

# Tesla Accelerates the Transition to Sustainable Energy

## INTRODUCTION

Tesla is an all-electric vehicle and energy generation products company based in Palo Alto, California. Founded in 2003 by engineers Martin Eberhard and Marc Tarpenning, the company was named after Nikola Tesla, an inventor and engineer known for his contributions to the design of modern alternating current electric systems.

Tesla is widely admired for its industry-altering innovation which is built around its core vision of moving the world toward sustainable energy. Though Tesla got its start with electric vehicles (EVs), the company has branched out to create a variety of renewable energy technologies from solar roof tiles to clean energy storage. The company believes the faster the world stops relying on fossil fuels and moves toward a zero-emission future, the better. Tesla also has an extensive corporate social responsibility (CSR) strategy that includes focusing on the safety of both employees and consumers, supporting a diverse work environment, sourcing responsibly produced materials, and contributing to education.

Despite the company's good intentions and CSR efforts, Tesla has attracted both skepticism and criticism from the public as well as investors. CEO Elon Musk's outspoken nature has hurt the company's reputation and stock price more than once. Additionally, Tesla has faced many ethical issues in the workplace from whistleblower retaliation to violating labor laws. The EV company has also struggled with supply chain management, often failing to meet crucial deadlines and production goals.

Without a doubt, Tesla paved the way for EVs. Since the company was founded, there are now more than 3 million EVs on the road globally. Despite facing more competition than ever before,

Tesla is growing substantially and has repeatedly posted quarterly profits after years of losses. Though Tesla did not invent the EV, it was the first to create a viable EV for consumers and has set the standard of what an electric car should be.

## **TESLA'S HISTORY**

In 2003 Eberhard and Tarpenning they set out to create a high-end performance EV, going after wealthy car enthusiasts. Though many assume Elon Musk created Tesla, he didn't join the company until 2004 after investing \$30 million and becoming the chairman of the board of directors. The company spent years testing and designing components and prototypes of what would become the Roadster. The team hit a major snag in late 2007 when they realized the design of their transmission could not work and had to evaluate new options. This left them with nearly finished vehicles they could not ship. Eberhard resigned as CEO that year and was replaced by Ze'ev Drori who pushed the company forward to get the long-awaited Roadsters on the road.

Shortly after the Roadster was introduced in June 2008, Musk succeeded Drori to become Tesla's CEO. Before the Roadster, companies were challenged by the tasks of creating a battery that could sufficiently power a vehicle and a motor that was effective and affordable. Though Tesla was successful in achieving these goals, the price of the Roadster, around \$100,000 at the time of its 2008 launch, and the long battery charging times were massive barriers to widespread consumer adoption. Tesla needed sales to continue its business. In 2009, Tesla was struggling financially with less than \$10 million to its name. Fortunately, the company was saved by Daimler AG, the automotive company behind Mercedes, which bought a 10 percent stake of Tesla for \$50 million, and the United States Department of Energy, which gave Tesla a \$465 million loan. To remain financially stable, Tesla filed an IPO in 2010, raising \$226 million.

To follow up on the launch of its first EV, in 2012 Tesla introduced the Model S, the world's first ever premium all-electric sedan, which was significantly more affordable than the Roadster at \$76,000. The vehicle had a record 0-60 mph acceleration time of 2.28 seconds, according to Motor Trend, and had the longest driving range of any EV, pushing standards even higher. That same year, Tesla introduced its first freestanding charging stations called Superchargers. Now, there are more than 16,500 Superchargers at more than 1,800 locations. Although the company had finally gotten its feet under itself, Tesla didn't post a quarterly profit until 2014.

Building on the success of its sedan, Tesla introduced the Model X in 2015, which became the safest SUV ever tested. It earned a 5-star safety ratings across every category from the National Highway Traffic Safety Administration, the first vehicle to ever hit that mark. That same year, Tesla began rolling out an auto-pilot feature for partial autonomous driving, which enabled the cars to self-drive with active driver supervision.

With three successful vehicle launches under its belt, Tesla began to focus on the energy side of its business, unveiling Solar Roof solar tiles as well as Powerwall and Powerpack industry batteries to store converted solar energy. To support this focus on energy, Tesla strategically acquired SolarCity, a solar energy service company, in 2016 for \$2.6 billion. To seal the deal, the company changed its name from Tesla Motors to Tesla, Inc. in 2017, signifying the company's shift from a car manufacturer to a sustainable energy solution company.

Tesla introduced the Model 3 in 2017, its most affordable vehicle yet, starting at \$70,000. By 2018, the Model 3 had become the number one selling plug-in car in the world, passing the Nissan Leaf by 2,000 units. Government tax incentives had made EVs more attractive to buyers, but once Tesla sold 200,000 units at the end of 2018, it marked the end of the \$7,500 government tax credit. Because this made Tesla vehicles more expensive to consumers, the company lowered the price

of its Model 3, Model S, and Model X by \$2,000. In 2019 Tesla achieved Musk's goal of creating a more affordable EV for the broader market when it released a base model of the Model 3 at a price point of \$35,000 for a limited time.

