

Tesla's Journey into India

A Case Study

Team Tesla

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Tesla's Genesis: A Tale of Innovation and Perseverance

In the dawn of the 21st century, amidst concerns about climate change and the sustainability of traditional energy sources, Elon Musk embarked on a mission that would reshape the automotive industry forever. It was 2003 when Musk, a visionary entrepreneur with an inclination towards disruption, founded Tesla Motors with a bold ambition: to accelerate the world's transition to sustainable energy.

Founding Years and the Roadster Revolution

In its infancy, Tesla faced a myriad of challenges. Financial constraints loomed large, and skeptics questioned the feasibility of Musk's grand vision. However, Musk and his team pressed on, driven by their unwavering belief in the transformative power of electric vehicles.

The breakthrough came in 2008 with the launch of Tesla's first production car, the Roadster. A sleek, all-electric sports car, the Roadster shattered preconceptions about electric vehicles, proving that sustainability and performance could go hand in hand. With its impressive range and acceleration, the Roadster captured the imagination of enthusiasts worldwide, laying the foundation for Tesla's future success.

Navigating Rough Terrain: Challenges and Triumphs

Tesla's journey was far from smooth sailing. The Roadster, while groundbreaking, faced production delays and quality issues, putting a strain on the company's finances and reputation. Critics seized upon these setbacks, casting doubt on Tesla's ability to deliver on its promises.

Undeterred by adversity, Tesla persevered, learning valuable lessons from its early missteps. The company doubled down on research and development, refining its technology and manufacturing processes to deliver products of uncompromising quality. In 2012, Tesla achieved a significant milestone with the launch of the Model S, a luxury electric sedan that set new standards for performance and safety. The Model S garnered widespread acclaim, earning accolades for its innovative design and cutting-edge features.

Expanding Horizons: Global Reach and Product Diversification

As Tesla's reputation grew, so too did its ambitions. The company expanded its footprint beyond the United States, establishing a presence in Europe and Asia. In 2015, Tesla unveiled the Model X, an all-electric SUV equipped with futuristic falcon-wing doors and advanced autopilot capabilities. The Model X showcased Tesla's commitment to innovation and pushed the boundaries of automotive design.

In subsequent years, Tesla continued to diversify its product portfolio, introducing the Model 3, a more affordable electric sedan aimed at mass-market consumers. The Model 3 proved to be a game-changer, catapulting Tesla into the mainstream and solidifying its position as a leader in the electric vehicle market.

Looking Ahead: Tesla's Bold Leap into India

Fast forward to the present day, and Tesla stands at the cusp of a new frontier: India. With its burgeoning population, rapid urbanization, and growing demand for clean transportation, India presents a golden opportunity for Tesla to expand its global reach and fulfill its mission of sustainability.

However, the path forward is not without its challenges. Tesla must navigate India's complex regulatory landscape, overcome logistical hurdles, and tailor its products and pricing to suit the needs of Indian consumers. Yet, armed with its track record of innovation and resilience, Tesla is poised to overcome these obstacles and make a lasting impact on the Indian market.

Tesla's journey from humble beginnings to global dominance is a testament to the power of vision, perseverance, and innovation. As the company sets its sights on India, the next chapter of its remarkable story is poised to unfold, promising to redefine the future of mobility and shape the world for generations to come.

Electric Vehicles in India

The journey towards electrification in India began with cautious steps, as early adopters embraced electric scooters and rickshaws as alternatives to their fossil-fueled counterparts. As awareness of environmental issues grew, so too did the demand for cleaner, greener transportation solutions.

In 2010, the Indian government unveiled the National Electric Mobility Mission Plan (NEMMP), laying the groundwork for the widespread adoption of electric vehicles across the country. Subsequent years saw the introduction of incentives and subsidies to encourage the production and purchase of EVs, spurring a flurry of activity in the automotive industry.

Today, India boasts a diverse array of electric vehicles, ranging from compact hatchbacks to luxurious sedans. Domestic manufacturers like Tata Motors and Mahindra & Mahindra have led the charge, introducing popular models such as the Tata Nexon EV and the Mahindra eVerito.

In addition to homegrown offerings, international players have also entered the fray, with companies like Hyundai, MG, and Nissan launching electric vehicles tailored to the Indian market. These vehicles, equipped with features like long-range batteries and fast-charging capabilities, have resonated with Indian consumers eager to embrace the benefits of electric mobility.

