5.	8-K(1)	001-35758	4.4	March 26, 2015	
4.38	Twentieth Supplemental Indenture, dated as of March 26, 2015, by and between SolarCity and the Trustee, related to SolarCity's 4.70% Solar Bonds, Series 2015/C9-10.	8-K(1)	001-35758	4.5	March 26, 2015	
4.39	Twenty-First Supplemental Indenture, dated as of March 26, 2015, by and between SolarCity and the Trustee, related to SolarCity's 5.45% Solar Bonds, Series 2015/C10-15.	8-K(1)	001-35758	4.6	March 26, 2015	
4.40	Twenty-Fifth Supplemental Indenture, dated as of April 2, 2015, by and between SolarCity and the Trustee, related to SolarCity's 3.60% Solar Bonds, Series 2015/C13-5.	8-K(1)	001-35758	4.4	April 2, 2015	

Exhibit	Incorporated by Reference				ence	Filed
Number	Exhibit Description	Form	File No.	Exhibit		Herewith
4.41	Twenty-Sixth Supplemental Indenture, dated as of April 2, 2015, by and between SolarCity and the Trustee, related to SolarCity's 4.70% Solar Bonds, Series 2015/C14-10.	8-K(1)	001-35758	4.5	April 2, 2015	
4.42	Twenty-Ninth Supplemental Indenture, dated as of April 9, 2015, by and between SolarCity and the Trustee, related to SolarCity's 3.60% Solar Bonds, Series 2015/C18-5.	8-K(1)	001-35758	4.4	April 9, 2015	
4.43	Thirtieth Supplemental Indenture, dated as of April 9, 2015, by and between SolarCity and the Trustee, related to SolarCity's 4.70% Solar Bonds, Series 2015/C19-10.	8-K(1)	001-35758	4.5	April 9, 2015	
4.44	Thirty-First Supplemental Indenture, dated as of April 9, 2015, by and between SolarCity and the Trustee, related to SolarCity's 5.45% Solar Bonds, Series 2015/C20-15.	8-K(1)	001-35758	4.6	April 9, 2015	
4.45	Thirty-Fourth Supplemental Indenture, dated as of April 14, 2015, by and between SolarCity and the Trustee, related to SolarCity's 3.60% Solar Bonds, Series 2015/C23-5.	8-K(1)	001-35758	4.4	April 14, 2015	
4.46	Thirty-Fifth Supplemental Indenture, dated as of April 14, 2015, by and between SolarCity and the Trustee, related to SolarCity's 4.70% Solar Bonds, Series 2015/C24-10.	8-K(1)	001-35758	4.5	April 14, 2015	
4.47	Thirty-Sixth Supplemental Indenture, dated as of April 14, 2015, by and between SolarCity and the Trustee, related to SolarCity's 5.45% Solar Bonds, Series 2015/C25-15.	8-K(1)	001-35758	4.6	April 14, 2015	
4.48	Thirty-Eighth Supplemental Indenture, dated as of April 21, 2015, by and between SolarCity and the Trustee, related to SolarCity's 4.70% Solar Bonds, Series 2015/C27-10.	8-K(1)	001-35758	4.3	April 21, 2015	
4.49	Thirty-Ninth Supplemental Indenture, dated as of April 21, 2015, by and between SolarCity and the Trustee, related to SolarCity's 5.45% Solar Bonds, Series 2015/C28-15.	8-K(1)	001-35758	4.4	April 21, 2015	
4.50	Forty-Second Supplemental Indenture, dated as of April 27, 2015, by and between SolarCity and the Trustee, related to SolarCity's 3.60% Solar Bonds, Series 2015/C31-5.	8-K(1)	001-35758	4.4	April 27, 2015	

Exhibit				ed by Referen		Filed
Number	Exhibit Description	Form	File No.	Exhibit	Filing Date	Herewith
4.51	Forty-Third Supplemental Indenture, dated as of April 27, 2015, by and between SolarCity and the Trustee, related to SolarCity's 4.70% Solar Bonds, Series 2015/C32-10.	8-K(1)	001-35758	4.5	April 27, 2015	
4.52	Forty-Fourth Supplemental Indenture, dated as of April 27, 2015, by and between SolarCity and the Trustee, related to SolarCity's 5.45% Solar Bonds, Series 2015/C33-15.	8-K(1)	001-35758	4.6	April 27, 2015	
4.53	Forty-Seventh Supplemental Indenture, dated as of May 1, 2015, by and between SolarCity and the Trustee, related to SolarCity's 4.00% Solar Bonds, Series 2015/11-5.	8-K(1)	001-35758	4.4	May 1, 2015	
4.54	Forty-Eighth Supplemental Indenture, dated as of May 1, 2015, by and between SolarCity and the Trustee, related to SolarCity's 5.00% Solar Bonds, Series 2015/12-10.	8-K(1)	001-35758	4.5	May 1, 2015	
4.55	Forty-Ninth Supplemental Indenture, dated as of May 1, 2015, by and between SolarCity and the Trustee, related to SolarCity's 5.75% Solar Bonds, Series 2015/13-15.	8-K(1)	001-35758	4.6	May 1, 2015	
4.56	Fifty-First Supplemental Indenture, dated as of May 11, 2015, by and between SolarCity and the Trustee, related to SolarCity's 3.60% Solar Bonds, Series 2015/C35-5.	8-K(1)	001-35758	4.3	May 11, 2015	
4.57	Fifty-Second Supplemental Indenture, dated as of May 11, 2015, by and between SolarCity and the Trustee, related to SolarCity's 4.70% Solar Bonds, Series 2015/C36-10.	8-K(1)	001-35758	4.4	May 11, 2015	
4.58	Fifty-Third Supplemental Indenture, dated as of May 11, 2015, by and between SolarCity and the Trustee, related to SolarCity's 5.45% Solar Bonds, Series 2015/C37-15.	8-K(1)	001-35758	4.5	May 11, 2015	
4.59	Fifty-Sixth Supplemental Indenture, dated as of May 18, 2015, by and between SolarCity and the Trustee, related to SolarCity's 3.60% Solar Bonds, Series 2015/C39-5.	8-K(1)	001-35758	4.3	May 18, 2015	
4.60	Fifty-Seventh Supplemental Indenture, dated as of May 18, 2015, by and between SolarCity and the Trustee, related to SolarCity's 4.70% Solar Bonds, Series 2015/C40-10.	8-K(1)	001-35758	4.4	May 18, 2015	

