Consumer Discretionary – Automobile Manufacturing

TESLA, INC. (TSLA)

November 1, 2024

Investment Thesis	
We recommend a SELL rating for Tesla with a target price of \$196, for a downside of -21.5%. Slowing demand, intensifying competition, and price cuts will constrain growth and margins through 2025. Tesla's visions for an autonomous future have significant upside, but Musk's various commitments will make it difficult to deliver on these promises.	Henry Henry Relativ Price D Curren
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Drivers of Thesis

- Demand for EVs and Tesla is slowing, resulting in a -1.1% decline in delivery units in 2024 for the first time in the company's history.
- Elon Musk's numerous responsibilities will make it challenging to manage and deliver on Tesla's ambitious projects.
- Intensifying competition, especially from Chinese manufacturers (BYD), will force price cuts of -2-4% through 2025 and constrain international growth.

Risks to Thesis

- Industry-leading vehicle autonomy technology, with potential for full selfdriving (FSD) commercialization in 2030, will drive revenues at a 13% CAGR.
- Leading market share within its energy generation and storage segment, coupled with rising industry demand, will provide reliable diversification.
- New vehicle models (e.g. Model 2, Robotaxi) are poised to help Tesla maintain at least a 20% EV market share.
- Alternative projects such as Optimus robots and gigacasting provide opportunities for significant economies of scale, raising gross margins above 30%.

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Earnings Estimates							6
Year	2021	2022	2023	2024E	2025E	2026E	4
EPS	\$1.87	\$4.01	\$4.72	\$1.99	\$2.82	\$3.62	2
HF est.				\$1.96	\$2.73	\$3.66	
Growth	624.3%	115.0%	17.8%	-58.5%	39.2%	34.3%	



Stock Rating	SELL
Target Price	\$196
Henry Fund DCF	\$196
Henry Fund DDM	\$104
Relative Multiple	\$29
Price Data	
Current Price	\$250
52wk Range	\$139 – 274
Consensus 1yr Target	\$233
Key Statistics	
Market Cap (B)	\$802.0
Shares Outstanding (M)	3,195
Institutional Ownership	46.2%
Beta	1.35
Dividend Yield	0.0%
Est. 5yr Revenue Growth	13.2%
Price/Earnings (TTM)	62.0
Price/Earnings (FY1)	127.6
Price/Sales (TTM)	8.1
PEG (FY1)	19.6
Profitability	
Gross Margin	23.1%
Profit Margin	15.5%
Return on Assets (TTM)	9.4%
Return on Equity (TTM)	32.7%



Tesla is the world's most valuable automobile manufacturer and produces high-performing battery electric vehicles (BEVs). It currently offers 5 vehicles – the Model S and 3 (sedans), Model X and Y (SUVs), and Cybertruck (pickup truck) – and primarily sells its vehicles in the United States, China, and Europe. The company has the largest supercharger network in the United States and offers an industry-leading line of solar panels, battery packs, and energy storage products. The company was founded in 2003 and is headquartered in Austin, Texas.

Important disclosures appear on the last page of this report.



COMPANY DESCRIPTION

Tesla, Incorporated ("Tesla", "the company") is a manufacturer and distributor of high-performing electric vehicles. Founded in 2003 and currently based in Austin, Texas, the company also offers energy generation and storage systems, and services related to these products.¹ Tesla primarily sells its products direct-to-consumer (DTC) and has a network of 823 showrooms/service facilities around the world. As of 2Q 2024, Tesla holds a 49% market share of the battery electric vehicle (BEV) in the United States and is the most valuable car brand in the world by a factor of 2.3x.² While the United States is the company's primary market, over 50% of its revenues are generated overseas, primarily in China and Europe. Dating back to 2019, the Chinese market has expanded rapidly (revenue CAGR 49%), growing from 14% of revenues in 2019.¹

2023 Geographic Revenues (\$96.8B)



Source: 2023 TSLA 10-K

Operationally, most of the company's revenues come from its automotive segment, accounting for 85.2% of revenues in 2023. Tesla offers 5 vehicles on the market with varying styles, ranges, and price points.³ Beginning in late 2022, Tesla began cutting prices by \$2,000-5,000 on each of its models due to increasing competition domestically and abroad and is represented at the lower end of price ranges in the table in the second column.

For reporting purposes, Tesla consolidates its production and delivery metrics by price point, merging the Model 3 and Y (Model 3/Y) and the Model S and X (Model S/X) vehicles. Since Cybertruck was released in November 2023, the company has not formally released any manufacturing numbers. Further, the company is currently developing 3 new vehicles – the Model 2, the Roadster, and the Robotaxi – that are expected to enter the market



in Q2 2025, 1H 2026, and 2H 2026, respectively. In the last fiscal year, Tesla delivered 1,740,000 vehicles, of which 96% were the Model 3 or Y.

	Description	Range (mi)	Price (\$)	Release Date
Model S	Mid-size luxury sedan	402	70-90k	2012
Model 3	Compact sedan	363	40-55k	2017
Model X	Luxury SUV	335	78-100k	2015
Model Y	Compact SUV	337	43-60k	2019
Cybertruck	Pickup truck	310	100-120k	2023

Source: TSLA Model Comparison

Despite having exponential growth over the last decade, production and delivery numbers are expected to fall in 2024 due to increased competition and lower-priced alternatives.⁴ The Henry Fund (HF) agrees with this sentiment and expects Tesla to miss 2024 delivery numbers by roughly 2,800 units driven by lower aggregate demand and newly reinstated European tariffs.



Source: TSLA 10-Ks and Henry Fund Estimates

Due to having a capital-intensive business model, Tesla's margins are relatively tight, with gross margins of around 25% and net margins of 12%.⁴ Over the last 18 months, gross margin compression has been a major issue for the company, driven by higher operating costs associated with its artificial intelligence (AI) models, weakening demand, price cuts for its electric vehicles, and elevated cost inflation. Most of the company's production costs are associated with its automotive segment, which rose by nine percentage points to 80.6% of automotive revenues in 2023. The HF anticipates this to continue, driving



automotive COGS up to 81.5% of automotive revenues in 2024, lowering automotive gross margins to 15.6% from 17.7%. For reference, traditional automakers earn a gross margin of 10-12% on gas-powered vehicles.⁴ The following chart shows the company's consolidated profitability from 2021-2026E.



Source: TSLA 10-Ks and Henry Fund Estimates

Revenue Decomposition

The following pie chart shows the distribution of Tesla's three operating segments – Automotive, Energy Generation and Storage (EG&S), and Services and Other (S&O) – from the last fiscal year. Dating back to 2018, roughly 85% of revenues have consistently been sourced from its Automotive segment.





Source: 2023 TSLA 10-K

Automotive

The company's largest operating segment, automotive, includes three components – automotive sales (95%), automotive regulatory credits (2%), and automotive leasing (3%). Automotive sales refer to the sale of any Tesla-branded vehicle, domestically and abroad, while



automotive leasing is revenue earned from its direct operating leasing program with customers.¹ Automotive regulatory credits are tradable credits related to zeroemission vehicles, greenhouse gases, and clean energy at the national and state levels. For example, for each sale of qualified vehicles, Tesla receives a \$7,500 tax credit from the federal government as part of the Inflation Reduction Act (IRA) of 2022.¹ This credit 100% collected by Tesla, which is ultimately passed onto consumers in the form of reduced purchase prices.

As Tesla has continued to bring new vehicles to the market, its automotive sales component has seen the most rapid growth, expanding from \$20.0 billion in 2019 to \$78.5 billion in 2024 (41% CAGR). Its delivery numbers have followed a similar path, growing from 367,000 to 1,809,000 units in the same time frame (49% CAGR).⁴ Due to the relationship between these line items, automotive revenues were forecasted using total deliveries and unit revenue to reach an average selling price. For example, in 2023, the average selling price for Tesla vehicles in 2023 was \$43,409 (\$78,509,000,000 / 1,808,581 deliveries = \$43,409/vehicle). Total deliveries were broken down into Model 3/Y, Model S/X, and Other, which includes the development of new vehicles and technologies such as Cybertruck, Robotaxi, and full self-driving (FSD). Production numbers were also forecasted as a proxy for deliveries but did not have an impact on annual revenues. The following chart shows the company's average vehicle selling price, automotive sales (\$mm), and total automotive revenues (\$mm) from 2021-2026E.



TSLA Automotive Sales

The HF believes the average selling price for vehicles will continue to fall in the short term as more low-cost competitors continue to enter the market. Coupled with weakened demand, automotive sales are forecasted to fall

Source: TSLA 10-Ks and Henry Fund Estimates



by -4.5% in 2024. While the team expects revenues to rebound in 2025, deliveries are still expected to fall short of analysts' expectations as the company struggles to unveil new vehicles to the market. Automotive regulatory credits are forecasted to follow analyst consensus, while automotive leasing is expected to follow automotive sales growth, with some heightened volatility. Both forecasts were derived using a YOY growth rate.

Energy Generation and Storage

The energy generation and storage segment accounted for 6.2% of revenues in 2023 and includes the sale and lease of energy generation and storage products to residential, commercial, and industrial customers. This segment also includes battery production for its vehicles, including the 4680 battery, which serves as a key value proposition against its competitors by allowing its vehicles to travel further distances, accelerate faster, manage heat more efficiently, and reduce the cost per kilowatt-hour (kWh) by 50%.^{5,6}

Products offered for consumption include solar panels, solar roofs, Powerwall (an energy storage unit that can power devices in an individual's home or business), and Megapacks (the industrial-grade equivalent to Powerwall).⁷ Powerwall is often paired with solar panels and solar roofs to store extra energy that can be used in times of crisis or when additional power is needed. Powerwall costs \$11,500-15,000 and has 600,000 units installed globally. While more expensive than the industry average, Powerwall is the most cost-effective energy storage unit on the market, with very little maintenance, adaptive power usage, and a 30% tax credit from the government. Megapacks are equally popular, with a single unit storing over 3.9 megawatt-hours (MWh) of energy, enough to power 3,600 homes for one hour.⁸ In general, residential and commercial customers will tend to purchase these products (as opposed to leasing) to qualify for tax credits, a 20-year warranty, and improved long-term savings.

As of December 2023, Tesla owned a 47% market share in residential solar-plus-storage battery products in the United States, commanding a 30-point lead over the nearest competitor.⁷ In 2023, energy storage deployments from Powerwall and Megapacks topped 14,724 MWh, up 125% from 2022. Solar deployments (panels, roofs), however, dropped 36% to 223 megawatts (MW) despite the broader United States increasing by 33 gigawatts (GW).⁸ While Tesla accredited the drop to higher interest



rates, the company laid off several of its solar installers and canceled numerous solar roof installations. The company has said they plan to use more third-party installers instead.

