



#### Case Study:

# Tesla

Burn rubber not gasoline!

To accelerate the advent of sustainable transport and electric technology.

<u>PDF</u>

**Reference** 

Special Topics in Business Ethics Professor Gloria Chen, PhD Student Tse-Wen Hong 洪哲文 December 12, 2004

## **Business Ethical Issues**

Criticism	Description	Source	Catergory
	Tesla faced multiple fines for air quality violations, including \$1 million in		
Air Quality Violations	2021 and \$140,000 in 2018 for emissions breaches.	<b>Ethical Consumer</b>	Environmental
	Tesla faces criticism and lawsuits for alleged involvement in child labor		
Child Labor Allegations	in Congo's cobalt mining industry.	Freedom United	Labor
	Tesla has been criticized for sourcing materials from Xinjiang, China,		
Uyghur Region Concerns	due to reports of forced labor practices.	<b>Ethical Consumer</b>	Politics
High Executive	Tesla executives, especially Elon Musk, face criticism for excessively		
Compensation	high compensation relative to the company's performance and ethics.	Ethical Consumer	Shareholders
	Tesla faces ethical concerns for allegedly using tax avoidance strategies		
Tax Avoidance Strategies	through subsidiaries in various tax havens.	Ethical Consumer	Goverment
0	O.W.		
Greenwashing	Critics accuse Tesla of greenwashing by exaggerating its environmental		
Accusations	impact, undermining the credibility of its sustainability claims.	<u>GW Blogs</u>	Environmental
	Tesla faces allegations of retaliating against employees who report		
	unethical practices, raising concerns about workplace culture and		
Whistleblower Retaliation	employee rights.	Harbert College	Employee
Autopilot Safety	Tesla's Autopilot feature faces scrutiny over accidents, raising ethical		
Concerns	concerns about consumer safety and transparency in marketing.	arXiv	Product

## Too young to have enough time to make even bigger mistakes



Company	Establis	Website	Major Business Ethics-Related Events	
Enron	1985	Enron	Accounting fraud leading to bankruptcy in 2001	
Ben & Jerry's	1978	benjerry.com	Controversies over ingredient sourcing and environmental impact	
TikTok	2016	tiktok.com	Data privacy concerns and content moderation issues	
Trafigura	1993	trafigura.com	2006 Ivory Coast toxic waste dump incident	
Sackler Family	1892	Purdue Pharma	Role in the opioid crisis through Purdue Pharma	
Facebook	2004	facebook.com	Cambridge Analytica data scandal in 2018	
Johnson &				
Johnson	1886	<u>jnj.com</u>	1982 Tylenol poisonings; recent talc powder lawsuits	
Nestlé	1867	nestle.com	Infant formula marketing controversy in developing countries	
Volkswagen	1937	volkswagen.com	2015 emissions cheating scandal ("Dieselgate")	
Tesla	2003	tesla.com	Allegations of labor violations and autopilot safety concerns	
Philip Morris	1847	pmi.com	Lawsuits over misleading marketing of tobacco products	
Norfolk Southern	1982	nscorp.com	Environmental violations and train derailments	
NIKE	1964	nike.com	Allegations of sweatshop labor practices in the 1990s	
BP	1909	<u>bp.com</u>	2010 Deepwater Horizon oil spill	
Monsanto	1901	<u>Minsanto</u>	Controversies over GMOs and Roundup herbicide litigation	
Jeffrey Epstein	1982	Jeffery Epstein	Convicted of sex trafficking minors; associated financial crimes	

## Wrong or Decline model



Era	Characteristics	Challenges	Relationship between Fame and Profit
Era of Pioneers	<ul> <li>In a difficult environment,</li> <li>requiring struggle and innovation.</li> <li>Strong goal-driven, highly</li> <li>efficient, extraordinary leadership.</li> </ul>	<ul> <li>- Lack of resources, high external pressure.</li> <li>- Emphasis on individual heroism, neglecting long-term stable infrastructure.</li> </ul>	<ul><li>Fame is often a byproduct, profit accumulation is the core goal.</li><li>Profit realization becomes the main standard for changing the status quo.</li></ul>
Second Generation: Preservation and Expansion	<ul> <li>Growing in a stable environment, mastering more resources.</li> <li>Strong resource integration and optimization ability, able to expand the foundation.</li> </ul>	<ul> <li>Decline in innovation ability, reliance on existing models, possibly lacking long-term vision.</li> <li>Intensified power struggles within the family or organization.</li> </ul>	<ul> <li>Still profit-centric, but gradually pursuing fame, such as through charity or brand influence.</li> <li>Enhancement of fame strengthens profit stability.</li> </ul>
Third and the rest generations: Decline	<ul> <li>Growing up in a comfortable environment, lacking the spirit of struggle and management ability.</li> <li>Family or business faces resource dilution and internal conflicts.</li> </ul>	<ul> <li>Lack of entrepreneurial mindset, resource dilution, difficult to cope with market changes.</li> <li>Internal division and disorderly management may lead to rapid decline.</li> </ul>	<ul> <li>Slower profit accumulation, fame becomes the main pursuit but lacks practical value support.</li> <li>Overemphasis on fame may weaken economic strength.</li> </ul>