Amidst this vibrant landscape, anticipation mounts for the arrival of Tesla, the trailblazer of electric vehicles. With its reputation for innovation, performance, and sustainability, Tesla's entry into India promises to disrupt the status quo and accelerate the transition to clean transportation.

Drivers for India's Electric Vehicle Revolution

Fueled by many factors, the electric vehicle (EV) market in India is experiencing unprecedented growth, reshaping the way people commute and envision the future of transportation.

Increasing Awareness of Environmental Issues

As the threat of climate change looms large, Indians are awakening to the urgent need for sustainable solutions. In this climate of heightened awareness, Tesla can find fertile ground for its mission of accelerating the world's transition to sustainable energy. By offering zero-emission electric vehicles powered by renewable energy, Tesla can resonate with environmentally conscious Indian consumers who seek to reduce their carbon footprint and contribute to a cleaner, greener future.

Government Initiatives to Promote Clean Transportation

Recognizing the importance of combating air pollution and reducing reliance on fossil fuels, the Indian government has embarked on a series of ambitious initiatives to promote the adoption of electric vehicles. From subsidies and incentives for EV buyers to investments in charging infrastructure and research and development, the government's efforts are laying the groundwork for a thriving electric mobility ecosystem. For Tesla, this presents a prime opportunity to collaborate with the Indian government and align its offerings with existing policies and incentives. By leveraging government support and participating in initiatives such as the Faster Adoption and Manufacturing of Electric Vehicles (FAME) scheme, Tesla can enhance the affordability and accessibility of its electric vehicles in the Indian market.

Rising Fuel Prices

The volatility of global oil markets and the threat of geopolitical tensions have driven fuel prices to new heights, prompting Indian consumers to seek alternatives to traditional petrol and diesel vehicles. With the cost of ownership for electric vehicles becoming increasingly competitive, many Indians are considering the switch to electric as a prudent long-term investment. Tesla, with its focus on innovation and efficiency, is well-positioned to capitalise on this trend. By offering electric vehicles with lower operating costs and minimal dependence on fossil fuels, Tesla can appeal to cost-conscious Indian consumers who are looking to save money while reducing their environmental impact.

Improvements in EV Infrastructure

A robust charging infrastructure is essential to the widespread adoption of electric vehicles, providing drivers with the confidence and convenience to travel long distances without range anxiety. In recent years, India has made significant strides in expanding its EV charging network, with public and private stakeholders investing in charging stations across the country. Tesla, renowned for its supercharger network and cutting-edge charging technology, can leverage its expertise to enhance India's EV infrastructure. By partnering with local utilities

and businesses to deploy superchargers and destination chargers in key locations, Tesla can address one of the primary barriers to EV adoption in India and differentiate itself from competitors.

Tesla's Challenges in entering India's Electric Vehicle Market

High Import Duties and Taxes

One of the biggest challenges confronting Tesla in India is the burden of high import duties and taxes on electric vehicles. As a foreign manufacturer looking to enter the Indian market, Tesla faces steep tariffs that inflate the cost of its vehicles, eroding their competitive edge against domestic rivals.

Despite efforts to localise production and assembly in India, Tesla must contend with a regulatory environment. Overcoming this barrier will require strategic partnerships, innovative business models, and advocacy for policy reforms that promote free trade and investment.

Limited Charging Infrastructure

A critical impediment to the widespread adoption of electric vehicles in India is the scarcity of charging infrastructure, particularly in rural and semi-urban areas where access to electricity is sporadic. Tesla's success hinges on its ability to address the challenge of charging infrastructure and alleviate concerns about range anxiety among Indian consumers.

While Tesla's supercharger network is renowned for its speed and reliability, scaling up this infrastructure to meet the demands of India's vast and diverse landscape presents a formidable logistical and financial challenge. Collaboration with local governments, utilities, and businesses will be essential to deploy charging stations strategically and ensure seamless integration with India's evolving energy ecosystem.

Concerns About Range Anxiety

In a country where long distances and unpredictable traffic congestion are commonplace, concerns about range anxiety loom large in the minds of prospective electric vehicle buyers. Tesla's reputation for long-range electric vehicles may mitigate some of these concerns, but educating consumers and removing misconceptions will be crucial to winning their trust and confidence.

Through targeted marketing campaigns, test drive events, and partnerships with influencers and opinion leaders, Tesla can demystify the experience of owning an electric vehicle and showcase the benefits of its technology. Moreover, investing in research and development to improve battery efficiency and range will be essential to address the unique challenges posed by India's diverse climatic conditions and driving patterns.