The HF views the company's energy storage products and battery production as a reliable source of diversification to its revenue stream, maintaining its position as a market leader. While Tesla experienced a slowdown in solar installations, industry trends remain favorable, growing at 25% per year on average with federal tax credits helping lower installation costs.9 Due to Hurricane Helene and Hurricane Milton's devastating impact on the southeast United States, the HF believes installations of solar panels will slow in Q4 2024, causing the company to underperform consensus by -3%. However, the team is bullish over the long term, beating expectations due to a strong rebound in battery storage and the production of new vehicles. Coupled with the company's five manufacturing facilities (three of which are gigafactories), the team is confident in the company's ability to scale production. The following chart shows the energy revenues from 2021-2026E.



Source: TSLA 10-Ks and Henry Fund Estimates

Services and Other

The Services and Other segment is a diverse collection of revenue sources, primarily stemming from the sale of used vehicles, vehicle repairs, solar panel and energy storage maintenance, paid Supercharging, and retail merchandise. Dating back to 2019, revenues have jumped from \$2.2 billion to \$8.3 billion (CAGR 39%) driven by increased demand for vehicles, which have resulted in higher used car sales and additional repairs.⁴ Due to its similarity to the automotive revenues segment, the HF predicts its growth



will follow a similar pattern, but outperform consensus due to increased maintenance on vehicles and energy storage products, growing Supercharger revenues, and sales of used vehicles. Recalls remain a challenge to gross margins, notably with Cybertruck, which faced its fifth recall of the year in October 2024.¹¹ Consequently, margin expansion in this segment is expected to rely more heavily on revenue growth than cost management. The chart below illustrates service and other revenue from 2021-2026E.





Additional Company Analysis

Market Share

As one of the first battery electric vehicle (BEV) brands, Tesla has held the top market share for deliveries for several years. However, as a majority of traditional automakers have started offering their own BEV's, Tesla's market share has shrunk, especially with the availability of lower-cost options. In the first half of 2024, Tesla accounted for roughly 50% of BEV's sold in the United States, down from 60% a year prior. Some other key statistics regarding the company's market share include:

- #1 worldwide market share of BEV's in 2023 (19.9%)
- 4.2% market share of all vehicles in the United States in 2023 (vs. 3.8% in 2022)
- Most valuable car company in the world by market capitalization (\$802.0bn)
- Largest global EV charging network in the world (60,000+ superchargers)
- #1 market share of residential solar-plus-storage battery products in the US (47%)



 #1 worldwide market share in battery energy storage systems (15%)

Source: Statista, Visual Capitalist, Wood Mackenzie



Tesla's market share outnumberes all other

carmakers combined (\$bn)





Source: CNN

The Henry Fund predicts the battle between Tesla and BYD will continue in the short term. BYD's strongest competitive advantages over Tesla include its lower prices (\$9,700 vs. \$37,000 for the cheapest vehicle offered in China), larger international supply chain (production

Source: TSLA 10-Ks and Henry Fund Estimates



facilities in 6 countries vs. 3), and a first-mover advantage in a larger domestic market (523 million licensed Chinese drivers vs. 233 million licensed US drivers).¹³ The team predicts BYD will likely overtake Tesla again as the top BEV producer in early 2025 unless Tesla can offer their new, low-price Model 2 ahead of schedule. Further, BYD could enter the US market as early as 2028, increasing its global market share. The team considers this scenario unlikely, however, given the United States' persistence of strict import tariffs on Chinese products.

Recent stimulus packages to Chinese residents will help spur EV demand in the short term, and with wavering consumer confidence in the United States, the team predicts annual EV deliveries for Tesla will decrease by -1.1% in 2024. Even if BYD does enter the US market, the team is confident Tesla will maintain at least a 20% market share for BEVs in the long run as persistently high tariffs will force BYD to remain focused on the Chinese and European markets.

New Vehicles, FSD, and Other Projects

Tesla is known for pushing the limits of technology with its futuristic outlook and side projects that could send the automotive industry to new heights. While not all these projects are currently in progress, they all have been discussed or attempted in the past with the potential to reemerge in the future. The most prevalent projects include:

- **Cybertruck:** A new all-electric pickup truck launched in 2023, featuring a distinctive angular design and a stainless-steel exterior.
- Model 2: A highly anticipated, more affordable compact electric vehicle, rumored to be priced under \$25,000, with a potential release in the second quarter of 2025.
- **Roadster**: Tesla's original vehicle model, an all-electric sports car that was discontinued in 2012. It is Tesla's fastest vehicle ever produced, with a rumored relaunch set for the first half of 2026.
- **Robotaxi:** An autonomous ride-hailing vehicle utilizing Tesla's Full Self-Driving (FSD) technology, aimed at competing with services like Waymo. Its projected release is in the second half of 2026.
- **Optimus Robot:** A humanoid robot designed for repetitive and hazardous tasks, primarily in Tesla's manufacturing processes. There is potential for future



public availability, though no release date has been confirmed.

- Full-self-driving (FSD) and Dojo: FSD is Tesla's advanced driver-assistance system aimed at achieving Level 4 autonomy, where the vehicle can fully monitor its environment and perform all driving functions. Currently, it operates at Level 2, requiring driver supervision.¹⁴ Dojo is Tesla's custom-built supercomputer designed to accelerate the training of its AI models, focused on improving FSD capabilities.
- Gigacasting: An innovative manufacturing method using large, single-piece castings for major vehicle components, such as the front and rear underbodies. In May 2024, Tesla announced a shift from one-piece castings to three-piece castings for the Model Y and Cybertruck, but a single-piece technique may still be used in Model 2 production.¹⁵





Tesla Robotaxi and Optimus Robot

The HF has attempted to account for all these factors and is most succinctly summarized in its scenario analysis. In general, however, the team believes the company will not deliver on its anticipated release dates for the Model 2, Roadster, and Robotaxi. Elon Musk has a history of being overoptimistic in his timeframes and given the number of recalls that have already occurred on the newly released Cybertruck, the company will likely defer the deliveries of these projects.

The automation side of the company, through its Optimus robots and FSD projects, has the greatest long-term potential for internal and external use. Musk has indicated in recent earnings calls that he is in discussions with "multiple" automobile manufacturers regarding the commercialization of its FSD software, which the HF believes will occur beginning in 2030.¹ Coupled with the revenues earned from Robotaxi and driverless ride-hailing services, <u>FSD technology has the potential to grow into its own operating segment in the next decade</u>.



While Musk has visions of Optimus robots being purchased for personal use, the timeframe, addressable market, and ethical concerns pose much greater threats. Thus, the team believes Optimus robots will be limited to manufacturing and commercial purposes, helping reduce human error, the threat of injury, and lower production costs. The timeline for this is highly uncertain, so the HF believes these robots will be limited to Tesla's operations for the duration of the forecast horizon.

Supercharger Network and Gigafactories

As mentioned previously, Tesla has the largest electric vehicle charging network in the world with over 6,500 stations and 60,000 connectors (compared to nearly 200,000 retail gas stations in the US (3.25%)).¹⁶ These superchargers are also compatible with several other brands of EVs, including Ford, GM, Hyundai, Kia, Mercedes, and Volkswagen. Tesla owners typically pay \$25-40 to fully charge their vehicle, while non-Tesla owners will pay 10-20% more. The company also offers Supercharger Memberships for non-Tesla owners to remove this premium. Compared to chargers offered by other brands, Tesla offers competitive rates with faster charging and is often the most popular choice for BEV owners when traveling. Although Tesla vehicles use a proprietary charging head, all superchargers are equipped with a "Magic Dock" that can adapt the Tesla plug to the universal J1772 port.¹⁶





Source: Tesla Superchargers

Tesla's vehicles, batteries, and solar products are made at the company's eight factories in the United States, Germany, and China. Five of these factories are touted as gigafactories, which sit on roughly 100 acres of land and



can produce approximately 5,000 vehicles per week (260,000 per year), which is on par with competitors.¹⁷ The company's California factory is the largest in the United States, only trailing Volkswagen's Germany plant as the largest automotive production facility in the world. The company has also hinted at opening a sixth gigafactory in Mexico in 2026, but 200% import tariffs threatened by presidential candidate Donald Trump have subsided the potential construction.¹⁸ Musk claims these factories can produce up to 2 million vehicles per year, but substantial investment and customer demand will be necessary to see if these limits will ever be reached.

The size and scalability of Tesla's network have been a major catalyst to the company's meteoric rise over the last decade. As the company looks to release even more vehicles and further invest in R&D and artificial intelligence (AI), these factories provide a clear pathway for supporting these capital expenditures. Regardless of the long-term popularity of Tesla's vehicles, these factors serve as significant barriers to entry for outsiders and will allow the company to remain a dominant player in the BEV market for years to come.

Debt Maturity and Credit Analysis

Tesla can be characterized as a high-growth company that is beginning to mature within its life cycle. Ten years ago, the company held a significant amount of debt in the form of non-recourse loans to help finance the production of its electric vehicles. Since then, the company has been able to pay off most of this debt and currently has \$9.6 billion outstanding as of December 2023. Its debt-to-equity (D/E) ratio has decreased from 6.16x to 0.68x, with a debt-tocapital ratio of 13.3% and a current ratio of 1.7x.⁴ As a result, the company's credit rating is investment grade at BBB/Baa3 and is on par with its peer group. In the second quarter of 2024, however, Tesla issued an additional \$2.6bn in debt backed by automotive leases from its prime borrowers, bringing its outstanding debt to \$12.46 billion.¹⁹ While the purpose of the debt issuance was not reported, it can be assumed this debt will be used to help fund the production of its new vehicles and its FSD models.

Looking ahead, the HF predicts the company will continue to reduce its D/E ratio as it pays down existing debt. However, the team predicts debt will jump again in 2029 as the company prepares to commercialize its FSD technology and finalize its machine learning models. Liquidity will not pose an issue on these bonds as it will



continue to maintain a current ratio above 2.0x, a debt-tocapital ratio of less than 10%, and residual operating cash balances (post-capital expenditures) of at least \$2.3 billion. With very few publicly traded bonds, the HF is confident the company will be able to maintain its investment-grade credit rating.

Company	S&P	Moody's
BYD	х	х
NIO	х	х
Rivian	х	х
Volkswagen	BBB+	Baa1
Lucid	х	х
Ford	BBB-	Ba1
General Motors	BBB	Baa2
Toyota	A+	A1
Tesla	BBB	Baa3

Source: FactSet

Fiscal Year	Payment (\$mm)
2024	\$1,978
2025	1,667
2026	494
2027	276
2028	44
Thereafter	224
Total	\$4,683
Courses FrankCat	

Source: FactSet

ESG Analysis

While most companies are performing well in the "environmental" aspect of ESG, the social and governance aspects of the rating can pose the greatest risks. While Tesla is considered a "medium" risk, the company still faces substantial issues regarding its labor relations, product safety, and corporate governance. For instance, Elon Musk currently holds a 13% stake in the company but has recently been advocating for 25% ownership through a new pay package that is valued at \$76 billion.²⁰ The package is 100% stock-option based, which will allow him to purchase roughly 304 million shares in total once the company reaches certain milestones (EV deliveries, market capitalization, earnings, etc.). Further, if he were to exercise the options, he would be required to hold on to the shares for five years.