Tesla continues to outpace competitors with its non-stop innovation. Looking forward, the company is focused on new products such as the Tesla Semi, Model Y and Cybertruck. The Tesla Cybertruck, with a starting price of \$40,000, was first revealed in late-2019. It is the first truck from the company and will go up against EV pickups from mainstream car makers Ford and GM. With soaring stock prices, Tesla overtook General Motors in 2019 as the United States' most valuable car company with a market cap of \$53 billion. As the COVID-19 (coronavirus) pandemic crippled the world economy in 2020, Tesla remained optimistic about sales despite factory closures.

## **TESLA'S MASTER PLAN FOR SUSTAINABILITY**

Tesla, once regarded as a producer of high-end, luxury vehicles for the wealthy, has painstakingly fought to accelerate the world's transition to sustainable energy, which is the company's core vision. Recognizing that this goal cannot be achieved by one company, Tesla made the move to open source Tesla patents in order to make them accessible to anyone wanting to design EVs. Musk believes that Tesla's competition is not the small percentage of EVs being produced but rather the large number of gasoline-fueled vehicles saturating the market.

In 2006, Elon Musk spelled out Tesla's master plan for sustainability: build and sell the Tesla Roadster in order to build more affordable models while providing zero emission electric power generation options. Tesla delivered on that plan by creating an entire sustainable energy ecosystem including Powerwall, Powerpack, and Solar Roof energy solutions. These enable homeowners, businesses, and utilities to manage renewable energy generation, storage, and consumption. To test whether or not it could provide 100 percent renewable energy, Tesla converted the American

Samoan island of Ta'u to a solar and battery microgrid in 2016. Previously, the island operated on diesel generators, but with the new microgrid the island can operate for three days without sun. Building off of this success, in 2017 Tesla built the world's largest lithium-ion battery in South Australia to avoid blackouts that crippled the region. Though it cost approximately \$66 million, the battery has reduced Australia's grid service cost by 90 percent. The Powerpack project is more affordable and faster than a conventional steam turbine, according to a report from the Australian Energy Market Operator. That same year, Tesla sent 700 solar panels to the "Hospital del Niño" in Puerto Rico after Hurricane Maria to avoid the island relying on diesel generators that release harmful emissions and require constant refueling

Ten years after the introduction of the Master Plan, Musk introduced several new goals to achieve a sustainable economy:

## **Integrating Energy Generation and Storage**

One of Musk's first goals was to create a solar-roof-with-battery product, which it successfully achieved. Tesla, which first introduced solar roof tiles in 2015, launched version three of its Solar Roof product in 2019. They are designed to look like normal roof tiles and cost \$42,500 for a 2,000 square-foot house. Before solar roof tiles, consumers had to pay for a regular roof plus the added cost of solar panels on top. Not only is Tesla Solar more affordable than a new roof and solar panels combined, but the product is three times stronger than standard roofing tiles. This business segment in particular was hard hit due to the COVID-19 pandemic with deployments decreasing by 35 percent in the first quarter of 2020. Musk said he hoped to regain the momentum it built prior to the outbreak.

# **Expanding to Cover the Major Forms of Terrestrial Transport**

Tesla covers three vehicle segments with premium sedans, SUVs, and a compact SUV. To address more of the consumer market, Tesla introduced a new kind of pickup truck, the Cybertruck. Tesla claims its pickup truck has superior durability and passenger protection with a "nearly impenetrable" body, according to the Tesla website. Though the angular, futuristic design is polarizing, it allows Tesla's truck to stand apart from mainstream truck makers like GM. Just days after the truck's unveiling in late-2019, the company reported it received more than 250,000 reservations for its new vehicle. Less than six months later, it was reported pre-orders had surpassed 600,000. The Cybertruck marks Tesla's first attempt to gain credibility in the light-duty pickup truck market. Musk has said that it would consider a more conventional design in the future.

In addition to addressing more of the consumer market, Tesla is investing in heavy-duty trucks and high passenger-density urban transport. For example, Tesla Semi, an electric semi-trailer truck, is designed to save owners at least \$200,000 over a million miles based on fuel costs alone. The truck accelerates faster than a traditional semi and can drive faster uphill. Plus, the Semi includes safety features such as Enhanced Autopilot to help truck drivers avoid collisions. Working to cover more forms of transport greatly expands Tesla's footprint and improves the carbon footprint of the transportation industry as a whole.

## **Introducing Full Autonomy**

Musk envisions a future where cars have the ability to drive and park without a person inside the vehicle at all. Tesla aims for its vehicles to be completely self-driving while recognizing the regulatory hurdles the company will have to jump. By replacing drivers with artificial intelligence (AI), car companies are also assuming new ethical and legal responsibilities they did not have

previously. AI-powered cars will have to be programmed to make ethical decisions. Believing that its self-driving function is already safer than human driving, Tesla made the controversial decision to release partial autonomy in 2015 that allows its vehicles to steer, accelerate, and brake automatically under constant driver supervision. Although the autopilot feature has been connected to several crashes and more than one death, the company has repeatedly insisted that drivers who use the feature are safer than other drivers. The system issues hands-off alerts to encourage drivers to avoid overreliance on the feature.