## At the beginning of the 21st century, no one knew how long it would take



Year	Total	Electric	% of Electric
2000	58	0.02	0.03
2005	66	0.1	0.15
2010	78	0.5	0.64
2015	90	0.6	0.67
2016	95	8.0	0.84
2017	97.5	1.2	1.23
2018	95.6	2	2.09
2019	90.3	2.2	2.43
2020	77.6	3.1	3.99
2021	80.1	6.5	8.12
2022	84.8	~10	~11.76
2023	~94	~14	~14.89

Global automobile production, electric vehicle production and proportion of electric vehicles from 2000 to 2023

- Unit: 1,000,000 vehicles
- Data is sourced from the International Organization of Motor Vehicle Manufacturers (OICA) and Statista.
- Electric vehicle production numbers in earlier years are estimates due to less comprehensive data collection.
- Increase from 2021 Onwards: Reflects growing consumer demand, advancements in battery technology, and increased investment from automakers.

## History

In June 2014, Tesla's CEO Elon Musk announced the company would open all its patents to accelerate the electric vehicle (EV) industry.

This move aimed to boost EV adoption, which was under 1% of the global market.

The impact included advancing EV technology, speeding up infrastructure development, and enhancing Tesla's market position.

By 2024, this strategy significantly increased competition, technological progress, and infrastructure improvements, with Tesla remaining a market leader.

Year	Important Issue	Employees	Vehicles Sold
	Founding of Tesla Motors by Martin		
2003	Eberhard and Marc Tarpenning	0	0
	Elon Musk joins as Chairman and		
2004	largest shareholder	10	0
2008	Launch of the Tesla Roadste	200	500
2012	Introduction of Model S	3,000	2,650
	Model S becomes the best-selling		
2013	electric car	5,859	22,442
2014	Launch of <b>Model X</b>	10,161	31,655
2015	Continued growth in production	13,058	50,517
2016	Expansion of Gigafactory in Nevada	17,782	76,243
2017	Launch of Model 3	37,543	103,091
2018	Record sales with Model 3	48,817	245,491
2019	Increased production capacity	48,016	367,656
2020	Record deliveries amid pandemic	70,757	499,535
2021	Model Y and Cybertruck launch,	99,290	936,222
	Introduction of new battery		
2022	technology	127,855	1,313,851
2023*	Continued innovation and growth	TBD	~1,324,074

#### All the Tesla Models





2008-Roadster



2017-Model 3



2012-Model S



2021-Model Y



2014-Model X



2021-Cybertruck

## **Production Capacity**



		Start	Estimated Annual	
Plant Name	Location	Year	Capacity	<b>Primary Products</b>
	Fremont,			Model S, Model 3, Model
Fremont Factory	California, USA	2010	650,000 vehicles	X, Model Y
	Storey County,			Battery packs, energy
Gigafactory Nevada	Nevada, USA	2016	35 GWh of batteries	storage products
Gigafactory New	Buffalo, New York,		1 GW of solar	
York	USA	2017	products	Solar panels, solar roofs
Gigafactory				
Shanghai	Shanghai, China	2019	950,000 vehicles	Model 3, Model Y
Gigafactory	Grünheide,			
Berlin-Brandenburg	Germany	2022	500,000 vehicles	Model Y
	Austin, Texas,			
Gigafactory Texas	USA	2022	500,000 vehicles	Model Y, Cybertruck
Total			2,600,000 vehicles	

#### Introduction



Tesla wasn't just a car company, it was revolution. And as Tesla's reputation grew, so did its impact. Ohter car companies took notice. They watched Tesla's success, saw the excitement, and realized they'd have to change too.

- Overview of Tesla as an all-electric vehicle and energy generation company.
- Founded in 2003 by Martin Eberhard and Marc Tarpenning; named after Nikola Tesla.
- Focus on sustainable energy and corporate social responsibility, despite facing criticism and ethical challenges.

### Tesla's Master Plan for Sustainability



- Open Source Patents:
   To encourage EV
   development globally.
- Energy Solutions:
   Development of
   Powerwall, Powerpack,
   and Solar Roof
   products.
- Microgrid Projects: Successful implementation in Ta'u and South Australia.







High Density Battery: Tesla's Model 3 batteries have 260 Wh/kg energy density; new tech reaches 450 Wh/kg, boosting performance and efficiency.

Vehicle-to-Grid (V2G): Tesla's V2G tech lets Model 3 return energy to the grid, balancing demand and supply, and supporting grid stability.

Smart Charging System: Tesla's smart charging system optimizes costs by scheduling off-peak charging and adapting to driver habits, enhancing efficiency and user experience.

## Corporate Social Responsibility at Tesla



- Environmental Impact: Significant reduction in greenhouse gas emissions through EV sales and solar energy generation.
- Consumer Safety Initiatives: Advanced safety features in vehicles and proactive measures to enhance safety perceptions.
- Employee Focus: Emphasis on creating a diverse work environment and responsible sourcing of materials.

This summary encapsulates Tesla's evolution from a luxury EV manufacturer to a leader in sustainable energy solutions while addressing its commitment to corporate social responsibility.