Competition from Domestic and International Players

Tesla faces stiff competition from both domestic automakers and international brands in India's expanding electric vehicle market. Established players like Tata Motors and Mahindra & Mahindra have a strong foothold in the Indian automotive industry and enjoy brand loyalty and trust among Indian consumers.

To differentiate itself from competitors, Tesla must leverage its strengths in technology, design, and brand identity to carve out a niche in the Indian market. By offering a compelling value proposition and superior customer experience, Tesla can win over Indian consumers and establish itself as a leader in the premium electric vehicle segment.

Regulatory Complexity and Bureaucratic Hurdles

Tesla must navigate India's complex regulatory environment and bureaucratic hurdles, which have prevented many foreign companies seeking to enter the Indian market for electric vehicles. From obtaining permits and licences to complying with local regulations and standards, Tesla faces administrative challenges that threaten to delay its entry and expansion in India.

To overcome these obstacles, Tesla must invest in building relationships with key stakeholders, including government officials, industry associations, and regulatory bodies. By demonstrating its commitment to compliance, corporate responsibility, and long-term investment in India, Tesla can earn the trust and support of policymakers and regulators and pave the way for a smoother entry into the Indian market.

Seizing the Opportunity: Why Should Tesla Enter India

With a population of over 1.3 billion people and a rapidly growing economy, India represents one of the largest and most dynamic markets in the world. The country's growing middle class, expanding urban centres, and increasing disposable income create an ever increasing demand for automobiles, particularly those that offer a clean and sustainable alternative to traditional fossil-fueled vehicles.

Moreover, India's commitment to combating climate change and reducing carbon emissions presents a compelling alignment with Tesla's mission of accelerating the transition to sustainable energy. As the Indian government sets ambitious targets for electric vehicle adoption and renewable energy deployment, Tesla stands poised to play a pivotal role in driving this transformation and shaping the future of mobility and energy in India.

Beyond the promise of market size and environmental alignment, India offers Tesla a canvas for innovation and experimentation. From leveraging India's abundant sunlight to promote solar energy solutions to harnessing the power of digital technology and data analytics to enhance the efficiency and affordability of electric vehicles, Tesla can leverage India's unique challenges and opportunities to drive breakthrough innovations and establish new benchmarks for excellence in the industry.

Furthermore, by entering India, Tesla gains access to a vast talent pool of engineers, design-

ers, and technologists who are hungry for opportunities to contribute to the next wave of technological disruption. India's thriving ecosystem of startups, research institutions, and academic centres provides Tesla with a rich tapestry of partnerships and collaborations to tap into, fostering a culture of innovation and entrepreneurship that mirrors Tesla's own vision.

Therefore, India represents not just a market for Tesla, but also presents an opportunity for realising its vision of a sustainable future. By entering India, Tesla can be the driver of economic growth, create jobs, and empower millions of Indians to embrace a cleaner, greener way of life. In doing so, Tesla will not only fulfil its mission of accelerating the world's transition to sustainable energy but also leave a legacy of impact and inspiration for generations to come.

Forging a Path Ahead: Tesla's Strategy for India

As Tesla embarks on its journey into the markets of India with a vision of accelerating the transition to sustainable transportation, Tesla's strategy for India must be bold, adaptable, and rooted in a deep understanding of the local landscape.

Central to Tesla's strategy is localization. By establishing manufacturing facilities within India's borders, Tesla can circumvent the barriers of high import duties and taxes, making its products more accessible and affordable to Indian consumers. Moreover, localization enables Tesla to create jobs, stimulate economic growth, and forge closer ties with the Indian community, laying the foundation for long-term success and sustainability.

Tesla must invest in bolstering India's charging infrastructure. Recognizing the importance of addressing range anxiety and facilitating widespread adoption of electric vehicles, Tesla's investment in charging stations and networks across the country is very important. By partnering with local governments, utilities, and businesses, Tesla can leverage existing infrastructure and resources to deploy charging solutions that meet the needs of Indian consumers.