Exhibit			Incorporat	ed by Referer	ıce
Number	Exhibit Description	Form	File No.	Exhibit 4.5	Filing Date
4.61	Fifty-Eighth Supplemental Indenture, dated as of May 18, 2015, by and between SolarCity and the Trustee, related to SolarCity's 5.45% Solar Bonds, Series 2015/C41-15.	8-K(1)	001-35758	4.3	May 18, 2015
4.62	Sixtieth Supplemental Indenture, dated as of May 26, 2015, by and between SolarCity and the Trustee, related to SolarCity's 3.60% Solar Bonds, Series 2015/C43-5.	8-K(1)	001-35758	4.3	May 26, 2015
4.63	Sixty-First Supplemental Indenture, dated as of May 26, 2015, by and between SolarCity and the Trustee, related to SolarCity's 4.70% Solar Bonds, Series 2015/C44-10.	8-K(1)	001-35758	4.4	May 26, 2015
4.64	Sixty-Second Supplemental Indenture, dated as of May 26, 2015, by and between SolarCity and the Trustee, related to SolarCity's 5.45% Solar Bonds, Series 2015/C45-15.	8-K(1)	001-35758	4.5	May 26, 2015
4.65	Sixty-Fifth Supplemental Indenture, dated as of June 8, 2015, by and between SolarCity and the Trustee, related to SolarCity's 3.60% Solar Bonds, Series 2015/C47-5.	8-K(1)	001-35758	4.3	June 10, 2015
4.66	Sixty-Seventh Supplemental Indenture, dated as of June 8, 2015, by and between SolarCity and the Trustee, related to SolarCity's 5.45% Solar Bonds, Series 2015/C49-15.	8-K(1)	001-35758	4.5	June 10, 2015
4.67	Seventieth Supplemental Indenture, dated as of June 16, 2015, by and between SolarCity and the Trustee, related to SolarCity's 4.70% Solar Bonds, Series 2015/C52-10.	8-K(1)	001-35758	4.4	June 16, 2015
4.68	Seventy-First Supplemental Indenture, dated as of June 16, 2015, by and between SolarCity and the Trustee, related to SolarCity's 5.45% Solar Bonds, Series 2015/C53-15.	8-K(1)	001-35758	4.5	June 16, 2015
4.69	Seventy-Fourth Supplemental Indenture, dated as of June 22, 2015, by and between SolarCity and the Trustee, related to SolarCity's 4.70% Solar Bonds, Series 2015/C56-10.	8-K(1)	001-35758	4.4	June 23, 2015
4.70	Seventy-Fifth Supplemental Indenture, dated as of June 22, 2015, by and between SolarCity and the Trustee, related to SolarCity's 5.45% Solar Bonds, Series 2015/C57-15.	8-K(1)	001-35758	4.5	June 23, 2015

Exhibit			Incorporat	ed by Referer	ıce
Number 4.71	Seventy-Ninth Supplemental Indenture, dated as of June 29, 2015, by and between SolarCity and the Trustee,	8-K(1)	File No. 001-35758	Exhibit 4.4	Filing Date June 29, 2015
4.72	related to SolarCity's 3.60% Solar Bonds, Series 2015/C60-5. Eightieth Supplemental Indenture, dated as of June 29, 2015, by and between SolarCity and the Trustee, related to SolarCity's 4.70% Solar Bonds, Series	8-K(1)	001-35758	4.5	June 29, 2015
4.73	2015/C61-10. Eighty-First Supplemental Indenture, dated as of June 29, 2015, by and between SolarCity and the Trustee, related to SolarCity's 5.45% Solar Bonds, Series 2015/C62-15.	8-K(1)	001-35758	4.6	June 29, 2015
4.74	Eighty-Fourth Supplemental Indenture, dated as of July 14, 2015, by and between SolarCity and the Trustee, related to SolarCity's 3.60% Solar Bonds, Series 2015/C65-5.	8-K(1)	001-35758	4.4	July 14, 2015
4.75	Eighty-Sixth Supplemental Indenture, dated as of July 14, 2015, by and between SolarCity and the Trustee, related to SolarCity's 5.45% Solar Bonds, Series 2015/C67-15.	8-K(1)	001-35758	4.6	July 14, 2015
4.76	Eighty-Ninth Supplemental Indenture, dated as of July 20, 2015, by and between SolarCity and the Trustee, related to SolarCity's 3.60% Solar Bonds, Series 2015/C70-5.	8-K(1)	001-35758	4.4	July 21, 2015
4.77	Ninetieth Supplemental Indenture, dated as of July 20, 2015, by and between SolarCity and the Trustee, related to SolarCity's 4.70% Solar Bonds, Series 2015/C71-10.	8-K(1)	001-35758	4.5	July 21, 2015
4.78	Ninety-First Supplemental Indenture, dated as of July 20, 2015, by and between SolarCity and the Trustee, related to SolarCity's 5.45% Solar Bonds, Series 2015/C72-15.	8-K(1)	001-35758	4.6	July 21, 2015
4.79	Ninety-Fourth Supplemental Indenture, dated as of July 31, 2015, by and between SolarCity and the Trustee, related to SolarCity's 4.00% Solar Bonds, Series 2015/19-5.	8-K(1)	001-35758	4.4	July 31, 2015
4.80	Ninety-Fifth Supplemental Indenture, dated as of July 31, 2015, by and between SolarCity and the Trustee, related to SolarCity's 5.00% Solar Bonds, Series 2015/20-10.	8-K(1)	001-35758	4.5	July 31, 2015

Exhibit			Incorporat	ed by Referen		Filed
<u>Number</u> 4.81	Ninety-Sixth Supplemental Indenture, dated as of July 31, 2015, by and between SolarCity and the Trustee, related to SolarCity's 5.75% Solar Bonds, Series 2015/21-15.	- Form 8-K(1)	File No. 001-35758	Exhibit4.6	Filing Date July 31, 2015	Herewith
4.82	Ninety-Ninth Supplemental Indenture, dated as of August 3, 2015, by and between SolarCity and the Trustee, related to SolarCity's 3.60% Solar Bonds, Series 2015/C75-5.	8-K(1)	001-35758	4.4	August 3, 2015	
4.83	One Hundred-and-Fifth Supplemental Indenture, dated as of August 10, 2015, by and between SolarCity and the Trustee, related to SolarCity's 4.70% Solar Bonds, Series 2015/C81-10.	8-K(1)	001-35758	4.5	August 10, 2015	
4.84	One Hundred-and-Ninth Supplemental Indenture, dated as of August 17, 2015, by and between SolarCity and the Trustee, related to SolarCity's 3.60% Solar Bonds, Series 2015/C85-5.	8-K(1)	001-35758	4.4	August 17, 2015	
4.85	One Hundred-and-Eleventh Supplemental Indenture, dated as of August 17, 2015, by and between SolarCity and the Trustee, related to SolarCity's 5.45% Solar Bonds, Series 2015/C87-15.	8-K(1)	001-35758	4.6	August 17, 2015	
4.86	One Hundred-and-Fourteenth Supplemental Indenture, dated as of August 24, 2015, by and between SolarCity and the Trustee, related to SolarCity's 3.60% Solar Bonds, Series 2015/C90-5.	8-K(1)	001-35758	4.4	August 24, 2015	
4.87	One Hundred-and-Sixteenth Supplemental Indenture, dated as of August 24, 2015, by and between SolarCity and the Trustee, related to SolarCity's 5.45% Solar Bonds, Series 2015/C92-15.	8-K(1)	001-35758	4.6	August 24, 2015	
4.88	One Hundred-and-Nineteenth Supplemental Indenture, dated as of August 31, 2015, by and between SolarCity and the Trustee, related to SolarCity's 3.60% Solar Bonds, Series 2015/C95-5.	8-K(1)	001-35758	4.4	August 31, 2015	
4.89	One Hundred-and-Twenty-First Supplemental Indenture, dated as of August 31, 2015, by and between SolarCity and the Trustee, related to SolarCity's 5.45% Solar Bonds, Series 2015/C97-15.	8-K(1)	001-35758	4.6	August 31, 2015	