The pay package is still not confirmed, however, as a Delaware court ruled against it earlier this year, stating



that the pay package was "excessive and unfair." Since then, Musk has gained shareholder approval to move the company's jurisdiction to Texas from Delaware in hopes of overturning the ruling. While the timeline for the company's appeal is uncertain, approval of the pay package could be significantly dilutive to existing shareholders, immediately reducing the company's intrinsic value to \$180 per share (\$16 impact).

The Henry Fund does not consider these factors a risk given the unlikelihood of the pay package being approved. The judge who disapproved of the package stated that "unanimous" approval from shareholders would be necessary to overturn her decision.²⁰ Tesla's internal vote received 72% shareholder support, which will likely fall short of the judge's requirements.²¹

Below is a distribution of ESG ratings among Tesla's competitors. Ratings between 20 and 30 are considered "medium" risk, while ratings above 30 are "high" risk.

Peer Group ESG Rating



Source: Sustainalytics

RECENT DEVELOPMENTS

Recent Earnings Announcement

On October 24, 2024, Tesla released its third-quarter results for the 2024 fiscal year. The company reported revenues of \$25.2 billion for a surprise of -0.7% (-\$0.19 billion), earnings per share (EPS) of \$0.72 for a surprise of +24.1% (+\$0.14 per share), and deliveries of 463,000 that were just below consensus.⁴ The stock rose 21.9% the following day on the news, driven by automotive gross margins (excluding credits) of 17.1% compared to expectations of 14.9%. The rise was the company's best single-day performance in over a decade. Management also significantly raised expectations for deliveries in 2024, now anticipating a slight growth from 2023. Some other key takeaways from the earnings call include:



- Reaffirmed plans to release the Model 2 in the first half of 2025
- Projecting a 20-30% growth in deliveries in 2025
- Reaffirmed plans to roll out fully autonomous driving in Texas and California in 2025. Noted take rates of FSD are improving after the "We, Robot" event
- Energy generation and storage products continue to show strength, with margins above 30% and revenues growing 50%+ YoY
- Capital expenditures are expected to surpass \$11 billion in 2024 (+\$2.4 billion vs. 2023). This would be the highest level in Tesla's history.

In Q2, Tesla reduced its workforce by 14% (approximately 19,000 employees) to lower operating costs amid price cuts and softer vehicle demand. Although this reduction faced criticism, management highlighted the resulting gains in efficiency, helping contribute to the strong automotive gross margins and the lowest manufacturing cost per vehicle in the company's history.

Tesla's energy segment has remained a standout performer for the second consecutive quarter, deploying 6.9 GWh of energy products after having 9.4 GWh in Q2. Management confirmed that demand for energy products remains exceptionally strong and expects this segment to drive the company's growth through 2025.

Despite the strong quarter, the Henry Fund remains pessimistic driven by increased competition from Chinese brands, lower consumer demand for BEVs, and delays in the release of new AI features. Further, in five of the last seven guarters, Tesla has failed to meet expectations, causing its stock to fall by -10.6% on average. Much of the company's future growth is backed by Musk's ambitious expectations, providing little room for error if the company delays or fails to deliver on these promises. The HF expects volume growth will fall by -1.1% in 2024, missing consensus by roughly 2,800 vehicles, and the average vehicle selling price falling by -3.5%. Although management expects 20-30% delivery growth and the Model 2 to be released by Q2 2025, the HF anticipates its release will be delayed to Q4, resulting in growth of only 15%. Coupled with a 90 bps increase in the company's automotive COGS, the team anticipates automotive gross margins will fall to 15.6% from 17.7%. Meanwhile, an increase in R&D will add to the company's operating expenses, causing the company's EPS to fall by -59% YOY to \$1.96 (vs. \$1.99 consensus).



Elon Musk's Ventures

Elon Musk is certainly one of the busiest CEOs in the world. While he is most known for his leadership positions at Tesla and SpaceX, the eccentric billionaire oversees six other companies, including X (formerly Twitter), OpenAI, and Starlink. His most recent move was acquiring X (Twitter) in October 2022 for \$44 billion. The move was largely political, in hopes of limiting content moderation to enhance free speech on the platform.²³ Musk has used this ownership to his advantage, frequently posting about various company updates and his own personal interests. However, his activity has been largely controversial, with critics stating his behavior has become increasingly "unprofessional and divisive." Thus far in 2024, Musk has posted over 13,000 times on the platform, averaging 61 posts per day. Further, his content has become increasingly political since backing presidential candidate Donald Trump. Statistically, Musk has had roughly 230 times more exchanges each month containing political terms compared to when he joined the platform in 2019.²⁴

Elon Musk's Companies



Source: Adobe Stock

Looking ahead at Tesla's future, the Henry Fund considers Elon Musk's controversial image and wide breadth of responsibilities one of the biggest risks to the company. While often considered one of the brightest technical minds on Earth, his various commitments will make it challenging for him to wholly focus on Tesla's development of new vehicles and technological tools. Further, with Tesla being the only publicly traded company in Musk's portfolio, much of the stock's movement can be attributed to his externalities. As mentioned previously, his 13% ownership of Tesla poses a dilutive risk to the company, and if raised to 25%, it could have a monopolistic impact on managerial decision-making. While the team believes Musk will always vote in the best interests of Tesla, it may fail to consider the interests of other stakeholders. In the long term, the team believes it is in



the company's best interest to terminate Musk's leadership for an individual who is solely focused on Tesla's success.

We, Robot

On October 10, 2024, Tesla hosted its highly anticipated "We, Robot" event to disclose further details on the company's Robotaxi, FSD technology, and Optimus robots. Ultimately, the event failed to wow investors, as the stock plummeted 9% the following day.²⁵ The headline of the event was that Tesla plans to begin producing the Robotaxi before 2027 and offer it at a price under \$30,000. Musk also noted that he expects unsupervised FSD (level 4 autonomy) to be up and running in Texas and California next year with the Model 3/Y. The "surprise" of the event was the unveiling of the Robovan which can carry up to 20 people and be used for "high-density transportation." Musk also talked briefly about the company's Optimus robots, which he believes will be the "biggest product ever of any kind." The demo illustrated a future in which robots could be purchased by customers, acting as personal assistants to perform various chores. The event concluded with the robots interacting with the audience members, serving drinks at the bar, and having simple conversations.

Tesla Robovan and Robotaxi



Source: autoevolution

The event drew criticism for its lack of concrete details, particularly regarding Model 2 production and FSD data. The Henry Fund concurs with this assessment, noting that Musk's vague statements offered little insight into the company's current position. Regulatory challenges are likely to impede FSD technology rollout for years, while consumer availability of Optimus robots will be at least two decades away. The Robovan faces significant hurdles in penetrating the market due to established competitors and its reliance on level 4 FSD autonomy. Although some discussed items (Robotaxi, Al investment) offer potential



long-term value, the event did little to alter Tesla's shortterm fundamentals. Consequently, the team maintains a pessimistic outlook.

INDUSTRY TRENDS

Rising Competition, Lower Demand

While establishing a first-mover advantage in the BEV industry has allowed Tesla to flourish over the last decade, growing competition from other brands has significantly slowed its growth in recent years. This competition originated from two sources – traditional car companies (Ford, GM, Toyota) and niche, high-tech companies attempting to mimic Tesla (Nio, Rivian, Lucid). Further, more country-specific brands such as BYD have reduced Tesla's international influence as well. As of December 2023, there are 70 BEV and hybrid models available for purchase in the United States (vs. 43 in 2019), and is expected to double in the next two years.²⁶ Despite this competition, the Tesla Model Y remains the most popular BEV on the market by a factor of 2x, selling over 1.2 million worldwide units in 2023.²

In conjunction with the rising competition, demand for EVs (BEVs and hybrids) in the US has slowed, only rising 6.8% in the first half of 2024, compared to 50% in 2023.²⁷ As the early adoption phase for these products has passed, general consumers have become increasingly concerned about the price of these vehicles, supercharger infrastructure, driving range, and government policies. However, brands that have been able to offset these concerns, as well as offer new models, have continued to see strong growth, anywhere from 56% (Hyundai) to 86% (Ford) in Q1 2024. For the broader industry, Bloomberg expects EV sales to grow at a CAGR of 21% from 2023 to 2027, compared to 61% observed from 2020 to 2023.²⁸

With the Model 3 and Y accounting for roughly half of all EV sales in the United States, the growth of the industry is still largely dependent on Tesla. Thus, the Henry Fund anticipates the EV market will underperform expectations for three reasons – limited new product releases, slower Supercharger network growth, and heightened overseas tariffs. Tesla's ambiguity surrounding the release of the Robotaxi, Model 2, and Model 3 refresh poses risks to the company's short-term growth. Further, Musk recently fired Tesla's entire 500-person Supercharger team as part of the company's layoffs.²⁹ Although the number of superchargers is currently expanding at roughly 20% per



year, these layoffs will significantly hinder the network's growth to 10-12% through 2026. Finally, the reinstated tariffs in Europe and potential tariffs in Mexico will constrain Tesla's international production. All told, the Henry Fund predicts the broader EV industry will grow at a CAGR of 15% from 2023 to 2027, falling short of analysts' expectations.

EVs Still Booming for Most US Automakers





Autonomous Driving

Tesla is not the only company experimenting with driverless vehicles, with some competitors already offering them on the open market. These include Waymo (by Alphabet), Cruise (by General Motors), and Zoox (by Amazon) with cars in Phoenix, Arizona; San Francisco, California; Los Angeles, California; Las Vegas, Nevada; and Austin, Texas. Since federal laws only allow level 2 autonomy (vehicle-controlled steering and speed, but with the driver ready to take over), the decision to permit level 4 autonomy (fully vehicle controlled, with no driver necessary) is approved at the state level. There are currently 29 states that have approved this driving in some capacity.³⁰ The most flexible of these states are the ones mentioned above and are where many companies, including Tesla, choose to first deploy their fleets. There are currently 700 Waymo, 400 Cruise, and 0 Zoox vehicles (still in testing) for use on the market.

Although Tesla's Robotaxi has yet to be released, its FSD software continues to improve through user subscriptions on their existing vehicles. In 2023, Tesla recorded over 735 million miles of FSD data, reaching over 1.3 billion miles cumulatively since the software was deployed in 2021. For reference, Cruise, Waymo, and Zoox had a combined 4.0 million miles of autonomous driving data in 2023.