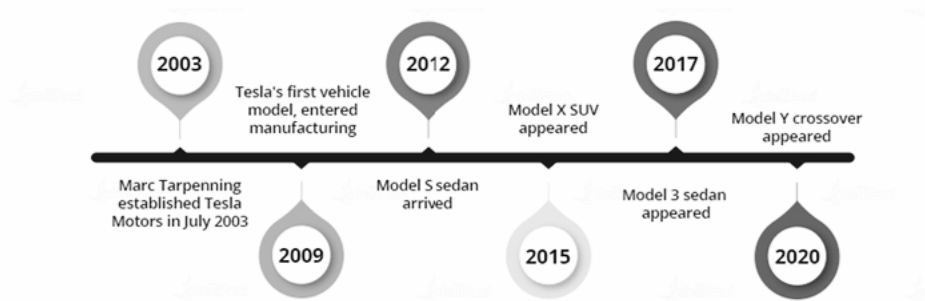
The cultivation of strategic partnerships with local stakeholders is also very important for Tesla's success in India. From government officials and regulators to industry associations and community leaders, Tesla must engage and collaborate to build trust and goodwill among the key stakeholders. Tesla can thus leverage the collective expertise and resources of its partners to overcome obstacles and seize opportunities in the Indian market.

At the heart of Tesla's strategy lies the art of pricing and costing. Balancing affordability with quality, Tesla must carefully calibrate its pricing strategy to remain competitive in the price-sensitive Indian market while upholding its commitment to innovation and excellence. By offering a compelling value proposition that resonates with Indian consumers' aspirations and preferences, Tesla can differentiate itself from competitors and capture market share in India's electric vehicle segment. Therefore, central to Tesla's strategy for India are its affordable models, the Model 3 and Model Y, which have garnered widespread acclaim for their sleek design, advanced technology, and impressive range. These vehicles, tailored to the needs of urban commuters and families alike, are perfect in the rapidly urbanising India.

Tesla's ambitions in India extend beyond electric vehicles alone. With its expertise in renewable energy and energy storage solutions, Tesla aims to promote its solar products and battery technologies. From rooftop solar panels to grid-scale energy storage systems, Tesla's offerings have the potential to revolutionise India's energy landscape, providing clean, reliable power to homes, businesses, and communities across the country.

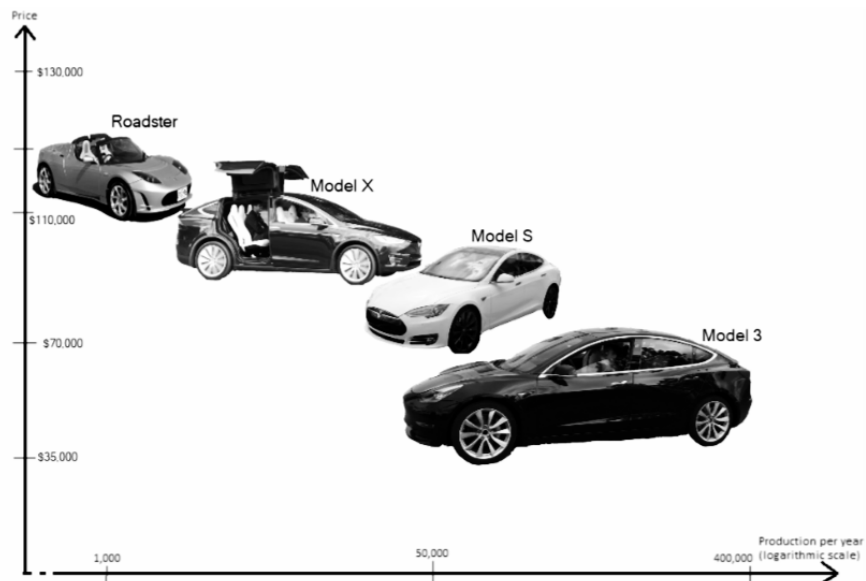
With building needs and anticipation for electric vehicles in India, Tesla's arrival is something the country is eagerly awaiting. What remains to be seen is how Tesla will leave its mark on the world's most populated country and what new and exciting innovations we will experience on the way!