Exhibit				ed by Referen		Filed
Number	Exhibit Description	Form Control	File No.	<u>Exhibit</u>	Filing Date	Herewith
4.90	One Hundred-and-Twenty-Seventh Supplemental Indenture, dated as of September 14, 2015, by and between SolarCity and the Trustee, related to SolarCity's 3.60% Solar Bonds, Series 2015/C100-5.	8-K(1)	001-35758	4.4	September 15, 2015	
4.91	One Hundred-and-Twenty-Eighth Supplemental Indenture, dated as of September 14, 2015, by and between SolarCity and the Trustee, related to SolarCity's 4.70% Solar Bonds, Series 2015/C101-10.	8-K(1)	001-35758	4.5	September 15, 2015	
4.92	One Hundred-and-Twenty-Ninth Supplemental Indenture, dated as of September 14, 2015, by and between SolarCity and the Trustee, related to SolarCity's 5.45% Solar Bonds, Series 2015/C102-15.	8-K(1)	001-35758	4.6	September 15, 2015	
4.93	One Hundred-and-Thirty-Second Supplemental Indenture, dated as of September 28, 2015, by and between SolarCity and the Trustee, related to SolarCity's 3.60% Solar Bonds, Series 2015/C105-5.	8-K(1)	001-35758	4.4	September 29, 2015	
4.94	One Hundred-and-Thirty-Third Supplemental Indenture, dated as of September 28, 2015, by and between SolarCity and the Trustee, related to SolarCity's 4.70% Solar Bonds, Series 2015/C106-10.	8-K(1)	001-35758	4.5	September 29, 2015	
4.95	One Hundred-and-Thirty-Fourth Supplemental Indenture, dated as of September 28, 2015, by and between SolarCity and the Trustee, related to SolarCity's 5.45% Solar Bonds, Series 2015/C107-15.	8-K(1)	001-35758	4.6	September 29, 2015	
4.96	One Hundred-and-Thirty-Seventh Supplemental Indenture, dated as of October 13, 2015, by and between SolarCity and the Trustee, related to SolarCity's 3.60% Solar Bonds, Series 2015/C110-5.	8-K(1)	001-35758	4.4	October 13, 2015	
4.97	One Hundred-and-Thirty-Eighth Supplemental Indenture, dated as of October 13, 2015, by and between SolarCity and the Trustee, related to SolarCity's 4.70% Solar Bonds, Series 2015/C111-10.	8-K(1)	001-35758	4.5	October 13, 2015	

Exhibit				ed by Referen		Filed
Number	Exhibit Description	Form	File No.	Exhibit	Filing Date	Herewith
4.98	One Hundred-and-Forty-Second Supplemental Indenture, dated as of October 30, 2015, by and between SolarCity and the Trustee, related to SolarCity's 4.00% Solar Bonds, Series 2015/24-5.	8-K(1)	001-35758	4.4	October 30, 2015	
4.99	One Hundred-and-Forty-Third Supplemental Indenture, dated as of October 30, 2015, by and between SolarCity and the Trustee, related to SolarCity's 5.00% Solar Bonds, Series 2015/25-10.	8-K(1)	001-35758	4.5	October 30, 2015	
4.100	One Hundred-and-Forty-Fourth Supplemental Indenture, dated as of October 30, 2015, by and between SolarCity and the Trustee, related to SolarCity's 5.75% Solar Bonds, Series 2015/26-15.	8-K(1)	001-35758	4.6	October 30, 2015	
4.101	One Hundred-and-Forty-Seventh Supplemental Indenture, dated as of November 4, 2015, by and between SolarCity and the Trustee, related to SolarCity's 3.60% Solar Bonds, Series 2015/C115-5.	8-K(1)	001-35758	4.4	November 4, 2015	
4.102	One Hundred-and-Forty-Eighth Supplemental Indenture, dated as of November 4, 2015, by and between SolarCity and the Trustee, related to SolarCity's 4.70% Solar Bonds, Series 2015/C116-10.	8-K(1)	001-35758	4.5	November 4, 2015	
4.103	One Hundred-and-Fifty-Third Supplemental Indenture, dated as of November 16, 2015, by and between SolarCity and the Trustee, related to SolarCity's 4.70% Solar Bonds, Series 2015/C121-10.	8-K(1)	001-35758	4.5	November 17, 2015	
4.104	One Hundred-and-Fifty-Fourth Supplemental Indenture, dated as of November 16, 2015, by and between SolarCity and the Trustee, related to SolarCity's 5.45% Solar Bonds, Series 2015/C122-15.	8-K(1)	001-35758	4.6	November 17, 2015	
4.105	One Hundred-and-Fifty-Eighth Supplemental Indenture, dated as of November 30, 2015, by and between SolarCity and the Trustee, related to SolarCity's 4.70% Solar Bonds, Series 2015/C126-10.	8-K(1)	001-35758	4.5	November 30, 2015	