Regardless of the company, these programs are inherently much safer than manually driving. Studies conducted by the Insurance Institute for Highway Safety (IIHS) for Waymo have concluded that they reduce airbag deployment crashes by 84% and injury-causing crashes by 73%. As of Q2 2024, Waymo vehicles were involved in 0.41 accidents per million miles driven, compared to 2.78 for the typical human.³¹ For Tesla, the number is even safer, at 0.14 accidents.³² The following chart shows the inverse of this data (miles driven per one accident) for Tesla dating back to 2023.



Miles Driven per One Accident (mm)



The Henry Fund views Tesla's FSD technology as its biggest catalyst for future growth. With that being said, for widespread adoption of this technology to occur in the eyes of insurance companies, a significant number of miles needs to be driven to prove its safety. Tesla's data outnumbers its competitors by several orders of magnitude, making it much more feasible for Robotaxi to gain widespread regulatory approval. Furthermore, the potential for commercializing the technology to other car companies could increase the company's long-term growth rate by another 1-2%. The Tesla Robotaxi boasts a much sleeker design than its competitors, avoiding the bulky look of vehicles with large cameras mounted on all sides. However, its two-seat configuration is a significant drawback, as most other ride-hailing vehicles offer four seats. This limitation could hinder Tesla's ability to compete with established players like Uber and Lyft in the ride-hailing industry. While the Robotaxi's affordable price



of \$30,000 may justify its smaller size, it raises concerns about passenger safety in the event of an accident.

Renewable Energy Gaining Traction

As noted in the company's recent earnings call, the energy side of the business is booming by deploying 9.4 GWh of storage products in the second quarter. Industry-wide demand for renewable energy has risen substantially in the last two years, and Tesla's position as a market leader has allowed it to capitalize on the influx of consumers. In 2023, new solar polar generation helped add 42.0 GW of renewable power to the U.S. grid, compared to 13.3 GW in 2019. Further, 7.5 GW of battery storage was added, compared to 1.2 GW in 2019.³³ Through 2032, Bloomberg anticipates renewable energy will continue to expand as it replaces coal for electricity generation. Further, offshore wind projects have struggled to gain traction, driven by lower outputs and rising maintenance costs. The following chart shows the historical and forecasted net change in electricity generation capacity by source.





Source: BMI

The team remains bullish on the company's energy generation and storage segment and expects over 30% annual growth through 2027. Federal support via grants in the Inflation Reduction Act and Energy Department have been a catalyst for industry growth and should continue to support Tesla in the short term. Furthermore, Tesla recently approved the expansion of its Nevada Gigafactory to support increased battery and energy storage production. Although the expansion is not expected to be completed until the second half of 2025, the company projects the factory will have to capacity to produce 105



GWh of battery cells and 150 GWh of battery packs per year. $^{\rm 34}$

Next year, however, the company plans to ramp production at its Shanghai gigafactory to accommodate 20 GWh of deployments annually, potentially expanding to 100 GWh to satisfy the segment's strong demand.¹ Given Tesla's complementary offerings for personal and commercial use, along with its 4680 battery production, the team anticipates this segment will be a silent driver for the company going forward, amounting to over 15% of revenues by 2030 (vs. 6.2% today).

MARKETS AND COMPETITION

The automotive industry is undoubtedly one of the oldest and most competitive in the world. Four of the largest and most well-known automakers – Ford, General Motors, Toyota, and Volkswagen – have histories dating back to the 1930s and collectively make up over 25% of global vehicle sales.² However, the most valuable car company today is Tesla, which became the first automaker to go public in the United States since Ford in 1956 and is larger than all of its industry peers combined.³⁵ The following peer analysis will compare these companies in terms of their <u>EV production</u>, unless otherwise stated, for consistency across product offerings. Below is a table summarizing key statistics among Tesla's peer group.

	Market Cap (\$mm)	Sales (\$mm)	Gross Margin	EV Deliveries LFY	NFY P/E
BYD Company	119,440	83,552	17.8%	141,601	17.7
Nio Inc.	12,408	7,850	3.0%	160,038	-5.2
Rivian Automotive	10,557	4,434	-52.0%	50,122	-2.5
Lucid Group	2,977	595	-225.2%	6,001	2.9
Ford Motor Company	41,700	176,191	13.8%	72,608	5.7
General Motors Company	51,712	171,842	16.9%	75,883	4.7
Volkswagen Group	52,803	348,426	19.3%	771,100	2.5
Toyota Motor Company	233,200	311,857	20.8%	104,018	7.1
Peer Average	99,771	218,374	15.3%	172,671	7.5
Tesla, Inc.	802,000	96,773	23.1%	1,808,581	127.6

Source: FactSet

*Values crossed out are not included in the peer average.

BYD Company (BYDDY)

BYD is a Chinese auto manufacturer that has quickly become Tesla's biggest competitor. In Q4 2023, BYD held the largest global market share of electric vehicles, the first company to ever overthrow Tesla. Its value proposition is to offer smaller, more affordable cars to the Chinese market, with its cheapest offering being the BYD Seagull at just \$9,700.¹³ Other offerings include the BYD Yuan Plus and the BYD HAN for \$16,600 and \$30,000, respectively. Its mileage is also comparable to Tesla, ranging from 200 to 375 miles depending on the model.³⁶ The company's original business line, smartphone and EV batteries, now



plays a smaller role but still supplies components for Samsung smartphones and Ford, Toyota, and Mercedes-Benz vehicles. In fact, Tesla also uses BYD batteries for its Model Y vehicles at its German Gigafactory. In the last fiscal year, 69% of BYD's revenues were generated from China.⁴

BYDDY Revenue Decomposition (\$85.0B)



Source: FactSet

Nio Inc. (NIO)

NIO is another Chinese auto manufacturer with a focus on more luxury vehicles. The company is young – founded in 2014 – and has yet to report a profit. However, the company's trajectory is similar to Tesla's in that it offers high-tech vehicles with an energy storage line to complement. The company currently offers 9 different models, ranging from \$42,000 to \$70,000, with ranges from 300 to 440 miles.³⁷ The company primarily targets the Chinese market (98% of sales), posing further competition for Tesla's demand in the country.⁴

NIO Revenue Decomposition (\$7.9B)



Source: FactSet

Rivian Automotive (RIVN)

Rivian Automotive is a U.S.-based BEV manufacturer backed by Jess Bezos. Its first vehicles were released in



2021 and currently offers 2 models. The company delivered over 50,000 vehicles in 2023 and is the supplier of Amazon's EV delivery vans. The company's vehicles are more adventure-based, performing better in rugged conditions with some of the longest ranges on the market. However, its vehicles are expensive, ranging from \$75,000 to \$115,000. The cars are extremely customizable and come with an array of driving ranges between 260 and 420 miles.³⁸ The company only manufacturers electric vehicles, and 100% of its revenues are generated from within the United States.⁴

RIVN Revenue (\$mm)



Source: FactSet

Lucid Group (LCID)

Lucid Group is another young, BEV producer based in the United States. The company was founded in 2007 and is led by Peter Rawlinson, a former Tesla engineer. Its first vehicles were delivered in 2021 and focus on producing luxury, high-performing vehicles. Its Air Dream limitededition model has the longest range of any BEV on the market at 520 miles, while also offering some of the lightest and smallest batteries for faster charging. In general, the company offers 1 model with 4 different trims ranging from \$70,000 to \$250,000. Its most expensive vehicle, the Lucid Air Sapphire, is the fastest BEV in the world and can achieve a top speed of 205 mph.³⁹ Like Rivian, the company only manufacturers electric vehicles, and 100% of its revenues are generated from within the United States.⁴



LCID Revenue (\$mm)



Source: FactSet

Ford Motor Company (F)

Founded in 1903, Ford Motor Company is one of America's legacy automakers, known today for its F-Series trucks (the best-selling truck in the U.S. for decades), the Ford Mustang, and the Ford Explorer. The company's Ford Model e segment oversees its electric vehicle sales, which currently include the Mustang Mach-E and the F-150 Lightning. The vehicles have selling prices starting at \$40,000 and \$63,000, respectively, each with a range of 320 miles. The company also offers several hybrid vehicles which include the Maverick and F-150 pickup trucks, Escape SUVs, and the E-Transit van. The company has 4 operating segments - Ford Blue (personal vehicles and engine manufacturing), Ford Pro (commercial vehicles), Ford Credit (financing and leasing), and Other.⁴⁰ In the last fiscal year, 66% of Ford's revenues were generated from within the United States.⁴

5.8% 3.3% Ford Blue Ford Pro Ford Credit

F Revenue Decomposition (\$176.2B)

Source: FactSet

General Motors (GM)

General Motors is another flagship American automaker that was founded in 1908 and oversees some of the most



popular car brands in the world including Buick, Cadillac, Chevrolet, and GMC. Their electric vehicle business has undergone significant investment, spearheaded by the company's proprietary "Ultium" battery pack. Its flexible design allows cells to be packed vertically or horizontally to fit the specifications of many GM vehicles. GM currently offers 9 EVs in sedan, SUV, and pickup truck designs across its Cadillac, Chevrolet, and GMC brands. However, in July the company announced it will be pushing back the opening date for a new EV truck for the second time due to slower-than-expected demand. A new Buick EV that was originally expected to debut in 2024 was also delayed.²⁷ The company's operating segments include GM North America, GM International, and GM Financial.⁴¹ In the last fiscal year, 81% of GM's revenues were generated from within the United States.⁴

GM Revenue Decomposition (\$171.8B)



Source: FactSet

Volkswagen Group (VWAGY)

Volkswagen Group is a German automobile manufacturer and is the largest carmaker in Europe. The company oversees several brands including Volkswagen, Audi, Bentley, Lamborghini, and Porsche. Volkswagen has made some of the largest investments in electric vehicles among major manufacturers, recently putting up to \$5 billion into Rivian as part of a software development partnership.⁴² Its EV lineup currently includes the ID.4 (SUV), the ID.Buzz (van), and the ID.7 (sedan), with 9 additional models available across its subsidiaries. The vehicles are priced between \$40,000 and 55,000, but the company recently announced plans to partner with Renault to produce a low-cost (\$22,000) vehicle to compete with Chinese rivals.43 Their new vehicles also have ranges between 200 and 400 miles. The company's operating segments include Passenger Cars, Financial Services, Commercial Vehicles,

Other



and Power Engineering (large engines, compressors, turbines, etc.).⁴⁴ In the last fiscal year, 39% of Volkswagen's revenues were generated from within the United States and Germany.⁴

VWAGY Revenue Decomposition (\$348.4B)



Source: FactSet

Toyota Motor Corp. (TM)

Founded in 1937, Toyota Motor Corporation is a Japanese multinational automobile manufacturer that oversees 4 brands, most notably Toyota and Lexus. The company's vehicles are regularly considered some of the most reliable on the market and are known for their just-in-time manufacturing methods to reduce waste and improve efficiency. While the company has a wide array of hybrid EVs, Toyota offers just one BEV, the bZ4x crossover SUV.⁴⁵ In stark contrast to most legacy automotive companies, Toyota released a statement in August 2024 that they believe the future of automotive transportation exists with gas-powered hybrid vehicles. As a result, the company opted out of BEV production and focused its attention on hybrid or plug-in hybrid designs, which accounted for 48% of the company's sales volume in the last quarter.⁴⁶ The company has three operating segments - Car, Finance, and Other – and 34% of its revenues are generated in the United States.⁴







Peer Comparisons

The following peer comparisons will assess Tesla across a variety of financial, operating, and valuation metrics. As values are representative of current market conditions or the company's last fiscal year end unless otherwise stated.

