

How tesla will accelerate the world's transition to sustainable energy

[Business](#), [Company](#)



Tesla was founded by a number of engineers in 2003 who believed that driving electric cars will be more fun, quick and efficient than gasoline cars. Tesla does not limit itself on making only all-electric vehicles but also infinitely scalable clean energy generation and storage products. Tesla wants the world to switch to preserving the fossil fuels for a better zero-emission future.

The first ever electric vehicle was the Tesla Roadster which was made in 2008. It flaunted Tesla's amazing electric power and technology. Then came Tesla's best car in every category which was the chic all-electric Sedan named-Model S. Model S is the perfect car for today's world which combines safety, efficiency and performance. This incredible model has taken the world by surprise with the longest range of any electric car that exists, over the air software, and as measured by the Motor Trend, a record of 0-60 mph acceleration time of 2.28 seconds. In 2015, Tesla introduced Model X which was rated the safest, quickest and most capable utility vehicle by the National Highway Traffic Safety Administration. In 2016, Tesla introduced another model which was affordable and high-volume electric vehicle called Model 3 and started production from 2017. Then in 2017 Tesla came up with yet another model except this time it was truck which was the safest and most comfortable truck ever made - Tesla Semi. This was supposed to save its owners fuel costs of up to \$200,000.

All vehicles are produced in Fremont, California where the factory of Tesla is situated. Most of the components are also made there. Also it is Tesla's goal to produce up to 500,000 cars each year from 2018 onwards.

Tesla does not only produce EVs (electric vehicles) but also makes sets of energy solutions, Powerwall, Powerpack and Solar Roof to create a sustainable energy ecosystem through the usage, storage and consumption of renewable energy. Tesla uses Gigafactory 1- that reduces cell costs of battery and through the production of battery Tesla produces thousands of jobs.

Tesla wants the renewable energy storage and consumption, production of clean energy and transport. This is just the beginning for Tesla as it is on its way into making the most affordable electric cars till date and helping the world accelerate into a healthier, greener environment.

Available Models of Tesla

- Model S
- Model X
- Model 3
- Energy
- Semi
- Roadster
- Founders
- Elon Musk- Chairman of the Board, CEO
- Jeffrey Straubel- Chief Technology Officer
- Mark Tarpening- Co-founder
- Martin Eberhard- Co-founder
- Ian Wright- Co-founder
- Revenue

- 11. 76 Billion USD (2017)
- Environmental Scanning and market analysis

PESTLE

India is a multicultural country with great potential for multinational companies (" Socio cultural environment in India", 2015). Before the major changes in economic policies it was quite difficult for foreign companies to invest in India however, with the government enforcing the economic reforms after 1991, it has been easier for foreign investors to invest in India (" What is New Economic Reforms", 2016). Although India is a diversified country and welcomes foreign companies for investment with open arms, doing business in India effectively is still a major challenge and cannot be taken lightly, as foreign companies have to adapt to the culture and make appropriate changes to fit in (" Socio cultural environment in India", 2015).

Political: India is a country in South-east Asia. It is surrounded by neighboring countries like Bangladesh, Myanmar, China, Pakistan Bhutan, Sri Lanka, and Nepal (Rahman, 2018). It is known to be the largest democracy in the world and also one the most influential and powerful country in the world today (Rahman, 2018). The will of people is heard and addressed by the political parties which ensure a healthy and somewhat stable political environment in India (Rahman, 2018). A stable political environment is a very tempting factor for foreign direct investment (Rahman, 2018). Nevertheless, corruption is quite common in India and is known to increase business costs and hence affect foreign direct investment (Rahman, 2018).

In addition, it also disrupts the political stability and slows down the economic growth; therefore, government initiatives are looking into the matter to reduce corruption (Rahman, 2018). Though politically India is stable now for MNCs to expand however, there is no guarantee for instability either as political unrests are called upon by national political parties such as strikes, that harm businesses severely (“ Socio cultural environment in India”, 2015).

Economic: In his article, Rahman said that India is the 7th largest economy by nominal GDP with a GDP of \$2. 4 trillion (as cited in IMF Economic Forecast 2017). Also, he mentioned that the GDP of the country is suppose to grow by 7. 4% in 2020 and 7% by this year (as cited in The World Bank Group 2018). Furthermore, he said the corporate tax rate of India had its fluctuations over the years, its highest tax rate ever was 38. 95% back in 2001, it was 33. 99% in 2010, and currently it is 30% as of February 2018 (as cited in Trading Economics 2018). He said India is the 7th largest coffee producer in the world (as cited in International Coffee Organization, 2017). In addition, he mentioned it is one of the top agricultural producers in the world. He wrote that the biggest trading partners of India over the years have been China, Switzerland, UAE, Saudi Arabia, USA and Qatar (as cited in Guardian News and Media Limited, 2016). He also specified that India exports petroleum products, jewelleryes, pharmaceutical products, transport products, machinery, and ready garments, etc. Some of India's imports are crude petroleum, gold and silver, electronic good, pearls and precious stones, and many more (Rahman, 2018).