Exhibit				ed by Referen		Filed
Number	Exhibit Description	Form	File No.	<u>Exhibit</u>	Filing Date	Herewith
4.106	One Hundred-and-Fifty-Ninth Supplemental Indenture, dated as of November 30, 2015, by and between SolarCity and the Trustee, related to SolarCity's 5.45% Solar Bonds, Series 2015/C127-15.	8-K(1)	001-35758	4.6	November 30, 2015	
4.107	One Hundred-and-Sixty-Second Supplemental Indenture, dated as of December 14, 2015, by and between SolarCity and the Trustee, related to SolarCity's 3.60% Solar Bonds, Series 2015/C130-5.	8-K(1)	001-35758	4.4	December 14, 2015	
4.058	One Hundred-and-Sixty-Third Supplemental Indenture, dated as of December 14, 2015, by and between SolarCity and the Trustee, related to SolarCity's 4.70% Solar Bonds, Series 2015/C131-10.	8-K(1)	001-35758	4.5	December 14, 2015	
4.109	One Hundred-and-Sixty-Fourth Supplemental Indenture, dated as of December 14, 2015, by and between SolarCity and the Trustee, related to SolarCity's 5.45% Solar Bonds, Series 2015/C132-15.	8-K(1)	001-35758	4.6	December 14, 2015	
4.110	One Hundred-and-Sixty-Seventh Supplemental Indenture, dated as of December 28, 2015, by and between SolarCity and the Trustee, related to SolarCity's 3.60% Solar Bonds, Series 2015/C135-5.	8-K(1)	001-35758	4.4	December 28, 2015	
4.111	One Hundred-and-Sixty-Eighth Supplemental Indenture, dated as of December 28, 2015, by and between SolarCity and the Trustee, related to SolarCity's 4.70% Solar Bonds, Series 2015/C136-10.	8-K(1)	001-35758	4.5	December 28, 2015	
4.112	One Hundred-and-Sixty-Ninth Supplemental Indenture, dated as of December 28, 2015, by and between SolarCity and the Trustee, related to SolarCity's 5.45% Solar Bonds, Series 2015/C137-15.	8-K(1)	001-35758	4.6	December 28, 2015	
4.113	One Hundred-and-Seventy-Second Supplemental Indenture, dated as of January 29, 2016, by and between SolarCity and the Trustee, related to SolarCity's 4.00% Solar Bonds, Series 2016/3-5.	8-K(1)	001-35758	4.4	January 29, 2016	

Exhibit				d by Referen		Filed
Number	Exhibit Description	Form	File No.	Exhibit	Filing Date	Herewith
4.114	One Hundred-and-Seventy-Third Supplemental Indenture, dated as of January 29, 2016, by and between SolarCity and the Trustee, related to SolarCity's 5.00% Solar Bonds, Series 2016/4-10.	8-K(1)	001-35758	4.5	January 29, 2016	
4.115	One Hundred-and-Seventy-Fourth Supplemental Indenture, dated as of January 29, 2016, by and between SolarCity and the Trustee, related to SolarCity's 5.75% Solar Bonds, Series 2016/5-15.	8-K(1)	001-35758	4.6	January 29, 2016	
4.116	One Hundred-and-Seventy-Seventh Supplemental Indenture, dated as of February 26, 2016, by and between SolarCity and the Trustee, related to SolarCity's 5.25% Solar Bonds, Series 2016/8-5.	8-K(1)	001-35758	4.4	February 26, 2016	
4.117	One Hundred-and-Seventy-Ninth Supplemental Indenture, dated as of March 21, 2016, by and between SolarCity and the Trustee, related to SolarCity's 5.25% Solar Bonds, Series 2016/10-5.	8-K(1)	001-35758	4.3	March 21, 2016	
4.118	One Hundred-and-Eighty-First Supplemental Indenture, dated as of June 10, 2016, by and between SolarCity and the Trustee, related to SolarCity's 5.25% Solar Bonds, Series 2016/12-5.	8-K(1)	001-35758	4.3	June 10, 2016	
4.119	Description of Registrant's Securities	_	_	_		X
10.1**	Form of Indemnification Agreement between the Registrant and its directors and officers.	S-1/A	333-164593	10.1	June 15, 2010	
10.2**	2003 Equity Incentive Plan.	S-1/A	333-164593	10.2	May 27, 2010	
10.3**	Form of Stock Option Agreement under 2003 Equity Incentive Plan.	S-1	333-164593	10.3	January 29, 2010	
10.4**	Amended and Restated 2010 Equity Incentive Plan.	10-K	001-34756	10.4	February 23, 2018	
10.5**	Form of Stock Option Agreement under 2010 Equity Incentive Plan.	10-K	001-34756	10.6	March 1, 2017	
10.6**	Form of Restricted Stock Unit Award Agreement under 2010 Equity Incentive Plan.	10-K	001-34756	10.7	March 1, 2017	
10.7**	Amended and Restated 2010 Employee Stock Purchase Plan, effective as of February 1, 2017.	10-K	001-34756	10.8	March 1, 2017	
10.8**	2019 Equity Incentive Plan.	S-8	333-232079	4.2	June 12, 2019	

Exhibit			Incorporate	d by Referenc	ce	Filed
Number	Exhibit Description	Form	File No.	Exhibit	Filing Date	Herewith
10.9**	Form of Stock Option Agreement under 2019 Equity Incentive Plan.	S-8	333-232079	4.3	June 12, 2019	
10.10**	Form of Restricted Stock Unit Award Agreement under 2019 Equity Incentive Plan.	S-8	333-232079	4.4	June 12, 2019	
10.11**	Employee Stock Purchase Plan, effective as of June 12, 2019.	S-8	333-232079	4.5	June 12, 2019	
10.12**	2007 SolarCity Stock Plan and form of agreements used thereunder.	S-1(1)	333-184317	10.2	October 5, 2012	
10.13**	2012 SolarCity Equity Incentive Plan and form of agreements used thereunder.	S-1(1)	333-184317	10.3	October 5, 2012	
10.14**	2010 Zep Solar, Inc. Equity Incentive Plan and form of agreements used thereunder.	S-8(1)	333-192996	4.5	December 20, 2013	
10.15**	Offer Letter between the Registrant and Elon Musk dated October 13, 2008.	S-1	333-164593	10.9	January 29, 2010	
10.16**	Performance Stock Option Agreement between the Registrant and Elon Musk dated January 21, 2018.	DEF 14A	001-34756	Appendix A	February 8, 2018	
10.17	Indemnification Agreement, dated as of February 27, 2014, by and between the Registrant and J.P. Morgan Securities LLC.	8-K	001-34756	10.1	March 5, 2014	
10.18	Form of Call Option Confirmation relating to 0.25% Convertible Senior Notes Due March 1, 2019.	8-K	001-34756	10.2	March 5, 2014	
10.19	Form of Call Option Confirmation relating to 1.25% Convertible Senior Notes Due March 1, 2021.	8-K	001-34756	10.3	March 5, 2014	
10.20	Form of Warrant Confirmation relating to 0.25% Convertible Senior Notes Due March 1, 2019.	8-K	001-34756	10.4	March 5, 2014	
10.21	Form of Warrant Confirmation relating to 1.25% Convertible Senior Notes Due March 1, 2021.	8-K	001-34756	10.5	March 5, 2014	
10.22	Form of Call Option Confirmation relating to 2.375% Convertible Notes due March 15, 2022.	8-K	001-34756	10.1	March 22, 2017	
10.23	Form of Warrant Confirmation relating to 2.375% Convertible Notes due March 15, 2022.	8-K	001-34756	10.2	March 22, 2017	
10.24	Form of Call Option Confirmation relating to 2.00% Convertible Senior Notes due May 15, 2024.	8-K	001-34756	10.1	May 3, 2019	