## **Encourage Vehicle Sharing**

Musk's vision for high passenger-density urban transport goes hand in hand with his vision for autonomous, self-driving vehicles. He describes a world of ride-sharing where Tesla owners can add their fully autonomous vehicle to a shared fleet of self-driving taxis in order to generate income for the owner. He believes this is how Tesla vehicles will become more affordable to all.

# **CORPORATE SOCIAL RESPONSIBILITY AT TESLA**

Tesla's CSR strategy addresses stakeholders' interests by monitoring and reporting on the company's product and operational impact, emphasizing consumer safety and responsible sourcing, and focusing on its employees and building a strong organizational culture.

## **Product and Operational Impact**

Tesla believes that consumers should not have to compromise on price or performance when it comes to choosing sustainable products. The company's products are intended to reduce the environmental impacts of transportation and energy use and production, thus reducing greenhouse gas (GHG) emissions. Collectively, the 550,000 Tesla vehicles sold have resulted in an emissions

savings of 4 million metric tons of carbon dioxide. Tesla's annual carbon dioxide emissions are approximately 3 percent of Ford's worldwide facility emissions. Additionally, Supercharger stations have saved 75 million gallons of gasoline. Across all of its solar installations, Tesla has generated over 13 Terawatthours (TWhs) of emissions-free electricity. Governments around the globe support this shift toward electrification as well, and many offer monetary incentives to consumers to adopt EVs and other energy efficient products.

## **Focusing on Consumer Safety**

A focus on occupant safety has always been at the center of Tesla's mission. The company's vehicles feature advanced safety features such as automatic emergency braking, lane departure and collision warnings, obstacle-aware acceleration, blind spot warnings, and more. Despite its best efforts to create safe vehicles, Tesla is not immune to accidents. Two vehicle fires negatively impacted Tesla's reputation for vehicle safety in 2013, just as the company was finally getting its feet under itself. Musk defended the vehicles, stating in a company blog post that the risk of fire in a Model S was five times less than the average gasoline car. Tesla used the media attention to its advantage, touting the safety features in the vehicle which contributed to the safety of the two drivers. Regardless of the statistics, Tesla made the ethical decision to prioritize both the safety of its customers as well as its customer's peace of mind by outfitting vehicle bodies with a triple underbody shield to give drivers peace of mind. Not only did new vehicles come with a titanium underbody shield and aluminum deflector plates, but Tesla offered to retrofit the shields to existing Tesla customers for free.

With consumer safety in mind, Tesla made the decision to deploy vehicles with partial autonomy in 2015 rather than waiting for full autonomy to be tested and approved by regulators. Musk wrote in a company blog post that he felt it was of moral importance to not delay the

technology because he believes self-driving Tesla vehicles are safer than vehicles driven by people. This makes driving safer for both Tesla customers as well as all other drivers on the road. Every quarter, Tesla voluntarily releases a vehicle safety report, creating transparency with the public.

## **Prioritizing Employee Safety**

Similar to its approach to consumer safety, Tesla takes the safety of its employees seriously. For example, the company requires production employees to participate in a multi-day training program before they can enter the factory floor. Additionally, Tesla provides on-the-job training and tracks performance daily so that improvements can be made quickly and efficiently. To achieve its goal of having the safest car factory in the world, Tesla's Global Environmental, Health and Safety team created a strategy based on three pillars: do the basics right, engage stakeholders, and reduce risk.

Despite its proactive efforts in the past, Tesla dug in its heels during the COVID-19 pandemic in 2020. Musk tweeted that the COVID-19 virus was less serious than people thought and continued to keep his factory in California open, despite the shelter in place order from California government officials. After a Tesla employee tested positive for COVID-19, Tesla announced that it would reduce its workforce at the factory by 75 percent. The workforce reduction was closely followed by 10 percent pay cut for standard employees and up to 30 percent for managers and directors at a time when many major companies fought to maintain wages. Though the county sheriff's department eventually forced the factory to close, less than two months later Musk announced the factory would reopen in defiance of the regional public health order and sued Alameda county. These decisions put the lives of 10,000 Tesla employees at risk as well as the lives of others in the local community. Prioritizing profit over public health is a major ethics issue.

## Creating Employee Advocates

Employees are important to Tesla because they have the potential to become advocates for the company. For example, in order to get more of its vehicles into the hands of its employees, Tesla allowed employees to apply unused vacation time toward the purchase of new Tesla cars. Everyone who works at the company is awarded shares of Tesla stock and can buy additional stock at a discount through the employee stock purchase program. This provides value to employees and incentivizes them to work harder.

Tesla effectively monitors employee happiness. Tesla hosted a "Merch Madness" pop-up shop at its Gigafactory 2 featuring heavily discounted company merchandise, boosting morale after a series of company-wide layoffs. This effectively pushed more Tesla-branded apparel into the world while reassuring employees. Tesla also has a history of responding quickly to criticism. After receiving negative feedback from employees for not providing steady work after temporary factory shutdowns in 2018, Tesla introduced employee loans that allow workers to borrow money from Salary Finance, a tech startup, at affordable rates which can easily be paid back directly from paychecks. Tesla's goal is to improve employee financial well-being, so employees stay with the company instead of searching for higher wages.