Exhibit 1: History of Tesla Cars



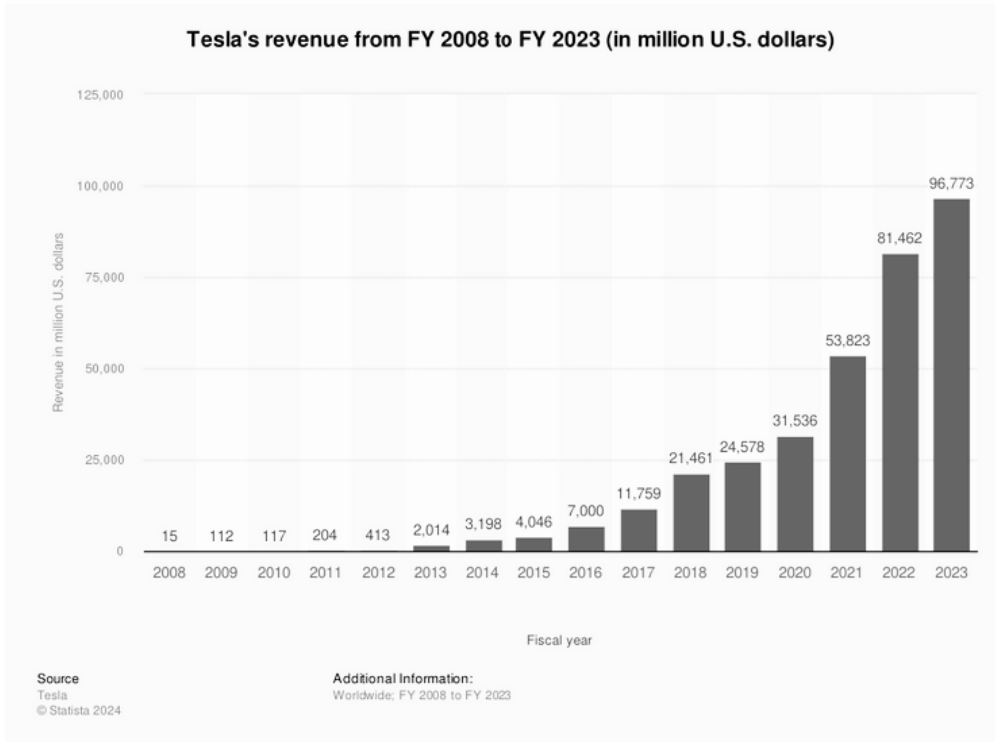
Source: <https://intellipa.com/blog/wp-content/uploads/2022/09/image-158.png>

Exhibit 2: Price vs Production Volume



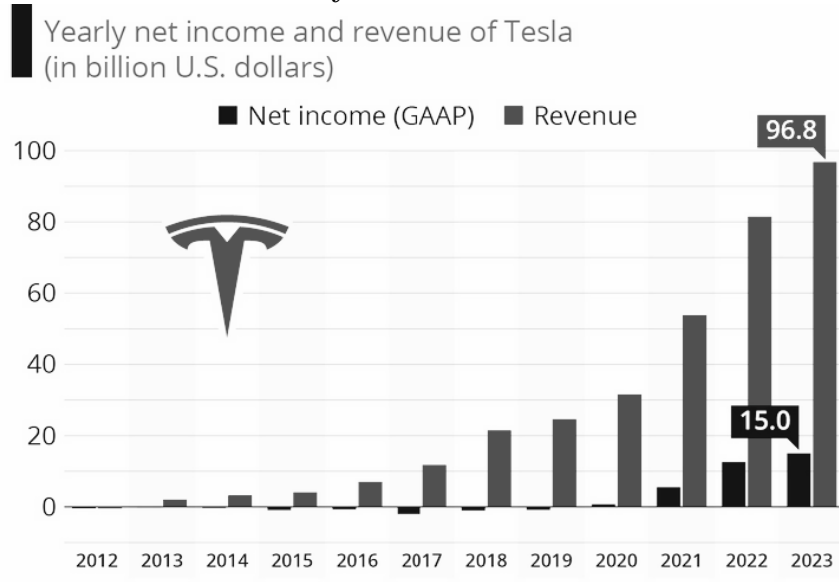
Source: https://upload.wikimedia.org/wikipedia/commons/thumb/2/26/Tesla_cars%2C_price_and_production3.png/640px-Tesla_cars%2C_price_and_production3.png

Exhibit 3: Revenue



Source: <https://encrypted-tbn0.gstatic.com/images?q=tbn:ANd9GcQbgcAHfellfvycgak4U1EfhvXt9hmquf6yK80JGIq0Gw&s>