Exhibit			Incorporated	l by Referenc		Filed
Number	Exhibit Description	<u>Form</u>	File No.	Exhibit	Filing Date	Herewith
10.25	Form of Warrant Confirmation relating to 2.00% Convertible Senior Notes due May 15, 2024.	8-K	001-34756	10.2	May 3, 2019	
10.26†	Supply Agreement between Panasonic Corporation and the Registrant dated October 5, 2011.	10-K	-001-34756	10.50	February 27, 2012	
10.27†	Amendment No. 1 to Supply Agreement between Panasonic Corporation and the Registrant dated October 29, 2013.	10-K	001-34756	10.35A	February 26, 2014	
10.28	Agreement between Panasonic Corporation and the Registrant dated July 31, 2014.	10-Q	001-34756	10.1	November 7, 2014	
10.29†	General Terms and Conditions between Panasonic Corporation and the Registrant dated October 1, 2014.	8-K	001-34756	10.2	October 11, 2016	
10.30	Letter Agreement, dated as of February 24, 2015, regarding addition of co-party to General Terms and Conditions, Production Pricing Agreement and Investment Letter Agreement between Panasonic Corporation and the Registrant.	10-K	001-34756	10.25A	February 24, 2016	
10.31†	Amendment to Gigafactory General Terms, dated March 1, 2016, by and among the Registrant, Panasonic Corporation and Panasonic Energy Corporation of North America.	8-K	001-34756	10.1	October 11, 2016	
10.32†	Production Pricing Agreement between Panasonic Corporation and the Registrant dated October 1, 2014.	10-Q	001-34756	10.3	November 7, 2014	
10.33†	Investment Letter Agreement between Panasonic Corporation and the Registrant dated October 1, 2014.	10-Q	001-34756	10.4	November 7, 2014	
10.34	Amendment to Gigafactory Documents, dated April 5, 2016, by and among the Registrant, Panasonic Corporation, Panasonic Corporation of North America and Panasonic Energy Corporation of North America.	10-Q	001-34756	10.2	May 10, 2016	
10.35††	2019 Pricing Agreement (2170 Cells) with respect to 2014 Gigafactory Agreements, executed September 20, 2019, by and among the Registrant, Tesla Motors Netherlands B.V., Panasonic Corporation and Panasonic Corporation of North America, on behalf of its division Panasonic Energy Corporation of North America.	10-Q	001-34756	10.5	October 29, 2019	

Exhibit	7.1845			ed by Referen	
Number	Exhibit Description	Form	File No.	Exhibit 10.6	Filing Date
10.36††	2019 Pricing Agreement (Japan Cells) with respect to 2011 Supply Agreement, executed September 20, 2019, by and among the Registrant, Tesla Motors Netherlands B.V., Panasonic Corporation and SANYO Electric Co., Ltd.	10-Q	001-34756	10.6	October 29, 2019
10.37††	Amended and Restated Factory Lease, executed as of March 26, 10'9, by and between Tesla, Inc. and Panasonic Energy North America, a division of Panasonic Corporation of North America, as tenant.	10-Q	001-34756	10.3	July 29, 2019
10.38††	Lease Amendment, executed September 20, 2019, by and among the Registrant, Panasonic Corporation of North America, on behalf of its division Panasonic Energy of North America, with respect to the Amended and Restated Factory Lease, executed as of March 26, 2019.	10-Q	001-34756	10.7	October 29, 2019
10.39	ABL Credit Agreement, dated as of June 10, 2015, by and among the Registrant, Tesla Motors Netherlands B.V., certain of the Registrant's and Tesla Motors Netherlands B.V.'s direct or indirect subsidiaries from time to time party thereto, as borrowers, Wells Fargo Bank, National Association, as documentation agent, JPMorgan Chase Bank, N.A., Goldman Sachs Bank USA, Morgan Stanley Senior Funding Inc. and Bank of America, N.A., as syndication agents, the lenders from time to time party thereto, and Deutsche Bank AG New York Branch, as administrative agent and collateral agent.	8-K	001-34756	10.1	June 12, 2015
10.40	First Amendment, dated as of November 3, 2015, to ABL Credit Agreement, dated as of June 10, 2015, by and among the Registrant, Tesla Motors Netherlands B.V., certain of the Registrant's and Tesla Motors Netherlands B.V.'s direct or indirect subsidiaries from time to time party thereto, as borrowers, and the documentation agent, syndication agents, administrative agent, collateral agent and lenders from time to time party thereto.	10-Q	001-34756	10.1	November 5, 2015

Exhibit	E 100 S			ed by Referen		Filed
Number	Exhibit Description	Form	File No.	Exhibit	Filing Date	Herewit
10.41	Second Amendment, dated as of December 31, 2015, to ABL Credit Agreement, dated as of June 10, 2015, by and among the Registrant, Tesla Motors Netherlands B.V., certain of the Registrant's and Tesla Motors Netherlands B.V.'s direct or indirect subsidiaries from time to time party thereto, as borrowers, and the documentation agent, syndication agents, administrative agent, collateral agent and lenders from time to time party thereto.	10-K	001-34756	10.28B	February 24, 2016	
10.42	Third Amendment, dated as of February 9, 2016, to ABL Credit Agreement, dated as of June 10, 2015, by and among the Registrant, Tesla Motors Netherlands B.V., certain of the Registrant's and Tesla Motors Netherlands B.V.'s direct or indirect subsidiaries from time to time party thereto, as borrowers, and the documentation agent, syndication agents, administrative agent, collateral agent and lenders from time to time party thereto.	10-K	001-34756	10.28C	February 24, 2016	
10.43	Fourth Amendment to Credit Agreement, dated as of July 31, 2016, by and among the Registrant, Tesla Motors Netherlands B.V., the lenders party thereto and Deutsche Bank AG New York Branch, as administrative agent and collateral agent.	8-K	001-34756	10.1	August 1, 2016	
10.44	Fifth Amendment to Credit Agreement, dated as of December 15, 2016, among the Registrant, Tesla Motors Netherlands B.V., the lenders party thereto and Deutsche Bank AG, New York Branch, as administrative agent and collateral agent.	8-K	001-34756	10.1	December 20, 2016	
10.45	Sixth Amendment to Credit Agreement, dated as of June 19, 2017, among the Registrant, Tesla Motors Netherlands B.V., the lenders party thereto and Deutsche Bank AG, New York Branch, as administrative agent and collateral agent.	10-Q	001-34756	10.1	August 4, 2017	
10.46	Seventh Amendment to the ABL Credit Agreement, dated as of August 11, 2017, by and among the Registrant, Tesla Motors Netherlands B.V., Deutsche Bank AG New York Branch, as administrative agent and collateral agent, and the other agents party thereto.	8-K	001-34756	10.2	August 23, 2017	