Additionally, Tesla offers alternative transportation programs to employees with the goal of reducing the carbon impact of its employees. Tesla encourages ride sharing through a variety of carpooling services and has a bike-to-work program in the U.S. The company operates a network of commuter shuttles to and from work. In the Bay Area, almost 4,000 employees take shuttles to work a day, and in Nevada, about 2,000 employees ride shuttles to Gigafactory a day. In addition, Tesla has hundreds of charging stations at their facilities to encourage Tesla employees to go

electric. These efforts simultaneously reduce carbon impact while providing valuable perks for employees.

## **Supporting a Diverse Work Environment**

Tesla strives to recruit and retain the best talent regardless of race, color, religion, sex, sexual orientation, gender expressions, gender identity, age, national origin, disability, or protected veteran status. To support a diverse work environment, Tesla created employee resource groups led by its team members to help employees build relationships and share ideas. The groups include Black@Tesla, Intersectionality@Tesla, LGBTQ@Tesla, Teslatinos, Veterans Taskforce, and Women In Tesla. The company backs this up with anti-discrimination and anti-sexual harassment training for employees. Additionally, recruiting teams take unconscious bias training to help identify and limit unintentional prejudice that could influence hiring.

## **Sourcing Responsibly Produced Materials**

To extend its principles of integrity, Tesla has a supplier code of conduct and a human rights and conflict minerals policy to outline expectations of all suppliers and partners. The code of conduct outlines Tesla's stance on human rights and labor issues, health and safety, the environment, ethics, and responsible mineral sourcing. Tesla, which conducts audits to ensure its standards are upheld, has a zero-tolerance policy towards human rights abuses in its supply chain. Additionally, its conflict minerals policy sets due diligence practices for its suppliers to create a more transparent supply chain. The company's suppliers are expected to provide parts and products that are "conflict free," meaning they do not benefit armed groups in the Democratic Republic of the Congo.

## **Contributing to Education**

Tesla strongly support education in the communities in which it operates. Tesla partners with high schools, universities, and nonprofit organizations in California to provide career-oriented

workshops, STEM hands-on learning activities, factory tours, and speaking opportunities. In Nevada, Tesla is investing \$37.5M in K-12 education to prepare students for manufacturing and engineering careers at Tesla and other companies. Tesla also launched a high school graduate apprenticeship, the Manufacturing Development Program, to educate and recruit talent from high schools across the state to become Production Associates at Gigafactory 1. Additionally, Tesla START, a 12-week training program in select markets, was designed to provide students with the skills necessary for a career at a Tesla Service Center. This not only supports the communities but also creates a larger pool of talent from which Tesla can recruit.

## **TESLA'S LEADERSHIP CHALLENGES**

Tesla's success has been dotted with leadership challenges. In 2007 Eberhard resigned as CEO and joined the company's advisory board. His replacement, Drori, is credited with advancing the Roadster from struggling prototype into a viable product. As the company was finally shipping its first Roadsters, Eberhard and Tarpenning broke all ties with Tesla and later suggested they had been forced out of the company. Shortly after their departure, Musk took over Drori's role as CEO in 2008. The next year, Eberhard sued Tesla and Musk, alleging his leadership had been unfairly blamed for Tesla's early struggles. Eberhard accused Musk of taking credit for the Roadster and accused Tesla of wrongfully denying Eberhard of his severance. Though Musk offered Eberhard a severance package that included \$100,000, six months of health insurance, the option to buy 250,000 shares of Tesla common stock, and a seat on the advisory board, the company's general counsel rescinded the package after Eberhard created a blog post discussing Tesla employees who he believed to be unfairly treated. Tesla denied the allegations, and Eberhard dropped his suit later that year. Though the fight wasn't good for Tesla's image, it didn't attract much attention as Tesla had yet to become a household name.

Many years later, Musk made a series of public statements online that damaged his reputation as well as the reputation of the company. For example, Musk projected Tesla would sell up to 200,000 Model 3 sedans in the second half of 2017, a gross overestimation. Ultimately, the company only produced 55,000 during that time. Later that year Musk announced on Twitter a plan to take the company private using money from Saudi Arabia's sovereign wealth fund. The plan, which eventually crumbled, caused rapid trading, increasing the company's stock price by 10 percent and resulted in a lawsuit from the Securities and Exchange Commission (SEC). Many viewed this as a lapse in ethical judgement. The SEC charged Musk with securities fraud due to the false and misleading tweet. Musk settled with the SEC and agreed to step down as chairman of Tesla. Though Musk remained CEO, his chairman position was overtaken by Robyn Denholm, Australian business executive. Both Musk and Tesla paid a \$20 million fine. Part of the agreement included the appointment of two independent board members, Oracle founder Larry Ellison and former Kellogg executive Kathleen Wilson-Thompson.