Then there is also the dilemma of high inflation as middle class group cannot afford luxuries and in some cases even necessities, whereas politically corrupt people and business people show off their wealth (" Socio cultural environment in India", 2015) . As a whole, India is a country of the rich and poor as luxury items like cars, foreign tours etc are sold all over the country (" Socio cultural environment in India", 2015).

The economy of India has a huge growth potential however, the lack of growth in infrastructure in the country is creating an obstacle in economic advancement (" Socio cultural environment in India", 2015). Nevertheless, it is quite cheap to built infrastructure in India than in western countries as labor force in India is quite cheap and reliable as well compared to the western labor force (" Socio cultural environment in India", 2015). The workforce is well-educated and can handle customers convincing them to make purchase as they also have good command in English (" Socio cultural environment in India", 2015).

Social: Something very common in India is the tendency to own a business in a family like major companies such as TATA, Reliance, Birla, etc (" Socio cultural environment in India", 2015). The biggest posts in these family business are taken by family members and their descendants, even though nowadays joint families are gradually diminishing in India (" Socio cultural environment in India", 2015). Another very habitual feature in India is that non-corporate companies like manufacturing and service companies hold most employment and also owns most of the businesses in India. (" Socio cultural environment in India", 2015). Among these non-corporate

companies most are family owned businesses, therefore foreign investors will have to get used to dealing and negotiating with family owned businesses (" Socio cultural environment in India", 2015).

There are many languages spoken in diversified India, however in the business world in urban India, they mix local language with English (" Socio cultural environment in India", 2015). Being fluent in just one language will not be adequate to negotiate business in India (" Socio cultural environment in India", 2015).

Though the majority in India are middle-class people, it is essential that MNCs make an effort to incorporate the eastern culture in their products as the middle-class majority are a believer of the eastern culture (" Socio cultural environment in India", 2015). Therefore, the eastern flavor is a vital feature that MNCs need to take in account while marketing their products/services in India (" Socio cultural environment in India", 2015).

Technological: India is known to be the 3rd most technologically advanced country in the world with a highly skilled IT workforce that attracts tech giants like Facebook, Apple, Microsoft, etc to invest in the country (Rahman, 2018). This technologically advanced country attracts entrepreneurs for projects like software development and innovation, e-commerce, mobile apps, etc (Rahman, 2018). Also the BPO (Business Process Outsourcing) industry in India is booming due to highly skilled workforce of IT and India is at the moment the first choice of foreign companies in UK and USA for

outsourcing IT-related business projects defeating its competitors like Australia, Ireland, China, and Philippines (“ The BPO Industry In India,” n. d.).

Legal: For investing in India, foreign firms need no prior permission from the government except for a few sectors like insurance, non-banking financial corporations, real estate (“ India’s Legal and Regulatory Framework,” n. d.). All FDIs are governed by a comprehensive FDI policy that is set annually by the Department of Industry Policy Promotion (“ India’s Legal and Regulatory Framework,” n. d.). This works under the Ministry of Commerce and Industry, Government of India (“ India’s Legal and Regulatory Framework,” n. d.). The rules and regulations of the policy framework is issued by India’s Central Bank, the Reserve Bank of India (“ India’s Legal and Regulatory Framework,” n. d.). Income tax Act 1961 governs the income tax in India (“ India’s Legal and Regulatory Framework,” n. d.). Also, there are Indian Labor laws that a foreign firm should be aware of before commencing business in India (“ India’s Legal and Regulatory Framework,” n. d.).

Market Analysis:

Target Market: India is the world’s fifth-largest auto market and is planning to shift to electric vehicles (EVs) by 2030 (Balachandran, 2017). It is the Indian Prime Minister Narendra Modi’s vision to create an emission-free India by transforming from fuel motors to EVs (Balachandran, 2017). By doing so, oil bills will be reduced by approximately \$60 billion and cut down emissions by 37% (Balachandran, 2017). However, it will not be easy for a country with 1.3 billion people with 21 million vehicles annually being sold to make such a transformation (Balachandran, 2017). Nevertheless, the Indian government

is taking initiatives to motivate companies and manufacturers to use EVs for example the government has already set out a national policy that has all the specifications and guidelines and incentives for the use of EVs (Balachandran, 2017). In addition, government vehicles are being replaced by EVs as instructed by the new and renewable energy ministry, also, all the state governments are contributing to the shift to EVs by setting up policies for research and development in electric automobiles, making it compulsory to have charging pods in high rises, etc (Balachandran, 2017).

As we can see the Indian government is desperate for transforming to the use of renewable energy for a renewable energy revolution, they are the target market for Tesla and other EV manufacturers. The EV market in India is ripe but it is yet to grow and has a lot of potential as the shift of India to EVs is inevitable. India is especially desperate for this move as 82% of the fuel India uses is imported, which makes it the third largest economy that is in great need of moving toward EVs (Balachandran, 2017). Also, the uber-rich in India are interested in EVs and have already started ordering EVs before Tesla has even launched in India (Balachandran, 2017). Other than that, many cab companies and ride-hailing companies like Lithium Urban, Ola, Uber, etc are partnering up with EV manufacturers like Mahindra and Tata Motors and providing EVs for customers to ride in and get accustomed to it (Upadhyay and Sanjai, 2018). These cab and ride-hailing companies could one of the biggest target markets for Tesla.