Exhibit			Incorporate	d by Reference	ee	Filed
Number	Exhibit Description	Form	File No.	Exhibit	Filing Date	Herewith
10.47	Eighth Amendment to the ABL Credit Agreement, dated as of March 12, 2018, by and among the Registrant, Tesla Motors Netherlands B.V., Deutsche Bank AG New York Branch, as administrative agent and collateral agent, and the other agents party thereto.	10-Q	001-34756	10.2	May 7, 2018	
10.48	Ninth Amendment to the ABL Credit Agreement, dated as of May 3, 2018, by and among the Registrant, Tesla Motors Netherlands B.V., Deutsche Bank AG New York Branch, as administrative agent and collateral agent, and the other agents party thereto.	10-Q	001-34756	10.3	May 7, 2018	
10.49	Tenth Amendment to the ABL Credit Agreement, dated as of December 10, 2018, by and among the Registrant, Tesla Motors Netherlands B.V., Deutsche Bank AG New York Branch, as administrative agent and collateral agent, and the other agents party thereto.	10-K	001-34756	10.41	February 19, 2019	
10.50	Amendment and Restatement in respect of ABL Credit Agreement, dated as of March 6, 2019, by and among certain of the Registrant's and Tesla Motors Netherlands B.V.'s direct or indirect subsidiaries from time to time party thereto, as borrowers, Wells Fargo Bank, National Association, as documentation agent, JPMorgan Chase Bank, N.A., Goldman Sachs Bank USA, Morgan Stanley Senior Funding Inc. and Bank of America, N.A., as syndication agents, the lenders from time to time party thereto, and Deutsche Bank AG New York Branch, as administrative agent and collateral agent.	S-4/A	333-229749	10.68	April 3, 2019	
10.51	Eleventh Amendment to Credit Agreement, dated as of February 1, 2019, in respect of the ABL Credit Agreement, dated as of June 10, 2015, among Tesla, Inc., Tesla Motors Netherlands B.V., the lenders from time to time party thereto, Deutsche Bank AG New York Branch, as administrative agent and collateral agent and as Collateral Agent, and the other agent parties thereto.	10-Q	001-34756	10.1	April 29, 2019	

Exhibit		Incorporated by Reference				Filed
Number	Exhibit Description	Form	File No.	Exhibit	Filing Date	Herewith
10.52†	Agreement for Tax Abatement and Incentives, dated as of May 7, 2015, by and between Tesla Motors, Inc. and the State of Nevada, acting by and through the Nevada Governor's Office of Economic Development.	10-Q	001-34756	10.1	August 7, 2015	
10.53†	Amended and Restated Loan and Security Agreement, dated as of August 17, 2017, by and among Tesla 2014 Warehouse SPV LLC, Tesla Finance LLC, the Lenders and Group Agents from time to time party thereto, and Deutsche Bank AG, New York Branch, as Administrative Agent.	10-Q	001-34756	10.3	November 3, 2017	
10.54†	Amendment No. 1 to Amended and Restated Loan and Security Agreement, dated as of October 18, 2017, by and among Tesla 2014 Warehouse SPV LLC, Tesla Finance LLC, the Lenders and Group Agents from time to time party thereto, Deutsche Bank AG, New York Branch, as Administrative Agent, and Deutsche Bank Trust Company Americas, as Paying Agent.	10-K	001-34756	10.44	February 23, 2018	
10.55	Amendment No. 2 to Amended and Restated Loan and Security Agreement, dated as of March 23, 2018, by and among Tesla 2014 Warehouse SPV LLC, Tesla Finance LLC, the Lenders and Group Agents from time to time party thereto, Deutsche Bank AG, New York Branch, as Administrative Agent, and Deutsche Bank Trust Company Americas, as Paying Agent.	10-Q	001-34756	10.4	May 7, 2018	
10.56	Amendment No. 3 to Amended and Restated Loan and Security Agreement, dated as of May 4, 2018, by and among Tesla 2014 Warehouse SPV LLC, Tesla Finance LLC, the Lenders and Group Agents from time to time party thereto, Deutsche Bank AG, New York Branch as Administrative Agent, and Deutsche Bank Trust Company Americas, as Paying Agent.	10-Q	001-34756	10.1	November 2, 2018	

Exhibit			Incorporate	ed by Referen	
umber	Exhibit Description	Form	File No.	Exhibit	Filing Date
0.57†	Amendment No. 4 to Amended and Restated Loan and Security Agreement, dated as of August 16, 2018, by and among Tesla 2014 Warehouse SPV LLC, Tesla Finance LLC, the Lenders and Group Agents from time to time party thereto, Deutsche Bank AG, New York Branch as Administrative Agent and Deutsche Bank Trust Company Americas, as Paying Agent.	10-Q	001-34756	10.3	November 2, 2018
0.58†	Amendment No. 5 to Amended and Restated Loan and Security Agreement, executed on December 28, 2018, by and among Tesla 2014 Warehouse SPV LLC, Tesla Finance LLC, the Lenders and Group Agents from time to time party thereto, Deutsche Bank AG, New York Branch as Administrative Agent and Deutsche Bank Trust Company Americas, as Paying Agent.	10-K	001-34756	10.48	February 19, 2019
0.59††	Amendment No. 6 to Amended and Restated Loan and Security Agreement, dated as of August 16, 2019, by and among Tesla 2014 Warehouse SPV LLC, Deutsche Bank Trust Company Americas, New York Branch, as Administrative Agent, and the Lenders and Group Agents from time to time party thereto.	10-Q	001-34756	10.1	October 29, 2019
10.60†	Loan and Security Agreement, dated as of August 17, 2017, by and among LML Warehouse SPV, LLC, Tesla Finance LLC, the Lenders and Group Agents from time to time party thereto, and Deutsche Bank AG, New York Branch, as Administrative Agent.	10-Q	001-34756	10.4	November 3, 2017
10.61†	Amendment No. 1 to Loan and Security Agreement, dated as of October 18, 2017, by and among LML Warehouse SPV, LLC, Tesla Finance LLC, the Lenders and Group Agents from time to time party thereto, Deutsche Bank AG, New York Branch, as Administrative Agent, and Deutsche Bank Trust Company Americas, as Paying Agent.	10-K	001-34756	10.46	February 23, 2018