Tesla's reputation took another blow in 2018 when the Department of Justice investigated the company under suspicion that the company had misled investors about production capacity. After Musk published a tweet about production capacity, the SEC filed a motion for contempt because it violated Tesla's previous agreement with the SEC. The investigation resulted in the mandated oversight of Musk's Twitter account by Tesla's legal team. As a leader of a public company, Musk has the responsibility to behave in an ethical way, even when posting from his personal accounts.

Also, in 2018 Musk attracted negative publicity for smoking marijuana on Joe Rogan's podcast. Though the brunt of the fallout impacted his other company, SpaceX, which is a U.S. military contractor, Tesla still felt its effects. The interview concerned Tesla's business partner, Panasonic. Panasonic, which partnered with Tesla to invest in Gigafactory 2, is based in Japan

where use of marijuana is a serious crime. The incident hurt the already strained relationship. Many media outlets suggest Musk violated Tesla's code of conduct because he was under the influence while representing the company. The incident negatively impacted company's stock. Musk has become a celebrity in his own right due to his outspoken and charismatic nature. Though many companies have benefited from this phenomenon, such as Apple with Steve Jobs or Microsoft with Bill Gates, Tesla will have to reign in Musk who has been both an asset as well as a liability for the company.

Musk's Twitter rants have continued to attract negative publicity and performance for the company. On March 6, just as the COVID-19 pandemic began to affect U.S. business, Musk tweeted, "The coronavirus panic is dumb." As discussed earlier, Musk pushed to keep its California factory open even though there was a local shelter in place order, putting employees at risk. Musk then announced that the company would work on making ventilators for California and New York hospitals. One month later, Musk tweeted that the lockdown was "fascist." The next blow was just a few days later when Musk posted that Tesla stock prices were too high, causing Tesla's market value to decrease by \$14 billion. Musk's tweets have proven to be detrimental to both Tesla's reputation and Tesla's financial performance, showing a lack of regard for shareholder interest.

## **DEALING WITH ETHICAL MISCONDUCT IN THE WORKPLACE**

In addition to ongoing leadership troubles, Tesla has faced a series of ethical controversies in the workplace. For example, on June 4, 2018, *Business Insider* reported that inefficiency at Tesla's Nevada Gigafactory had led the company to scrap \$150 million in raw materials. Martin Tripp, who was identified as the leaker, claims he suggested to his bosses that scrap should be reduced in

order to be less wasteful and create a safer working environment. He wrote an email to Musk that went unanswered. He decided to share data from the company's internal production database with *Business Insider* and was later fired and sued for \$167 million. Tripp filed a counterclaim, saying Musk defamed him when he told media outlets that Tripp had threatened a mass shooting. The security manager at Tesla's Gigafactory, Sean Gouthro, filed a whistleblower report with the SEC against Tesla. Gouthro says Tesla behaved unethically in tracking down the leaker, claiming Tesla's security team hacked Tripp's phone, had Tripp followed, misled police, installed a device to monitor employee's personal communications. Though the legal battle is ongoing, Tesla denies the allegations.

In addition to the whistleblower scandal, it was discovered that Tesla violated labor laws. In a court ruling on September 27, 2019, Tesla was found guilty of violating the National Labor Relations Act several times, which included specific counts of threatening employees and retaliating against them. This court case was tried in California for incidents that happened in 2017. Also, Musk tweeted in May 2018 that joining a union meant giving up Tesla stock options, which was also illegal, the judge found. The company fired a union supporter in the past, and the judge stated that this person must be reinstated and given back pay for wrongful termination. There is also a notice that Tesla must announce to its employees that the company violated labor laws. Tesla can appeal this ruling which seems likely. This string of ethical issues could indicate deeper issues at Tesla.

## **STRUGGLING SUPPLY CHAIN**

While Tesla has worked to overcome challenges with ethics and leadership, it continues to improve its supply chain as well. In the supply chain there is an "upstream" (e.g., suppliers) and "downstream" (e.g., wholesalers and retailers). Tesla has invested many resources into its

upstream supply chain by focusing on its in-house battery cell production and vehicle production at its Gigafactories. This is one of Tesla's key competitive advantages. Downstream, Tesla has a unique retail distribution compared to competitors. The company sells online with no agency dealerships. Customers pick up their vehicles at a Tesla-owned regional distribution center. Interestingly, Tesla showrooms are strictly used for promotion, not purchases.

Tesla has struggled to meet delivery and production deadlines, especially with the Model 3 as it is the first time the company has produced a mass market car. Tesla blamed production issues on the inefficiency of its supply chain. The company was sourcing parts from across the globe but wanted to build and assemble all in one place. To improve production, Tesla brought battery cell production in-house in 2014 with Gigafactory 1 outside of Sparks, Nevada, a facility designed to significantly reduce battery cell costs, creating thousands of jobs. The cost of battery cells declined through economies of scale and the reduction of waste. This ultimately makes the vehicles more affordable for consumers.