Exhibit 4: Yearly Net Income and Revenue

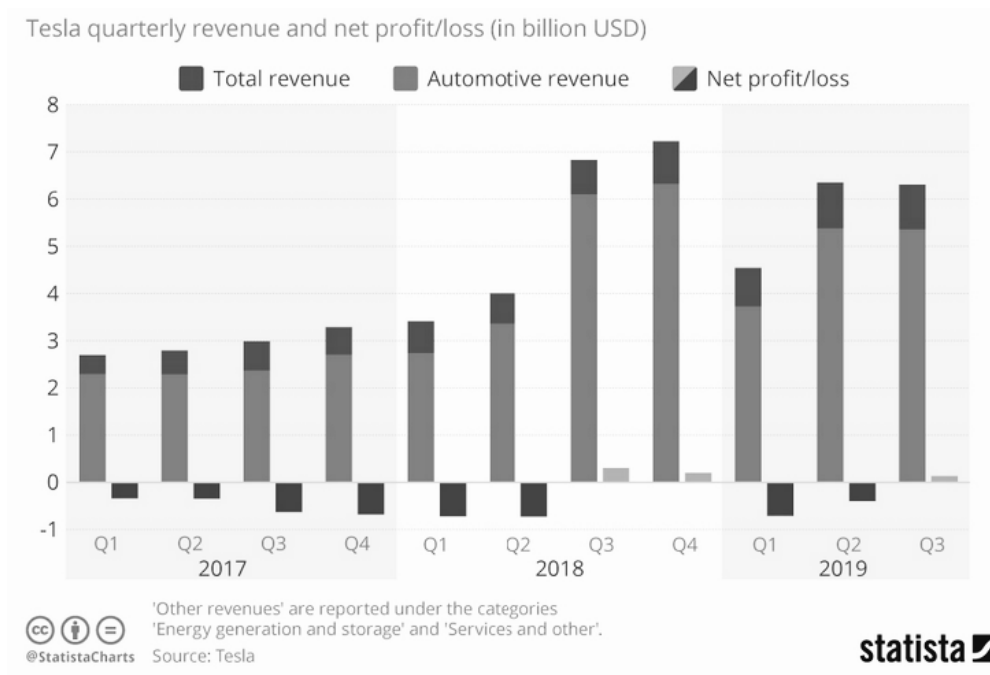


Source: Tesla



Source: <https://cdn.statcdn.com/Infographic/images/normal/26705.jpeg>

Exhibit 5: Quaterly Revenue and Net Profit/Loss



Source: <https://cdn.statcdn.com/Infographic/images/normal/9245.jpeg>

Table 1: Tesla Annual Operating Expenses (Millions of US \$)

Year	Operating Expenses (Millions of US \$)
2023	\$87,882
2022	\$67,806
2021	\$47,300
2020	\$29,542
2019	\$24,647
2018	\$21,849
2017	\$13,391
2016	\$7,667
2015	\$4,763
2014	\$3,385
2013	\$2,075
2012	\$808
2011	\$456
2010	\$264
2009	\$164

Source: https://tracxn.com/d/companies/tesla/_z7iBA0j3piGy5SjdQFAYgeC06G3Q2ntcoN1vYCcRsVg

Table 2: Tesla Price and Cost

Model	Starting Price	Average Manufacturing Cost
Model 3	\$45,000	\$36,000
Model Y	\$60,000	\$36,000
Model S	\$89,500	\$36,000
Model X	\$100,000	\$36,000

Source: <https://www.usatoday.com/story/money/cars/2023/04/19/tesla-price-cuts-continue/11695596002/>

Table 3: Tesla Funding

Date	Round Name	Amount
Feb 05, 2024	Post IPO	\$11.0M
Sep 04, 2023	Grant (prize...)	Undisclosed
Sep 01, 2020	Post IPO	\$5.0B
Jan 11, 2019	Post IPO	\$1.0B
Nov 19, 2018	Post IPO	\$20.0M
Mar 28, 2017	Post IPO	\$1.8B
May 20, 2016	Post IPO	\$1.5B
Jun 01, 2015	Post IPO	Undisclosed
Jun 13, 2013	Post IPO	\$55.0M
Oct 10, 2012	Grant (prize...)	\$10.0M
Jun 09, 2011	Post IPO	\$59.1M
Nov 17, 2010	Post IPO	\$30.0M
Apr 20, 2010	Grant (prize)	\$561.0K
Sep 15, 2009	Series F	\$82.5M
Jun 23, 2009	Convention...	\$465.0M
May 19, 2009	Series E	\$136.0M
Nov 02, 2008	Series D	\$40.0M
Jun 01, 2008	Convention...	\$40.2M
Feb 20, 2008	Series D	\$40.1M
May 11, 2007	Series D	\$45.0M
Feb 05, 2024	Post IPO	\$11.0M
Sep 04, 2023	Grant (prize...)	Undisclosed
Sep 01, 2020	Post IPO	\$5.0B
Jan 11, 2019	Post IPO	-\$1.0B
Nov 19, 2018	Post IPO	-\$20.0M
Mar 28, 2017	Post IPO	-\$1.8B
May 20, 2016	Post IPO	-\$1.5B
Jun 01, 2015	Post IPO	Undisclosed
Jun 13, 2013	Post IPO	\$55.0M
Oct 10, 2012	Grant (prize...)	\$10.0M
Jun 09, 2011	Post IPO	\$59.1M
Nov 17, 2010	Post IPO	\$30.0M
Apr 20, 2010	Grant (prize...)	\$561K