Exhibit			Incorporate	ed by Referen	ce	Filed
Number	Exhibit Description	Form	File No.	Exhibit	Filing Date	Herewith
10.62	Amendment No. 2 to Loan and Security Agreement, dated as of March 23, 2018, by and among LML Warehouse SPV, LLC, Tesla Finance LLC, the Lenders and Group Agents from time to time party thereto, Deutsche Bank AG, New York Branch, as Administrative Agent, and Deutsche Bank Trust Company Americas, as Paying Agent.	10-Q	001-34756	10.5	May 7, 2018	
10.63	Amendment No. 3 to Loan and Security Agreement, dated as of May 4, 2018, by and among LML Warehouse SPV, LLC, the Lenders and Group Agents from time to time party thereto, and Deutsche Bank AG, New York Branch, as Administrative Agent.	10-Q	001-34756	10.2	November 2, 2018	
10.64†	Amendment No. 4 to Loan and Security Agreement, dated as of August 16, 2018, by and among LML Warehouse SPV, LLC, the Lenders and Group Agents from time to time party thereto, and Deutsche Bank AG, New York Branch, as Administrative Agent.	10-Q	001-34756	10.4	November 2, 2018	
10.65†	Payoff and Termination Letter, executed on December 28, 2018, by and among LML Warehouse SPV, LLC, the Lenders and Group Agents from time to time party thereto, and Deutsche Bank AG, New York Branch, as Administrative Agent, relating to Loan and Security Agreement.	10-K	001-34756	10.54	February 19, 2019	
10.66†	Loan and Security Agreement, executed on December 28, 2018, by and among LML 2018 Warehouse SPV, LLC, Tesla Finance LLC, the Lenders and Group Agents from time to time party thereto, Deutsche Bank Trust Company Americas, as Paying Agent, and Deutsche Bank AG, New York Branch, as Administrative Agent.	10-K	001-34756	10.55	February 19, 2019	

Exhibit			Incorporate	ed by Referen	ice	Filed
Number	Exhibit Description	Form	File No.	Exhibit	Filing Date	Herewit
10.67††	Letter of Consent, dated as of June 14, 2019, by and among LML 2018 Warehouse SPV, LLC, Deutsche Bank AG, New York Branch, as Administrative Agent, and the Group Agents party thereto, in respect of the Loan and Security Agreement, dated as of August 17, 2017 and as amended from time to time, by and among LML Warehouse SPV, LLC, Tesla Finance LLC, and the Lenders, Group Agents and Administrative Agent from time to time party thereto.	10-Q	001-34756	10.1	July 29, 2019	
10.68††	Amendment No. 1 to Loan and Security Agreement, dated as of August 16, 2019, by and among LML 2018 Warehouse SPV, LLC, Deutsche Bank Trust Company Americas, as Paying Agent, and Deutsche Bank AG, New York Branch, as Administrative Agent, and the Lenders and Group Agents from time to time party thereto.	10-Q	001-34756	10.2	October 29, 2019	
10.69	Amendment No. 2 to Loan and Security Agreement, dated as of December 13, 2019, by and among LML 2018 Warehouse SPV, LLC, Deutsche Bank Trust Company Americas, as Paying Agent, and Deutsche Bank AG, New York Branch, as Administrative Agent, and the Lenders and Group Agents from time to time party thereto.	_		_		X
10.70	Purchase Agreement, dated as of August 11, 2017, by and among the Registrant, SolarCity and Goldman Sachs & Co. LLC and Morgan Stanley & Co. LLC as representatives of the several initial purchasers named therein.	8-K	001-34756	10.1	August 23, 2017	
10.71	Amended and Restated Agreement For Research & Development Alliance on Triex Module Technology, effective as of September 2, 2014, by and between The Research Foundation For The State University of New York, on behalf of the College of Nanoscale Science and Engineering of the State University of New York, and Silevo, Inc.	10-Q(1)	001-35758	10.16	November 6, 2014	

Exhibit			Incorporate	ed by Referen	ce
lumber	Exhibit Description	Form	File No.	Exhibit	Filing Date
10.72	First Amendment to Amended and Restated Agreement For Research & Development Alliance on Triex Module Technology, effective as of October 31, 2014, by and between The Research Foundation For The State University of New York, on behalf of the College of Nanoscale Science and Engineering of the State University of New York, and Silevo, Inc.	10-K(1)	001-35758	10.16a	February 24, 2015
10.73	Second Amendment to Amended and Restated Agreement For Research & Development Alliance on Triex Module Technology, effective as of December 15, 2014, by and between The Research Foundation For The State University of New York, on behalf of the College of Nanoscale Science and Engineering of the State University of New York, and Silevo, Inc.	10-K(1)	001-35758	10.16b	February 24, 2015
10.74	Third Amendment to Amended and Restated Agreement For Research & Development Alliance on Triex Module Technology, effective as of February 12, 2015, by and between The Research Foundation For The State University of New York, on behalf of the College of Nanoscale Science and Engineering of the State University of New York, and Silevo, Inc.	10-Q(1)	001-35758	10.16c	May 6, 2015
10.75	Fourth Amendment to Amended and Restated Agreement For Research & Development Alliance on Triex Module Technology, effective as of March 30, 2015, by and between The Research Foundation For The State University of New York, on behalf of the College of Nanoscale Science and Engineering of the State University of New York, and Silevo, Inc.	10-Q(1)	001-35758	10.16d	May 6, 2015
10.76	Fifth Amendment to Amended and Restated Agreement For Research & Development Alliance on Triex Module Technology, effective as of June 30, 2015, by and between The Research Foundation For The State University of New York, on behalf of the College of Nanoscale Science and Engineering of the State University of New York, and Silevo, LLC.	10-Q(1)	001-35758	10.16e	July 30, 2015