Market Need: The Indian customers' wants high speed electric cars with reasonable price and the EVs available in India are not that good quality and

the top speed is 85 km/hr which does not attract as many customers (Balachandran, 2017). Also, these EVs go on average 120 km on full charge which is not attractive enough for Indian customers to spend money on them (Balachandran, 2017).

Competitors: The EVs already available in India are from companies like Mahindra with full-electric cars like e-20 plus and Mahindra e-Verito (Garg, 2018). These cars are quite affordable with a price range of Rs. 6-10 lakhs (Garg, 2018). However, the top speed is about 85 km/hr and can go on an average of 120 km until needs to be charged. Nevertheless, companies like Hyundai Motors Co., Maruti Suzuki India Ltd., Tata Motors Ltd., Mahindra and Mahindra Ltd., Ashok Leyland Ltd., and BYD Co., are all set to introduce their share of EVs in India soon (The workforce is well-educated and can handle customers convincing them to make purchase as they also have good command in English (" Socio cultural environment in India", 2015). Tesla will have all these in competition when it expands in India.

Industry attractiveness: The industry of EVs in India is still yet to grow. Last year (2017), the sales of EVs in India were 2000 passenger cars; however compared to 2016 the sales doubled and are supposed to increase even more in the near future (India's Electric Vehicle Market, 2018). That is the biggest car manufacturers are heading towards India after realizing this potential that India has. Customer awareness will create more sales for EV companies and also infrastructure will have to be in place for EVs to be more common in the country. More charging stations need to be built as there are only 100 charging stations in India currently (Balachandran, 2017).

Core competencies:

Tesla's biggest core competency that it can use to break into the Indian automobile market is the fact that it makes its own lithium-ion batteries in its own factory known as the Gigafactory 1. Currently it is situated in Nevada, USA. However, Tesla is planning to expand this plant to other places as well like New York and Shanghai. Tesla could built this factory in India and therefore solve India's problem of having to import batteries with high prices and import duties for its EVs as well as use these batteries for their own cars that will be manufactured in India by Tesla. Other automobile manufacturers in India like Mahindra and Mahindra are planning to team up with other businesses like LG Chem that will produce lithium-ion batteries for it. However, they have not started production yet so Tesla has the first mover's advantage on manufacturing lithium-ion batteries in India. This advantage can help Tesla gain competitive advantage by establishing a strong brand name before any of its competitors in the market. In addition, Tesla can also gain the government's trust by fulfilling their dire need of lithium-ion battery manufacturers in the country. By getting the first mover's advantage they can also win over the customers' trust, increase sales volume, get more experience compared to its future competitors, and also create switching costs which will make it harder for new entrants to beat Tesla.

Another core competency that Tesla has in the Indian automobile market is that the Indian customers want EVs with reasonable price and good quality which includes high speed, mileage, etc. The existing EV manufacturers in India are selling EVs with really low speed and mileage that is not even suitable for long rides or trips. Fortunately for Tesla, it produces cars that are

quick, efficient and safe. Though Tesla cars might be relatively expensive but it ensures quality, speed, and safety. Tesla has the technology know how that other competitor in the market does not yet. This is a comparative advantage that can help Tesla succeed and gain market share as Tesla ensures quality even though the brand is pricey, it will ensure customer satisfaction with its amazing technology.

Tesla also has the advantage of expanding in India on a large scale as Tesla has adequate financial resources needed to start a factory from scratch and go big! As for other resources, the workforce of India is well-educated and can handle customers convincing them to make purchase as they also have good command in English (" Socio cultural environment in India", 2015). Starting on a large scale will not only let Tesla win over customers and distributors and make them believe that it is here for the long run but also make other competitors planning to enter India a moment to stop and think before entering the Indian market as now they will have to live up to the standards set by Tesla.

Mode of entry

Tesla should expand in India as a wholly owned subsidiary as Tesla has the technological know-how as a competitive advantage resulting in better, far more expensive cars than any other EV manufacturers. Having a personal fully owned gigafactory that makes lithium-ion battery is an advantage that Tesla should make the best use of in India - a country that desperately needs to shift to emission free vehicles and needs battery manufacturers. Hence, Tesla should operate as a wholly owned subsidiary in India, that way

they can solely own the shares and are not obliged to share their technological know-how either . In addition, expanding as a wholly owned subsidiary will also give Tesla a tight control over its operations in multiple countries which is essential for global strategic coordination. Also Tesla can expand on a large scale as doing so will give the company further advantages. The timing of entry now is also perfect as by entering the market now, Tesla will get early-mover's advantage, and for battery production line the first-mover's advantage.

Tesla will do great business in India and will be successful due to the quality and also because Tesla and the government of India wants the same thing - a zero emission future. Thus, the government of India is likely to welcome Tesla with open arms as Tesla will be the first battery manufacturer there. Tesla will impress with speed, quality and safety and soon enough after Tesla enters India, the government will be closer to achieving its target of adopting a renewable energy revolution in India. Tesla will undoubtedly be the poster child of technology in India.