In 2015, Tesla acquired Riviera Tool & Die in order to streamline the production of the Model 3. Later that year, Tesla sold \$738 million in shares in order to raise enough money for several infrastructure projects, including a battery factory and new production facility. Tesla began production of solar cells and modules at Gigafactory 2 in Buffalo, New York, in 2016. The company added new production lines to support electrical components for Supercharger and energy storage products, creating nearly 800 jobs. Tesla committed to creating 5,000 jobs in New York state by 2027. After many supply chain improvements, Tesla finally reached its goal of producing 5,000 Model 3s per week in 2018.

Building off the success of Gigafactory 1 and 2, Tesla opened a third Gigafactory outside of Shanghai, China in 2019. With Gigafactory 3, Tesla can finally operate at the kind of scale Musk

has always promised. Though Tesla is infamous for missing deadlines, its Gigafactory 3 in China opened early, showing Tesla's commitment to improving its reputation. Prices of Tesla vehicles in China shifted as a result of the U.S-China trade war which started in July 2018, but, after building Gigafactory 3, Chinese authorities announced Tesla cars would be exempt from a 10 percent vehicle tax. Tesla was the only foreign company to be exempt. It is projected that up to 70 percent of vehicles in China could be electric by 2040, making the country very important to Tesla's success. Next, Tesla eyes its European Gigafactory in Berlin, Germany for producing Model 3 sedans and Model Y crossovers.

Though Tesla has made strides in improving its supply chain and production facilities, the company has attracted criticism from its own employees who have had irregular schedules due to production line issues and unexpected maintenance. Tesla laid off 7 percent of its full-time employees, cutting more than 3,000 jobs across the company in 2019 ahead of a projected dip in sales industry-wide. Unfortunately, Tesla is not alone. GM and Ford both experienced major layoffs in 2019. Tesla's layoffs were a move toward streamlining the company as a result of pressure from shareholders to remain profitable.

## **THE FUTURE FOR TESLA**

Though leadership challenges early in Tesla's history did not stand in the way of the company's success, Tesla and Musk are now household names not only in the United States but also around the world. With more recognition and awareness from consumers and investors comes more scrutiny. Tesla, which has fumbled when it comes to setting expectations and meeting deadlines, will need to streamline its operations if it wants to be a contender in the mass car market. Additionally, Tesla will need to face its ethical misconduct head on to prevent wrongdoing from persisting.

Despite the growing pains Tesla has faced, the company has made significant gains and has firmly established itself as a leader in EVs. Tesla posted back-to-back profitable quarters for the first time ever at the end of 2018, and in 2019 saw a record number of sales with \$24.6 billion in revenue. According to this sales data, Tesla's Model 3 ended the year as the United State's seventh best-selling car for the year. Morgan Stanley, Deutsche Bank, and Goldman Sachs questioned the sustainability of the demand for the higher-priced versions of the Model 3, but the more affordable Model 3, which starts at \$35,000, has made the vehicle more attainable for more consumers. The vehicle is challenging the dominance of German brands BMW, Audi, and Mercedes in Europe, even with its higher prices. In fact, The Model 3 became best-selling car in Netherlands and in Norway in 2019, and Tesla became the best-selling car brand in Iceland in 2020. EVs are more even more attractive to consumers in Europe than in the United States because gasoline carries significantly higher taxes. Tesla will have to focus its attention on both Europe and China as it moves toward the future.

By creating the first commercially viable EV, Tesla has set the standard of what an EV should be and has caused major car companies to shift their EV production into high gear. Ultimately, Musk's decision to move away from having high-end vehicles at the core of Tesla's operations was critical to both the company's financial success and the company's vision is to accelerate the world's transition to sustainable energy.

# QUESTIONS FOR DISCUSSION

1. In what ways does Tesla address the interests of its stakeholders through its corporate social responsibility strategy?
2. What ethical issues has Tesla faced? What ethical issues is Tesla likely to face in the future?
3. What environmental issues do Tesla products work to address?