Source: <https://www.macrotrends.net/stocks/charts/TSLA/tesla/operating-expenses#:~:text=Tesla%20annual%20operating%20expenses%20for,a%2060.11%25%20increase%20from%202020.>

Table 4: Tesla Balance Sheet

All values are in USD Millions	2023	2022	2021	2020	2019
Sales/Revenue	96,773	81,462	53,823	31,536	24,578
Sales Growth	18.80%	51.35%	70.67%	28.31%	-
Cost of Goods Sold (COGS) incl. D&A	79,113	-	-	-	20,509
COGS excluding D&A	74,446	57,066	37,306	22,584	18,355
Depreciation & Amortization Expense	4,667	3,543	2,911	2,322	2,154
Depreciation	3,565	2,655	1,910	-	-
Amortization of Intangibles	1,102	888	1,001	-	-
COGS Growth	0.00%	-	-	0.00%	-
Gross Income	17,660	20,853	13,606	6,630	4,069
Gross Income Growth	-15.31%	53.26%	105.22%	62.94%	-
Gross Profit Margin	18.25%	-	-	-	-
SG&A Expense	8,769	-	-	-	3,989
Research & Development	3,969	3,075	2,593	1,491	1,343
Other SG&A	4,800	3,946	4,517	3,145	2,646
SGA Growth	0.00%	-	-	0.00%	-
EBIT	8,891	-	-	-	-
Unusual Expense	4	-	-	-	189
Non Operating Income/Expense	176	(69)	122	(86)	85
Non-Operating Interest Income	1,066	297	56	30	44
Interest Expense	156	-	-	-	685
Interest Expense Growth	0.00%	-	-	0.00%	-
Gross Interest Expense	156	191	424	796	716
Interest Capitalized	-	-	53	48	31
Pretax Income	9,973	13,719	6,343	1,154	(665)
Pretax Income Growth	-27.31%	116.29%	449.65%	273.53%	-
Pretax Margin	10.31%	-	-	-	-
Income Tax	(5,001)	1,132	699	292	110
Income Tax - Current Domestic	105	62	9	4	5
Income Tax - Current Foreign	1,243	1,266	839	248	86
Income Tax - Deferred Domestic	(5,899)	27	-	-	(4)
Income Tax - Deferred Foreign	(450)	(223)	(149)	40	23
Other After Tax Income (Expense)	2	27	5	(31)	(8)
Consolidated Net Income	14,976	12,614	5,649	831	(783)
Minority Interest Expense	(23)	31	125	141	87
Net Income	14,999	-	-	-	(870)
Net Income Growth	0.00%	-	-	0.00%	-
Net Margin	15.50%	-	-	-	-
Net Income After Extraordinaries	14,999	0	0	0	(870)
Net Income Available to Common	14,999	-	-	-	(870)
EPS (Basic)	4.30	3.62	1.63	0.21	(0.33)
EPS (Basic) Growth	18.85%	122.04%	667.84%	164.97%	-
Basic Shares Outstanding	3,174	3,130	2,958	2,799	2,661
EPS (Diluted)	4.30	3.62	1.63	0.21	(0.33)
EPS (Diluted) Growth	18.85%	122.04%	667.96%	164.96%	-
Diluted Shares Outstanding	3,485	3,475	3,387	3,249	2,661
EBITDA	13,558	-	-	-	2,234
EBITDA Growth	0.00%	-	-	0.00%	-
EBITDA Margin	14.01%	-	-	-	-
EBIT	8,891	-	-	-	-

Source: <https://www.wsj.com/market-data/quotes/TSLA/financials/annual/balance-sheet>

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