Financial Metrics

	Sales (\$mm)	Gross Margin	Oper Margin	Net Margin	Inv Turnover
BYD Company	83,552	17.8%	5.0%	5.1%	5.8
Nio Inc.	7,850	3.0%	-41.8%	-38.0%	7.3
Rivian Automotive	4,434	-52.0%	-129.4%	-122.5%	3.4
Lucid Group	595	-225.2%	-516.6%	-475.1%	2.5
Ford Motor Company	176,191	13.8%	3.1%	2.5%	10.2
General Motors Company	171,842	16.9%	5.4%	5.9%	9.0
Volkswagen Group	348,426	19.3%	6.7%	5.0%	4.9
Toyota Motor Company	311,857	20.8%	11.9%	11.0%	7.9
Peer Average	218,374	17.7%	6.4%	5.9%	6.4
Tesla, Inc.	96,773	23.1%	9.2%	15.5%	5.6
	Current Ratio	DSO	CapEx/Revenue	ROA	ROE
BYD Company	Current Ratio 0.7	DSO 53	CapEx/Revenue 20.6%	ROA 5.1%	ROE 23.9%
BYD Company Nio Inc.	Current Ratio 0.7 1.2	DSO 53 56	CapEx/Revenue 20.6% 25.8%	ROA 5.1% -19.6%	ROE 23.9% -84.8%
BYD Company Nio Inc. Rivian Automotive	Current Ratio 0.7 1.2 5.0	DSO 53 56 11	CapEx/Revenue 20.6% 25.8% 23.1%	ROA 5.1% -19.6% -31.2%	ROE 23.9% -84.8% -47.4%
BYD Company Nio Inc. Rivian Automotive Lucid Group	Current Ratio 0.7 1.2 5.0 4.7	DSO 53 56 11 28	CapEx/Revenue 20.6% 25.8% 23.1% 152.8%	ROA 5.1% -19.6% -31.2% -34.5%	ROE 23.9% -84.8% -47.4% -61.5%
BYD Company Nio Inc. Rivian Automotive Lucid Group Ford Motor Company	Current Ratio 0.7 1.2 5.0 4.7 1.2	DSO 53 56 11 28 121	CapEx/Revenue 20.6% 25.8% 23.1% 152-8% 4.7%	ROA 5.1% -19.6% -31.2% -34.5% 1.6%	ROE 23.9% -84.8% -47.4% -61.5% 10.1%
BYD Company Nio Inc. Rivian Automotive Lucid Group Ford Motor Company General Motors Company	Current Ratio 0.7 1.2 5:0 4:7 1.2 1.2 1.1	DSO 53 56 11 28 121 105	CapEx/Revenue 20.6% 25.8% 23.1% 152.8% 4.7% 14.3%	ROA 5.1% -19.6% -31.2% -34.5% 1.6% 3.8%	ROE 23.9% -84.8% -47.4% -61-5% 10.1% 15.3%
BYD Company Nio Inc. Rivian Automotive Lucid Group Ford Motor Company General Motors Company Volkswagen Group	Current Ratio 0.7 1.2 5:0 4.7 1.2 1.1 1.2 1.1	DSO 53 56 11 28 121 105 116	CapEx/Revenue 20.6% 25.8% 23.1% 152:8% 4.7% 14.3% 8.0%	ROA 5.1% -19.6% -31.2% -34.5% 1.6% 3.8% 2.6%	ROE 23.9% -84.8% -47.4% -61.5% 10.1% 15.3% 10.2%
BYD Company Nio Inc. Rivian Automotive Lucid Group Ford Motor Company General Motors Company Volkswagen Group Toyota Motor Company	Current Ratio 0.7 1.2 5:0 4.7 1.2 1.2 1.1 1.2 1.2 1.2	DSO 53 56 11 28 121 105 116 111	CapEx/Revenue 20.6% 25.8% 23.1% 152-8% 4.7% 14.3% 8.0% 11.2%	ROA 5.1% -19.6% -34.5% 1.6% 3.8% 2.6% 5.9%	ROE 23.9% -84.8% -47.4% -61.5% 10.1% 15.3% 10.2% 15.6%
BYD Company Nio Inc. Rivian Automotive Lucid Group Ford Motor Company General Motors Company Volkswagen Group Toyota Motor Company Peer Average	Current Ratio 0.7 1.2 5:0 4.7 1.2 1.1 1.1 1.2 1.2 1.2 1.1	DSO 53 56 11 28 121 105 116 116 111 37	CapEx/Revenue 20.6% 25.8% 3.1% 152.8% 4.7% 14.3% 8.0% 11.2% 15.4%	ROA 5.1% -19.6% -31.2% -34.5% 1.6% 3.8% 2.6% 5.9% 3.8%	ROE 23.9% -84.8% -47.4% -61.5% 10.1% 15.3% 10.2% 15.6% 15.0%

Source: FactSet

Based on most financial metrics, Tesla is outperforming its competitors despite tighter margins and a swelling inventory in the last fiscal year. While the company's net margin was inflated due to tax credits in 2023, it only sits 200-300 bps above historical levels. The Henry Fund does not expect this outperformance to continue, however, as increased production costs, further price cuts, and negative volume growth will further compress margins. Capital expenditures as a percentage of revenue will also increase to over 11% in 2024 as the company makes additional investments in training its FSD models, scaling up its Dojo supercomputer, and supporting production for the Model 2. Long term, the team believes Tesla can continue to outperform its competitors through stronger economies of scale by leveraging technological advances (Optimus robots), automation, and a reliable energy segment.

Operating Metrics

	5Y CAGR Sales	5Y CAGR EBITDA	Avg. Price per EV Sold (\$)	EV Deliveries LFY	Auto Gross Margin LFY
BYD Company	34.0%	36.1%	20,000	141,601	23.9%
Nio Inc.	60.0%	-33.7%	63,000	160,038	9.5%
Rivian Automotive	797.9%	-10.2%	100,000	50,122	-52.0%
Lucid Group	_368.7%	-78.3%	115,000	6,001	-225.2%
Ford Motor Company	1.9%	0.8%	50,000	72,608	13.8%
General Motors Company	3.2%	3.1%	56,000	75,883	16.9%
Volkswagen Group	4.6%	2.3%	47,000	771,100	18.7%
Toyota Motor Company	2.7%	6.1%	43,000	104,018	20.8%
Peer Average	17.7%	9.7%	61,750	172,671	17.3%
Tesla, Inc.	35.2%	52.4%	43,409	1,808,581	17.7%

Source: FactSet



From an operating perspective, Tesla is outperforming its competitors, particularly through its EV deliveries and automotive gross margins. While legacy automakers have attempted to shift towards EV production, many are losing money on these ventures. Ford reportedly lost \$1.3 billion in Q1 2024 on EVs, after losing \$4.7 billion on them in 2023.⁴⁷ This means that <u>Tesla is the only American automaker to be reporting a profit in this space</u>. Going forward, Tesla's ability to expand production beyond traditional automakers' EV levels will help maintain its strong market share. Additionally, if Tesla successfully releases the Model 2 and Robotaxi on schedule, its global market share could increase to 25%, while further reducing its average selling price per EV.

Valuation Metrics

	NFY P/E	NFY P/S	PEG	EV/EBITDA
BYD Company	17.7	1.2	1.1	10.9
Nio Inc.	-5.2	1.5	-0.3	-4.0
Rivian Automotive	2.5	2.1	-0.2	-4.2
Lucid Group	-2.9	11.9	-0.2	-3.8
Ford Motor Company	5.7	0.2	1.0	15.0
General Motors Company	4.7	0.3	0.9	1.4
Volkswagen Group	2.5	0.0	0.4	3.9
Toyota Motor Company	7.1	0.8	-8.9	7.8
Peer Average	7.5	0.9	1.0	7.8
Tesla, Inc.	127.6	8.0	19.6	63.5

Source: FactSet

Based on a relative valuation perspective, Tesla appears significantly overvalued to its peers. In general, however, Tesla has traded at a strong premium to its competitors given its duality as a technology company. With that being said, these levels are above historical levels, which has averaged a forward P/E of 89.0x and a PEG of 3.8x.⁴ The Henry Fund does not consider the relative valuation credible for Tesla given its long-term growth potential and unique business model. For a deeper analysis of the company's intrinsic value, please refer to the "Valuation Metrics" section below.

Future Outlook

Overall, the company's above-average margins, leading EV market share, and operational efficiency make it one of the top performers. Its ability to infiltrate the industry has invited new competitors and has forced many traditional automakers to adjust their production strategies. However, declining delivery volumes and price reductions will pressure margins in the short term, coupled with slower top- and bottom-line growth as the company matures. Technological opportunities through FSD and Optimus robots provide opportunities to rebound over the



long term, but uncertainty regarding their viability and regulatory adoption presents significant risks.

ECONOMIC OUTLOOK

Government Tax Incentives

Dating back to 2008, the United States government has offered tax credits to individuals for purchasing EVs. These incentives were recently revised as part of the Inflation Reduction Act of 2022, extending the credits through 2032 but enacting stricter requirements for qualification. The credits apply to both new and used vehicles. According to a 2023 survey conducted by Consumer Reports, 48% of Americans say the tax credits encourage them to purchase an EV.⁴⁸

Tax credits of up to \$7,500 are available for new vehicles (purchase or leased), \$4,000 for used vehicles, and \$1,000 for home chargers and energy storage systems.⁴⁹ The credits act as pure profit for manufacturers and have been a motivating factor for many legacy car companies. In the last fiscal year, Tesla earned \$1.79 billion in regulatory credits, or 2.2% of automotive revenues. Presidential candidate Donald Trump has discussed repealing the Inflation Reduction Act if re-elected, thereby eliminating these tax credits. While this would hurt the industry, the regulation would benefit Tesla in the long term as it does not rely on these credits to make a profit. Thus, Tesla would be able to continue to offer its vehicles at a lower price than its competitors, potentially forcing many traditional automakers to leave the industry. The Henry Fund anticipates these credits will remain in place over the forecast horizon but offer far less incentive over time. Forecasts generally align with analysts' consensus, but in the event the credits are repealed in 2026, the company's intrinsic value falls to \$195 (\$1 per share).