## SOURCES

Aarian Marshall, "Tesla Turns a Profit—and Builds a Chinese Factory Very Fast," *Wired*, October 23, 2019, <https://www.wired.com/story/tesla-turns-profit-builds-chinese-factory-fast/> (accessed November 7, 2019); Andrew Greiner, Ivory Sherman, Tiffany Baker, Allie Schmitz and Jen Tse, "The History of Tesla and Elon Musk: A Radical Vision for the Future of Autos," *CNN*, March 22, 2019, <https://www.cnn.com/interactive/2019/03/business/tesla-history-timeline/index.html> (accessed November 7, 2019); Andrew J. Hawkins, "Tesla's Autopilot Lulled Driver into a State of 'Inattention' in 2018 Freeway Crash," *The Verge*, September 4, 2019, <https://www.theverge.com/2019/9/4/20849499/tesla-autopilot-crash-culver-city-2018-ntsb-report> (accessed December 2, 2019); Brett Smith, "Why Tesla's Weird New Cybertruck Could Be a Hit," *CNN*, November 29, 2019, <https://www.cnn.com/2019/11/29/perspectives/cybertruck-tesla-elon-musk/index.html> (accessed December 2, 2019); Charles Morris, "The Definitive Story of Tesla's Beginnings, told by Co-Founder Marc Tarpenning," *Evannex*, June 18, 2017, <https://evannex.com/blogs/news/the-definitive-story-of-tesla-s-beginnings-told-by-co-founder-marc-tarpenning> (accessed November 13, 2019); Chuck Squatriglia, "Tesla's Founder Sues Tesla's CEO," *Wired*, June 11, 2009, <https://www.wired.com/2009/06/eberhard/> (accessed November 7, 2019); Darrell Etherington, "Tesla's New Solar Roof Costs Less Than a New Roof Plus Solar Panels, Aims for Install Rate of 1K per Week," *TechCrunch*, October 25, 2019, <https://techcrunch.com/2019/10/25/teslas-new-solar-roof-costs-less-than-a-new-roof-plus-solar-panels-aims-for-install-rate-of-1k-per-week/> (accessed November 7, 2019); David Robinson, "Tesla's Solar Energy Business Takes a Turn for the Worse," *Buffalo News*, April 29, 2020, <https://buffalonews.com/2020/04/29/teslas-solar-energy-business-takes-a-turn-for-the-worse-2/> (accessed May 12, 2020); Elisabeth Behrmann and Wout Vergauwen, "Tesla Model 3 Passes VW Polo as No. 1 Seller in Dutch Market," *Automotive News Europe*, October 2, 2019, <https://europe.autonews.com/automakers/tesla-model-3-passes-vw-polo-no-1-seller-dutch-market> (accessed November 7, 2019); Elizabeth Lopatto, "Tesla and Elon Musk Broke the Law in Labor Dispute, Judge Rules," *The Verge*, September 27, 2019, <https://www.theverge.com/2019/9/27/20887897/tesla-elon-musk-tweets-union-nlr-illegal> (accessed November 7, 2019); Emily Chasan, "Tesla's First Impact Report Puts Hard Number on CO2 Emissions," *Bloomberg*, April 17, 2019, <https://www.bloomberg.com/news/articles/2019-04-17/tesla-s-first-impact-report-puts-hard-number-on-co2-emissions> (accessed December 2, 2019); Eric Loveday, "Tesla Cybertruck Pre-Orders Soar to over 600,000," *Inside EVs*, April 2, 2020, <https://insideevs.com/news/407596/tesla-cybertuck-orders-million/> (accessed May 12, 2020); Eric Reed, "History of Tesla: Timeline and Facts," *TheStreet*, September 13, 2019, <https://www.thestreet.com/technology/history-of-tesla-15088992> (accessed November 7, 2019); Fred Lambert, "Tesla Becomes the Best-Selling Car Brand in Iceland," *Electrek*, April 1, 2020, <https://electrek.co/2020/04/01/tesla-best-selling-car-brand-iceland/> (accessed May 12, 2020); Fred Lambert, "Tesla's Massive Powerpack Battery in Australia Cost \$66 Million and Already Made up to ~\$17 Million," *Electrek*, September 24, 2018, <https://electrek.co/2018/09/24/tesla-powerpack-battery-australia-cost-revenue/> (accessed November 7, 2019); Graham Rapier, "Tesla Encouraged Its Employees to Buy Cars Using Their Paid Vacation Days," *Business Insider*, March 8, 2019, <https://www.businessinsider.com/tesla-encouraged-workers-buy-cars-using-vacation-days-2019-3> (accessed November 7, 2019); Jack Stewart, "Tesla Cuts 3,000 Jobs, Bracing for an Uncertain Future," *Wired*, January 18, 2019, <https://www.wired.com/story/tesla-layoffs-cost-cutting/> (accessed November 7, 2019); Julia Carrie Wong, "Elon Musk Downplays Coronavirus as Tesla Factory Stays open amid Crisis," *The Guardian*, March 19, 2020, <https://www.theguardian.com/technology/2020/mar/19/elon-musk-coronavirus-tesla-factory-california> (accessed May 12, 2020); Julia Carrie Wong, "Tesla Countersued by 'Whistleblower' It Accused of Sabotage and Shooting Threat," *The Guardian*, July 31, 2018, <https://www.theguardian.com/technology/2018/jul/31/tesla-whistleblower-lawsuit-elon-musk-martin-tripp> (accessed November 7, 2019); Lora Kolodny, "Tesla Gigafactory Employees Stood in Line for 'Merch Madness,' a Chance to Buy Company Swag on the Cheap," *CNBC*, March 22, 2019, <https://www.cnbc.com/2019/03/22/tesla-gigafactory-employees-lined-up-to-buy-swag-at-merch-madness.html> (accessed November 7, 2019); Lora Kolodny, "Tesla Rolls out Employee Loan Benefit as Factory Workers Cope with Unpredictable Hours," *CNBC*, May 2, 2019, <https://www.cnbc.com/2019/05/02/tesla-adds->