Exhibit			Incorporate	ed by Referen	ce	_ Fi
Number	Exhibit Description	Form	File No.	Exhibit	Filing Date	Her
10.77	Sixth Amendment to Amended and Restated Agreement For Research & Development Alliance on Triex Module Technology, effective as of September 1, 2015, by and between The Research Foundation For The State University of New York, on behalf of the College of Nanoscale Science and Engineering of the State University of New York, and Silevo, LLC.	10-Q(1)	001-35758	10.16f	October 30, 2015	
10.78	Seventh Amendment to Amended and Restated Agreement For Research & Development Alliance on Triex Module Technology, effective as of October 9, 2015, by and between The Research Foundation For The State University of New York, on behalf of the College of Nanoscale Science and Engineering of the State University of New York, and Silevo, LLC.	10-Q(1)	001-35758	10.16g	October 30, 2015	
10.79	Eighth Amendment to Amended and Restated Agreement For Research & Development Alliance on Triex Module Technology, effective as of October 26, 2015, by and between The Research Foundation For The State University of New York, on behalf of the College of Nanoscale Science and Engineering of the State University of New York, and Silevo, LLC.	10-Q(1)	001-35758	10.16h	October 30, 2015	
10.80	Ninth Amendment to Amended and Restated Agreement For Research & Development Alliance on Triex Module Technology, effective as of December 9, 2015, by and between The Research Foundation For The State University of New York, on behalf of the College of Nanoscale Science and Engineering of the State University of New York, and Silevo, LLC.	10-K(1)	001-35758	10.16i	February 10, 2016	
10.81	Tenth Amendment to Amended and Restated Agreement For Research & Development Alliance on Triex Module Technology, effective as of March 31, 2017, by and between The Research Foundation For The State University of New York, on behalf of the Colleges of Nanoscale Science and Engineering of the State University of New York, and Silevo, LLC.	10-Q	001-34756	10.8	May 10, 2017	

Exhibit			Incorporated	d by Reference		Filed
Number	Exhibit Description	Form	File No.	Exhibit 10.2	Filing Date	Herewith
10.82††	Grant Contract for State-Owned Construction Land Use Right, dated as of October 17, 2018, by and between Shanghai Planning and Land Resource Administration Bureau, as grantor, and Tesla (Shanghai) Co., Ltd., as grantee (English translation).	10-Q	001-34756	10.2	July 29, 2019	
10.83††	Facility Agreement, dated as of September 26, 2019, by and between China Merchants Bank Co., Ltd. Beijing Branch and Tesla Automobile (Beijing) Co., Ltd. (English translation).	10-Q	001-34756	10.3	October 29, 2019	
10.84††	Statement Letter to China Merchants Bank Co., Ltd. Beijing Branch from Tesla Automobile (Beijing) Co., Ltd., dated as of September 26, 2019 (English translation).	10-Q	001-34756	10.4	October 29, 2019	
10.85††	Fixed Asset Syndication Loan Agreement, dated as of December 18, 2019, by and among Tesla (Shanghai) Co., Ltd., China Construction Bank Corporation, China (Shanghai) Pilot Free Trade Zone Special Area Branch, Agricultural Bank of China Shanghai Changning Sub-branch, Shanghai Pudong Development Bank Co., Ltd., Shanghai Branch, and Industrial and Commercial Bank of China Limited, China (Shanghai) Pilot Free Trade Zone Special Area Branch (English translation).					X
10.86††	Fixed Asset Syndication Loan Agreement and Supplemental Agreement, dated as of December 18, 2019, by and among Tesla (Shanghai) Co., Ltd., China Construction Bank Corporation, China (Shanghai) Pilot Free Trade Zone Special Area Branch, Agricultural Bank of China Shanghai Changning Sub-branch, Shanghai Pudong Development Bank Co., Ltd., Shanghai Branch, and Industrial and Commercial Bank of China Limited, China (Shanghai) Pilot Free Trade Zone Special Area Branch (English translation).					X

Exhibit		Incorporated by Reference			Filed	
Number	Exhibit Description	Form	File No.	Exhibit	Filing Date	Herewith
10.87††	Syndication Revolving Loan Agreement, dated as of December 18, 2019, by and among Tesla (Shanghai) Co., Ltd. China Construction Bank Corporation, China (Shanghai) Pilot Free Trade Zone Special Area Branch, Agricultural Bank of China Shanghai Changning Sub-branch, Shanghai Pudong Development Bank Co., Ltd., Shanghai Branch, and Industrial and Commercial Bank of China Limited, China (Shanghai) Pilot Free Trade Zone Special Area Branch (English translation).			_		X
21.1	List of Subsidiaries of the Registrant	_	_	_	_	X
23.1	Consent of PricewaterhouseCoopers LLP, Independent Registered Public Accounting Firm	_	_	_	_	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	_	_	_	_	X
101.INS	Inline XBRL Instance Document	_	_	_	_	X
101.SCH	Inline XBRL Taxonomy Extension Schema Document	_	_	_	_	X
101.CAL	Inline XBRL Taxonomy Extension Calculation Linkbase Document.	_	_	_	_	X
101.DEF	Inline XBRL Taxonomy Extension Definition Linkbase Document	_	_	_	_	X
101.LAB	Inline XBRL Taxonomy Extension Label Linkbase Document	_	_	_	_	X
101.PRE	Inline XBRL Taxonomy Extension Presentation Linkbase Document	_	_	_	_	X
104	Cover Page Interactive Data File (formatted as inline XBRL with applicable taxonomy extension information contained in Exhibits 101)					

^{*} Furnished herewith

ITEM 16. SUMMARY

None

^{**} Indicates a management contract or compensatory plan or arrangement

[†] Confidential treatment has been requested for portions of this exhibit

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

⁽¹⁾ Indicates a filing of SolarCity

SIGNATURES

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

	Tesla, Inc.
Date: February 13, 2020	/s/ Elon Musk
	Elon Musk
	Chief Executive Officer
	(Principal Executive Officer)

Pursuant to the requirements of the Securities Exchange Act of 1934, this report has been signed below by the following persons on behalf of the registrant and in the capacities and on the dates indicated.

Signature	Title	Date
/s/ Elon Musk Elon Musk	Chief Executive Officer and Director (Principal Executive Officer)	February 13, 2020
/s/ Zachary J. Kirkhorn Zachary J. Kirkhorn	Chief Financial Officer (Principal Financial Officer)	February 13, 2020
/s/ Vaibhav Taneja Vaibhav Taneja	Chief Accounting Officer (Principal Accounting Officer)	February 13, 2020
/s/ Robyn Denholm Robyn Denholm	Director	February 13, 2020
/s/ Ira Ehrenpreis Ira Ehrenpreis	Director	February 13, 2020
/s/ Lawrence J. Ellison Lawrence J. Ellison	Director	February 13, 2020
/s/ Antonio J. Gracias Antonio J. Gracias	Director	February 13, 2020
/s/ Stephen T. Jurvetson Stephen T. Jurvetson	Director	February 13, 2020
/s/ James Murdoch James Murdoch	Director	February 13, 2020
/s/ Kimbal Musk Kimbal Musk	Director	February 13, 2020
/s/ Kathleen Wilson-Thompson Kathleen Wilson-Thompson	Director	February 13, 2020