Interest Rates

On September 18, 2024, the Federal Reserve lowered the Federal Funds Rate (FFR) by 50 bps to 4.75-5.00% for the first reduction since March 2020.⁵⁰ While the cut was largely anticipated, debate still lingers regarding the Fed's next moves and if they can deliver a soft landing. The Henry Fund anticipates rates will fall another 75 bps (4.00-4.25%) in the next six months, slightly more conservative than analysts' estimates of 4 cuts (3.75-4.00%).⁵¹



Interest rates impact Tesla in two ways - rates for customers who choose to lease vehicles, and long-term financing costs for Tesla to fund new vehicle production, gigafactory expansions, and processing power. In the leadup to the rate cut, many markets were already pricing in the effects, which had positive impacts on the EV leasing industry. EV sales hit a record high in the United States in Q3 2024 with over 346,000 deliveries, accounting for 8.9% of all automotive sales in the guarter. This resulted in the proportion of leases rising to 42.7%, compared to 22.2% for gas-powered vehicles.⁵² Looking ahead, the Henry Fund remains optimistic about the state of the economy, estimating 10-year yields will remain near 4.1%, with a less than 25% probability of a recession. This will be beneficial for Tesla, which the team forecasts leasing revenues will grow by 20% in 2025 and 18% in 2026. While the company does not carry much debt on its balance sheet (\$12.5 billion as of Q2 2024), lower interest rates may motivate the company to use more leverage, particularly if it pursues the construction of its new gigafactory in Mexico. The following chart shows the FFR dating back to 2004.





Source: FactSet

Consumer Confidence

The Consumer Confidence Index is a monthly survey measuring Americans' optimism or pessimism about current and future economic conditions, with 100 as the baseline for neutral sentiment. In the last year, consumer confidence has been relatively flat but recently jumped to 108.7 in October from 99.2 in September. This marked the largest MoM gain since March 2021 with all five components of the index turning positive.⁵³



Source: The Conference Board, NBER

The Henry Fund maintains a neutral stance on consumer confidence in the short term but anticipates an increase over the next two years. Weakening consumer confidence presents risks for Tesla, with the largest inhibiting factor among consumers being the price of new EVs.48 Tesla's recent price cuts reflect this sentiment, coupled with rising competition and softening aggregate demand. The Henry Fund believes Tesla will miss delivery targets through 2025 and that additional time is needed for moderating inflation to work through this bifurcated consumer environment. The average age of vehicles on the road in the United States is currently 12.6 years (a record high), and assuming regulatory credits remain in place, the combination of these factors could positively impact people's willingness to purchase EVs and raise consumer confidence over the long term.

VALUATION

This valuation utilizes a ten-year forecast horizon with a continuing valuation estimation in 2033. Tesla's rapid growth and fervent following have significantly disrupted the automotive industry in its 20-year history. The company's innovative products, cutting-edge technology, and distinctive designs have distinguished it from competitors, enabling it to become the most valuable car company in the world. However, Tesla's era of unchallenged dominance appears to be waning, driven by increased competition, pricing pressures, and slowing demand. Despite a strong outperformance in Q3 2024, the company's short-term outlook looks murky as Tesla faces an identity crisis between being an automaker or a software developer. Undeniably, Tesla has evolved beyond its startup roots and eco-friendly aspirations. It now stands as a \$800+ billion corporation bridging the gap between automobiles, technology, and efficiency. The



critical question that remains: to what extent can the company deliver on these promises?

Revenue and Growth Outlook

As mentioned previously, the team expects deliveries to fall for the first time in the company's history in 2024. Combined with a -3.5% decline in the average selling price of vehicles, automotive revenues are expected to fall by roughly -4% in 2024. In general, the Henry Fund expects Tesla to continue to underperform consensus through 2025 as weakening demand and delayed releases of new vehicles constrain deliveries.

Elon Musk is famously quoted as saying Tesla will deliver 20 million electric vehicles in 2030 or have a long-term growth rate of 50% per year. Unfortunately, both of these forecasts are grossly unrealistic. While the company's delivery numbers have met this growth when dating back to 2014, Tesla is a far more mature company today that faces dozens of alternatives on the market. The Henry Fund believes Tesla will achieve one-fifth of this goal, delivering over 4 million vehicles per year by 2032.

While 3-4 new models are tabled for production, along with the newly released Cybertruck, there exist several opportunities for the company's growth to accelerate once again. While Tesla has provided estimates for when they expect these vehicles to hit the market, history suggests they will fail to deliver them on time. The Henry Fund agrees with this sentiment, and the team's outlook for these new vehicles is summarized below:

Vehicle	Expected HF Release		Market
	Release		Penetration?
Cybertruck	Nov. 2023	Nov. 2023	No
Model 2	Q2 2025	Q4 2025	Yes
Roadster	1H 2026	1H 2028	Yes
Robotaxi	2H 2026	2H 2027	Yes
Robovan	Unknown	1H 2031	No

Source: Tesla Investor Relations, Henry Fund Estimates

The Henry Fund considers the Model 2, Roadster, and Robotaxi as the future of Tesla's vehicles, along with the Model S/3/X/Y. While Cybertruck has a distinctive look, its use as a pickup truck is rather impractical and will garner little demand from its target market, causing it to be discontinued in the long term. Its deliveries will peak at 90,000 units in 2028, before tailing off to 0 by 2031. In the short term, Tesla will likely focus on releasing the Model 2



to bring a low-price vehicle to the market. Meanwhile, it will continue to refine its FSD model for the release of Robotaxi in late 2027. This additional time will make the system even more safe and user-friendly, preparing it for widespread commercialization in 2030. The growth rate of Robotaxi could be immense, particularly if the company offers it in multiple sizes. The HF predicts the vehicle could immediately compete with Lyft and Uber, earning at least a 10% market share within the ride-hailing industry.

This focus on technology will push the re-release of the Roadster to 2028, exactly 20 years after the initial model was unveiled. Its demand will be strong at first, but given its niche market, deliveries stabilize quickly at only 80-90,000 vehicles per year. Finally, Robovan will struggle to gain traction. Its design reflects flashiness over functionality and will struggle to compete with the offerings from traditional automakers. In total, the Henry Fund predicts Tesla will be able to deliver 420,000 vehicles by 2033, representing roughly 10% of its global fleet.

Looking at the company's current vehicles, the Model 3/Y will continue to be the breadwinner for the company, reaching 3,150,000 annual deliveries by 2030 (8.9% CAGR). Model S/X growth will be muted in comparison to the company's new vehicle offerings, reaching 250,000 annual deliveries by 2031 (18.1% CAGR). Continuing to redesign its vehicles will be imperative in maintaining their popularity, just as it recently did with the Model 3.⁵⁴ There are also rumors of the Model Y being revamped next year, which would be the first redesign since the car's initial release in 2020. Models S and X were most recently redesigned in 2021, so the Henry Fund anticipates an update will not occur until 2026 or 2027, depending on the timing of its other projects. The company's current vehicles will continue to provide steady growth in the short term given their traditional designs. Newer cars, however, will eventually surpass the S/X in volume, delivering 225,000 units in 2028 (vs. 200,000). By the end of the forecast horizon, Model 3/Y deliveries will continue to dominate, representing 83% of annual deliveries.

Revenue per vehicle will steadily decline over the next three to five years, falling near \$41,000 by 2025 (\$43,409 in 2023). Afterward, this growth will reaccelerate, driven by strong demand for Robotaxi and the commercialization of its FSD software. This will cause unit revenues to grow by 7.5% in 2031, before stabilizing at 3% over the long term to slightly outpace inflation.



New Vehicle Deliveries



Source: Henry Fund Estimates

The Henry Fund views the company's FSD technology as the biggest catalyst for success over the long term. Industry research has proven that FSD is the safest autonomous driving system on the market, recording just 1 accident per 7.08 million miles driven in Q3 2024 (or 10.6x safer than humans). As the number of miles driven continues to increase, the model's performance will improve exponentially, potentially decreasing the accident ratio to less than 1 in 10 million miles.

As of Q2 2024, there were roughly 900,000 FSD users on the market. Further, any car produced after 2019 has the necessary hardware to support new software updates, which accounts for roughly 75% of Tesla's on the road today. Assuming there are 1,000,000 users by FYE, this will be 6.67x larger than the number of users in 2021. Growth will continue to accelerate with improved technology and new vehicles, crossing over 3,000,000 users in 2027.

The cumulative number of miles driven is projected to reach 2.1 billion by FYE 2024, and assuming users follow historical levels by driving 2,000-2,500 miles per year using the software, the model will have over 10 billion miles of data by 2028. Subsequently, in 2030, the Henry Fund anticipates FSD will be commercialized to other car brands given its reliability, safety, and lengthy history. This will further amplify its growth, increasing the number of users by 10-20% annually through 2032, and the number of user miles per year to 3,000-3,500. By the forecast horizon, the team projects there will be 8.0 million users of FSD, which amounts to roughly 3.1% of all US drivers and 38% of Tesla users.

Its widespread use will allow Tesla to offer its subscriptions at a lower price than its competitors, further expanding its



growth through 2040. This justifies the team's 7.0% CV growth rate and will result in Tesla's value proposition aligning closer to its hardware and software offerings.



Source: Henry Fund Estimates

A complement to Tesla's business model is its energy segment, offering industry-leading storage products, solar panels, and battery packs. The Henry Fund views this segment as a dependable source of diversification, as industry analysis suggests renewable energy sources will remain immensely popular. The company continues to set internal records for energy deployments and could reach over 50 GWh per year by the end of the decade. Expansions to the supercharger network will be imperative for the company to support the number of EVs on the road. Its first-mover advantage in this area will allow it to scale its offerings much faster than competitors, particularly in more remote parts of the country. Given all these factors, the Henry Fund anticipates this segment will sustain double-digit growth to the forecast horizon, growing to over 15% of the company's annual revenues.

Its final segment, Services and Other, will also see doubledigit growth through 2031, as the number of repairs on new and existing vehicles will continue to mount. Vehicle maintenance, FSD updates, and used car sales will be the biggest catalysts, particularly with its Robotaxi, Cybertruck, and Model 2 vehicles. A continuing value growth of 6% is expected to mirror automotive revenues, representing 11% of the company's annual business.

The following figures evaluate the HF's forecasts against consensus for the next five years (2028E). The chart represents Tesla's long-term revenue outlook while the table represents compounded annual growth rates.