employee-loan-benefit-workers-describe-unpredictable-hours.html (accessed November 7, 2019); Maggie Angst, Rex Crum, and John Woolfolk, "Tesla Defies Bay Area Coronavirus Orders, Restarts Fremont Plant," *Mercury News*, May 11, 2020, <https://www.mercurynews.com/2020/05/11/tesla-defies-bay-area-coronavirus-orders-restarts-fremont-plant/> (accessed May 12, 2020); Matt Robinson and Zeke Faux, "When Elon Musk Tried to Destroy a Tesla Whistleblower," *Bloomberg Businessweek*, March 13, 2019, <https://www.bloomberg.com/news/features/2019-03-13/when-elon-musk-tried-to-destroy-tesla-whistleblower-martin-tripp> (accessed November 7, 2019); Michelle Castillo, "Elon Musk May Have Violated Tesla's Business Conduct Policy by Smoking Weed," *CNBC*, September 7, 2018, <https://www.cnbc.com/2018/09/07/elon-musk-may-have-violated-tesla-conduct-policy-by-smoking-weed.html> (accessed November 7, 2019); Neha Malara and Noel Randewich, "Tesla Overtakes GM as Most Valuable U.S. Automaker, Short Sellers Burned," *Reuters*, October 24, 2019, <https://www.reuters.com/article/us-tesla-stock/tesla-overtakes-gm-as-most-valuable-us-automaker-short-sellers-burned-idUSKBN1X31NG> (accessed November 13, 2019); Neil Winton, "Tesla Intensifies Thrust into Europe As Model 3 Enters U.K. Market," *Forbes*, August 29, 2019, <https://www.forbes.com/sites/neilwinton/2019/08/29/tesla-intensifies-thrust-into-europe-as-model-3-enters-uk-market/#734615ab467f> (accessed November 7, 2019); Sean O'Kane and Andrew J. Hawkins, "Tesla Ekes out a Profit as All Eyes Turn to Its China Gigafactory," *The Verge*, October 23, 2019, <https://www.theverge.com/2019/10/23/20928982/tesla-q4-earnings-profit-model-3-china-gigafactory> (accessed November 7, 2019); Sean O'Kane, "Tesla Posts Back-to-Back Profits for the First Time," *The Verge*, January 30, 2019, <https://www.theverge.com/2019/1/30/18203886/tesla-earnings-q1-revenue-profit-record-model-3> (accessed November 7, 2019); Sean O'Kane, "Tesla's Fourth Gigafactory Will Be in Berlin, Elon Musk Says," *The Verge*, November 12, 2019, <https://www.theverge.com/2019/11/12/20961812/elon-musk-berlin-tesla-ceo-fourth-gigafactory-construction> (accessed November 13, 2019); Sherisse Pham and Peter Valdes-Dapena, "Tesla Furloughs Staff and Slashes Salaries as Covid-19 Pandemic Worsens," *CNN*, April 8, 2020, <https://www.cnn.com/2020/04/08/business/tesla-staff-furloughs-coronavirus/index.html> (accessed May 12, 2020); Tesla, "All Our Patent Are Belong to You," June 12, 2014, <https://www.tesla.com/blog/all-our-patent-are-belong-you> (accessed November 13, 2019); Tesla, "Cybertruck," <https://www.tesla.com/cybertruck> (accessed December 2, 2019); Tesla, "Impact Report," 2019, [https://www.tesla.com/ns\\_videos/tesla-impact-report-2019.pdf](https://www.tesla.com/ns_videos/tesla-impact-report-2019.pdf) (accessed November 7, 2019); Tesla, "Master Plan, Part Deux," July 20, 2016, <https://www.tesla.com/blog/master-plan-part-deux> (accessed November 7, 2019); Tesla, "Solar Roof," <https://www.tesla.com/solarroof> (accessed November 7, 2019); Tesla, "Tesla Adds Titanium Underbody Shield and Aluminum Deflector Plates to Model S," March 28, 2014, <https://www.tesla.com/blog/tesla-adds-titanium-underbody-shield-and-aluminum-deflector-plates-model-s> (accessed November 7, 2019); Tesla, "Tesla Gigafactory 2," <https://www.tesla.com/gigafactory2> (accessed November 7, 2019); Tesla, "The Secret Tesla Motors Master Plan (Just Between You and Me)," August 2, 2006, <https://www.tesla.com/blog/secret-tesla-motors-master-plan-just-between-you-and-me> (accessed November 7, 2019); Tesla, "About Tesla," <https://www.tesla.com/about> (accessed November 7, 2019); Tim Higgins and Takashi Mochizuki, "Tesla Needs Its Battery Maker. A Culture Clash Threatens Their Relationship," *The Wall Street Journal*, October 8, 2019, <https://www.wsj.com/articles/tesla-needs-its-battery-maker-a-culture-clash-threatens-their-relationship-11570550526?mod=djemwhatsnews> (accessed November 7, 2019); Zachary Shahan, "Tesla Model 3 = 7th Best Selling Car in USA," *Clean Technica*, January 19, 2020, <https://cleantechnica.com/2020/01/19/tesla-model-3-7th-best-selling-car-in-usa/> (accessed May 12, 2020).