TSLA underperforms consensus through '25, but accelerates thereafter (\$mm)



Source: FactSet, Henry Fund Estimates

	Consensus	HF
Automotive Revenues	6.80%	10.60%
EG&S Revenues	37.60%	34.90%
S&O Revenues	13.30%	20.90%
Deliveries	11.60%	11.90%

Source: FactSet, Henry Fund Estimates

Cost Structure

Tesla's primary operating expenses include its cost of goods sold (COGS, 77% of revenues); research and development (R&D, 4.1%); and selling, general, and administrative expenses (SG&A, 5.0%).⁴ As mentioned previously, rising automotive costs will continue to tighten gross margins in the near term. The team also anticipates R&D and SG&A expenses will rise due to increased investment in artificial intelligence, FSD models, and marketing costs.

In the recent "We, Robot" event, Elon Musk explained the possibility of the company's Optimus robots being massmarketed to the general public. The Henry Fund considers this scenario very utopian, given the timeframe in which this would realistically occur and its addressable market. Their current use within manufacturing is the most suitable purpose, both for Tesla and other companies. The cost savings from ramping up their usage would be tremendous, by reducing human injury, working 24 hours a day, using greater precision, and eliminating labor costs.

Automotive (auto) gross margins will remain lower at 15-17% through 2026 as the low-cost Model 2, and potentially the Robotaxi, hit the market. In 2027, the team predicts Optimus robots will become unveiled for widespread use



in production, leveraging their efficiency to lower all production costs by 3-4 percentage points and push auto gross margins above 20%. The team anticipates these costs will be reduced to 66.5% of revenues in aggregate (vs. 77% today) driven by expanding FSD revenues, vehicle demand, and immense economies of scale. Research and development will likely remain steady at 4.0% as the company continuously refines the technology in their products, FSD, and Optimus robots. On the other hand, SG&A expenses will be reduced to only 4.3% of revenues due to less overhead costs. The following chart summarizes the company's cost structure as a percentage of revenues through 2033.





Source: FactSet and Henry Fund Estimates

Inventory and Capital Expenditures

The company's most prominent line items on its balance sheet include property, plant, and equipment (PP&E, 28% of total assets), inventory (13%), and cash/short-term investments (27%). In the last two fiscal years, inventory has swelled from \$5.8 to \$13.6 billion, driven by vehicle surpluses (total production – deliveries) of 35,000-55,000 vehicles per year. Historically, this number is much lower at less than 10,000 vehicles or even negative. Looking ahead, the Henry Fund anticipates this surplus will remain elevated and not normalize until 2026 or 2027. In the long term, the team anticipates inventory levels will continue to decline as manufacturing processes become more efficient to reduce the number of excess vehicles. The commercialization of the company's FSD software will also play a factor, expanding revenues without adding inventory.

Capital expenditures (CAPEX) for Tesla have ranged between \$6-8 billion a year but are expected to rise near



\$15 billion at continuing value as it pursues numerous projects including new vehicles, gigafactory expansions, Dojo computing power, artificial intelligence training, energy storage, battery production, and a growing supercharger network. All told this will increase the company's CAPEX to 11.3% of revenues in 2024 but fall to 5-6% by 2030 given the value-added nature of these projects.

WACC

The Henry Fund arrived at the company's cost of equity using the 10-year YTM on Treasury bonds for the risk-free rate of 3.80%, an adjusted beta of 1.35, and an equity risk premium of 5.00%. While empirical evidence suggests using a beta of 2.00, an adjusted 5-year beta was utilized to more accurately reflect the company's stock price and long-term outlook.⁵⁵ Since Tesla has very little public debt, the pre-tax cost of debt was referenced from Bloomberg by using the average YTM on BBB-rated corporate bonds. Equity market values and all sources of debt from the company's balance sheet were utilized for its weights, before arriving at the weighted average cost of capital of 10.48%.

Valuation Metrics

Using the above forecasts, assumptions, and investment thesis, an intrinsic value of \$196.23 was calculated using the Discounted Cash Flow (DCF) and Economic Profit (EP) methods, a -21.5% downside from the current price. Key assumptions from this model resulted in the company's FCF growing at a CAGR of 42.3%, with a majority of this occurring after 2029. A 7.0% continuing value growth rate for NOPLAT and a continuing value ROIC of 50.8% were also utilized.

Since Tesla does not pay a dividend, the HF does not consider the Dividend Discount Model an accurate representation of value, resulting in an intrinsic share price of \$104.37. The team forecasts that Tesla will not institute a dividend over the forecast horizon as the company will look to use the cash to fund other internal projects. Finally, a relative valuation was conducted using eight of the company's closest competitors. Tesla has historically traded at a premium to its peers, especially when compared to legacy automakers, and resulted in an intrinsic value of \$28.89. Again, the HF does not consider this an accurate representation of the company's true value.



The biggest drivers for this valuation stem from the company's lofty growth expectations, the timing of new product releases, and the likelihood they can successfully penetrate the market. Although the team maintains a bearish stance, there remains a great possibility that Tesla is significantly undervalued when considering a 15- or 20year forecast horizon. Thus, this valuation weighs the company's outlook for the near term more heavily, resulting in more pessimistic forecasts for deliveries, revenue growth, and margins. With 87% of the company's value being represented in continuing value, and analyst consensus placing a 7.5% growth on this mark, there exists a substantial amount of volatility in the company's share price. Furthermore, the present value of employee stock options is extremely high at \$76.2 billion, diluting the share price by \$23.92.

When all considered, Tesla presents an excessive level of risk in the short term. A re-evaluation of the company is recommended in 2026 or 2027 when growth prospects and project timelines will be more clearly defined. Tesla is at an inflection point over the next 18 months, and the decision to pursue automobiles or cutting-edge technology will significantly dictate its future growth targets. While the company's projects offer potentially unprecedented upside, near-term competitive pressures and pricing challenges could further delay these projects. Such delays may adversely impact investor sentiment, potentially driving the share price down to as low as \$150 per share.

Sensitivity/Scenario Testing

As a final check of the strength of the DCF/EP model, several sensitivity and scenario tests were conducted on various operating and valuation assumptions. Significant stressors were applied to see the full range of price points that Tesla could reach, resulting in an average interquartile range between \$175 and \$227. The scenario tests were equally volatile, resulting in an average price of \$224 and a median price of \$195.

One of the key sensitivity tests applied was between the company's average selling price per vehicle and the number of deliveries per year. An annual delta was applied to each of these forecasts through the forecast horizon, resulting in a \$80.75 range of price points. The most probabilistic of these stressors is the event that Tesla makes additional price cuts (-1 to -2% delta) and has fewer deliveries than anticipated (-100,000 per year). This



immediately drops the share price to nearly \$175, a -30.0% downside from the current share price.

			Revenue/Unit Delivered Growth ∆ ('24-CV)										
	196.23	-3.00%	-2.00%	-1.00%	0.00%	1.00%	2.00%	3.00%					
⊲	(300,000)	159.12	166.31	173.76	181.51	189.55	197.90	206.56					
a,	(200,000)	163.46	170.82	178.47	186.42	194.67	203.23	212.11					
× S	(100,000)	167.79	175.34	183.18	191.32	199.78	208.56	217.66					
ies 4-0	-	172.12	179.85	187.89	196.23	204.89	213.89	223.22					
ver ('2	100,000	176.45	184.37	192.60	201.14	210.01	219.22	228.77					
Jeli	200,000	180.79	188.89	197.30	206.05	215.12	224.54	234.32					
	300,000	185.12	193.40	202.01	210.95	220.24	229.87	239.87					

Source: Henry Fund Estimates

Thirteen scenario tests were also conducted to analyze the impact of Tesla's EV and solar market share, new vehicle demand, FSD possibilities, production line efficiencies, automotive regulatory credits, Elon Musk's pay package, and the Federal Funds Rate. The most notable of these scenarios included the popularity of its new vehicles (Cybertruck, Roadster, Model 2, Roadster) and FSD timeline, resulting in a share price upside of nearly \$400. On the contrary, the company's share price could drop as low as \$160 if these projects fail to meet expectations. A summary of this analysis is included on the final page of the appendix.

KEYS TO MONITOR

Going forward, Tesla's ability to meet delivery targets, new vehicle timelines, and maintaining itself as a market leader within the energy storage industry will be key to outperforming its competitors. Its FSD software provides the best opportunity for long-term growth and serves as a key differentiator in a technology-focused industry. New low-cost alternatives threaten to take away from its leading EV market share, but the release of new vehicles could push the company's position above 25%.

Weakening demand, stronger competition, and Elon Musk's numerous projects present the biggest headwinds going forward. The company's recent downturn in deliveries will be indicative of the next 18 months as the company will likely be delayed in the release of the Model 2 and struggle to compete with lower-priced offerings in China. While the team applauds Musk's innovative thinking, his responsibilities are stretched too thin to prioritize Tesla's ambitious projects, making it difficult to meet analysts' expectations over the next three years. Although the company presents numerous opportunities over the long term, short-term performance will likely underperform the market, leading the Henry Fund to a **BEARISH** outlook.



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Revenue Decomposition

Call Vietning Uppe 1 2021<	in millions (mm), except unit data													
Percence by Segments Automotive Resonance 44.125 67.20 77.69 77.79 77.69 77.79 77.79 77.79 77.79 77.79 77.79 77.79 77.79 77.79 77.79 77.79 77.79 77.79	Fiscal Years Ending Dec. 31	2021	2022	2023	2024E	2025E	2026E	2027E	2028E	2029E	2030E	2031E	2032E	2033E
Jonnofice Services 44,235 67,200 78,977 44,444 101,299 109,235 129,071 45,464 166,107 129,152 203,323 120,071 45,465 166,107 129,152 203,323 120,071 45,465 1,465 1,776 1,776 1,776 1,776 1,776 1,776 1,776 1,776 1,776 1,776 1,776 1,776 1,776 1,776 1,776 2,22 1,776 1,776 1,776 2,028 2,008 4,000 1,776 1,776 1,776 1,786 2,038 4,000 1,00	Revenue by Segment													
Automotive sales 41,125 67,210 78,547 84,444 10.399 199,825 139,827 139,827 139,827 139,827 139,827 139,827 139,827 139,827 139,827 139,827 139,827 139,827 139,827 149,85 141,85 123,85<	Automotive Revenues													
generity automative suring generit 62.5% 1.65% 5.2.0% 1.7% 1.2.6% 1.7% 2.2.7% 1.7% 2.0.1% 2.377 2.3.37 3	Automotive sales	44,125	67,210	78,509	74,947	84,444	101,399	109,825	130,927	146,458	166,107	188,152	203,632	216,707
Automotive regulatory credits 1.465 1.776 1.765 1.775 1.765 1.775 1.765 1.775 1.765 1.775 1.775 1.765 1.775 <t< td=""><td>growth</td><td>68.5%</td><td>52.3%</td><td>16.8%</td><td>-4.5%</td><td>12.7%</td><td>20.1%</td><td>8.3%</td><td>19.2%</td><td>11.9%</td><td>13.4%</td><td>13.3%</td><td>8.2%</td><td>6.4%</td></t<>	growth	68.5%	52.3%	16.8%	-4.5%	12.7%	20.1%	8.3%	19.2%	11.9%	13.4%	13.3%	8.2%	6.4%
generic	Automotive regulatory credits	1,465	1,776	1,790	2,685	2,927	3,307	3,638	2,910	1,746	1,484	1,336	1,229	1,167
Altomotive learing 1.642 2.476 2.178 2.191 2.417 2.000 2.007 3.000 2.007 3.000 2.007 3.000 2.007 3.000 2.007 3.000 2.007 3.000 2.007 3.000 2.007 3.000 2.007 3.000 2.007 3.000 2.007 3.000 2.007 3.000 2.007 3.000 2.007 3.000 2.000 3.000 2.000 1.007 <td>growth</td> <td>-</td> <td>21.2%</td> <td>0.8%</td> <td>50.00%</td> <td>9.00%</td> <td>13.00%</td> <td>10.00%</td> <td>-20.00%</td> <td>-40.00%</td> <td>-15.00%</td> <td>-10.00%</td> <td>-8.00%</td> <td>-5.00%</td>	growth	-	21.2%	0.8%	50.00%	9.00%	13.00%	10.00%	-20.00%	-40.00%	-15.00%	-10.00%	-8.00%	-5.00%
approximation 516 Jin	Automotive leasing	1,642	2,476	2,120	1,484	1,781	2,101	2,417	2,658	2,871	3,101	3,287	3,484	3,658
data outbork 47,22 71,42 22,419 79,116 89,152 106,807 115,879 116,879	growth	56.1%	50.8%	-14.4%	-30.00%	20.00%	18.00%	15.00%	10.00%	8.00%	8.00%	6.00%	6.00%	5.00%
growth 72.45 51.35 61.35 12.75 12.85 6.55 12.78 10.07 11.09 12.05 61.25 64.35 serge Generation and Storage 2,789 3,099 6.035 5.354 13.044 15.401 22.444 26.595 31.000 15.650 39.923 43.921 46.931 growth 64.95 60.21% 32.664 20.005 16.005 15.006 12.005	Automotive Revenues	47,232	71,462	82,419	79,116	89,152	106,807	115,879	136,495	151,075	170,692	192,775	208,345	221,532
error Generation and Storage 2.289 3.090 6.035 9.354 13.444 13.431 22.464 25.006 15.006 15.006 15.006 15.006 12.001 10.008	growth	73.4%	51.3%	15.3%	-4.0%	12.7%	19.8%	8.5%	17.8%	10.7%	13.0%	12.9%	8.1%	6.3%
growth 39.99 40.2% 54.4% 55.00% 42.00% 30.00% 22.00% 15.00% <td>Energy Generation and Storage</td> <td>2,789</td> <td>3,909</td> <td>6,035</td> <td>9,354</td> <td>13,844</td> <td>18,413</td> <td>22,464</td> <td>26,956</td> <td>31,000</td> <td>35,650</td> <td>39,928</td> <td>43,921</td> <td>48,313</td>	Energy Generation and Storage	2,789	3,909	6,035	9,354	13,844	18,413	22,464	26,956	31,000	35,650	39,928	43,921	48,313
Index and Other growth 3,802 64.9 M 60.01 M 5,813 80.00 M 16,007 26.00 M 16,007 16.00 M 15,007 16.00 M 12,000 M 10,000	growth	39.9%	40.2%	54.4%	55.00%	48.00%	33.00%	22.00%	20.00%	15.00%	15.00%	12.00%	10.00%	10.00%
growth 64.9% 60.2% 36.6% 30.00% 26.00% 15.00% 15.00% 15.00% 15.00% 15.00% 15.00% 10.00% 00.00% 60.00% vial Revenues 53.823 81.462 96.773 99.282 11.6282 11.11% 17.2% 11.15% 11.5% <t< td=""><td>Services and Other</td><td>3,802</td><td>6,091</td><td>8,319</td><td>10,815</td><td>13,627</td><td>16,079</td><td>18,652</td><td>21,450</td><td>24,024</td><td>26,426</td><td>29,069</td><td>31,394</td><td>33,278</td></t<>	Services and Other	3,802	6,091	8,319	10,815	13,627	16,079	18,652	21,450	24,024	26,426	29,069	31,394	33,278
Hall Revenues 53,823 81,462 96,779 99,285 116,622 141,299 156,995 184,902 206,098 232,768 261,771 283,660 303,122 growth 70,7% 51,4% 12,8% 12,2% 11,1% 12,8% 11,5% 12,2% 8,4% 6,9% utomotive Revenues 87,2% 85,2% 79,7% 76,4% 75,6% 73,8% 73,3% 73,5% 73,4% 73,6% 73,4% 73,5% 153,8%	growth	64.9%	60.2%	36.6%	30.00%	26.00%	18.00%	16.00%	15.00%	12.00%	10.00%	10.00%	8.00%	6.00%
growth 70.7% 51.4% 12.8% 2.2% 17.5% 21.2% 11.1% 11.3% 12.3% <th< td=""><td>Total Revenues</td><td>53,823</td><td>81,462</td><td>96,773</td><td>99,285</td><td>116,622</td><td>141,299</td><td>156,995</td><td>184,902</td><td>206,098</td><td>232,768</td><td>261,771</td><td>283,660</td><td>303,123</td></th<>	Total Revenues	53,823	81,462	96,773	99,285	116,622	141,299	156,995	184,902	206,098	232,768	261,771	283,660	303,123
contenues 99.921 116.927 140,189 152,657 177,365 utomotive Revenues 87,8% 87,7% 85,2% 79,7% 76,4% 75,6% 73,3% 73,3% 73,3% 73,3% 73,3% 73,3% 73,3% 73,3% 73,3% 73,3% 73,3% 73,4% 75,3% 73,3% 73,3% 73,3% 73,3% 73,3% 73,3% 73,3% 73,3% 73,3% 73,3% 73,3% 73,3% 73,3% 73,3% 73,3% 73,3% 73,3% 73,3% 73,4% 75,5% 15,3% 15,5% 15,5% 15,5% 15,5% 15,5% 15,5% 15,5% 15,5% 15,5% 15,5% 15,5% 15,5% 15,5% 100,0% <t< td=""><td>growth</td><td>70.7%</td><td>51.4%</td><td>18.8%</td><td>2.6%</td><td>17.5%</td><td>21.2%</td><td>11.1%</td><td>17.8%</td><td>11.5%</td><td>12.9%</td><td>12.5%</td><td>8.4%</td><td>6.9%</td></t<>	growth	70.7%	51.4%	18.8%	2.6%	17.5%	21.2%	11.1%	17.8%	11.5%	12.9%	12.5%	8.4%	6.9%
atomotive Revenues 87.8% 87.7% 85.2% 79.7% 76.4% 75.6% 73.8% 73.3% 73.3% 73.3% 73.3% 73.3% 73.3% 73.3% 73.3% 73.3% 73.3% 73.4% 73.3% 73.3% 73.3% 73.4% 73.3% 73.4% 73.3% 73.3% 73.3% 73.4% 73.3% 73.4% </td <td></td> <td></td> <td></td> <td>consensus</td> <td>99,921</td> <td>116,927</td> <td>140,189</td> <td>152,657</td> <td>177,365</td> <td></td> <td></td> <td></td> <td></td> <td></td>				consensus	99,921	116,927	140,189	152,657	177,365					
energy Generation and Storage 5.2% 4.8% 6.2% 9.4% 11.9% 13.0% 14.3% 14.6% 15.0% 15.3% 15	Automotive Revenues	87.8%	87.7%	85.2%	79.7%	76.4%	75.6%	73.8%	73.8%	73.3%	73.3%	73.6%	73.4%	73.1%
nonces 7.1% 7.5% 8.6% 10.9% 11.7% 11.4% 11.9% 11.4% 11.1% 1	Energy Generation and Storage	5.2%	4.8%	6.2%	9.4%	11.9%	13.0%	14.3%	14.6%	15.0%	15.3%	15.3%	15.5%	15.9%
tal Revenues 100.0% 1	Services and Other	7.1%	7.5%	8.6%	10.9%	11.7%	11.4%	11.9%	11.6%	11.7%	11.4%	11.1%	11.1%	11.0%
Bilde Production/Deliveries 930,422 1,369,611 1,845,985 1,825,000 2,485,000 2,610,000 3,185,000 3,730,000 3,930,000 4,070,000 3,085,000 2,118 1,208 1,208 2,208 2,208 2,208,000 2,250,000 3,250,000 3,250,000 2,250,000 2,250,000 2,250,000 2,250,000 2,250,000 2,250,000 2,250,000 2,250,000 2,250,000 2,250,000 2,250,000 2,250,000 2,250,000 2,250,000 2,	Total Revenues	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
bick Production/Deliveries yab 20,222 1,365,611 1,825,000 2,080,000 2,465,000 2,610,000 3,185,000 3,730,000 3,730,000 3,730,000 3,730,000 3,730,000 3,000,000 2,000,000 2,000,000 2,000,000 2,000,000 2,000,000 2,000,000 2,000,000 2,000,000 2,000,000 2,000,00 2,000,000 2,000,000 2,000,00 2,000,000 2,000,00 2,000,00 2,000,000 2,000,00 2,000,00 3,000,00 3,000,00 3,000,00 3,000,00 3,000,00 3,000,00 3,000,00 3,000,00 3,000,00 3,000,00														
tal Production 930,422 1,369,611 1,845,985 1,825,000 2,485,000 2,485,000 3,185,000 3,475,000 3,730,000 3,930,000 4,070,000 4,200,000 growth 82.5% 47.2% 34.8% -1.1% 14.0% 19.5% 5.0% 22.0% 9.1% 7.3% 5.4% 3.6% 3.2% odel 3/V Deliveries 911,208 1,247,146 1,739,707 1,704,663 1,920,000 2,750,000 2,500,00 3,150,000 3,300,000 3,400,000 3,000,000 </td <td>Vehicle Production/Deliveries</td> <td></td>	Vehicle Production/Deliveries													
growth 82.5% 47.2% 34.8% -1.1% 14.0% 19.5% 5.0% 22.0% 9.1% 7.3% 5.4% 3.6% 3.2% odel 3/Y Deliveries 911,208 1,247,146 1,739,707 1,704,663 1,920,000 2,175,000 2,250,000 2,950,000 3,150,000 3,300,000 3,400,000 3,500,000 3,500,000 2,200,000 22,250,000 2,250,000 2,250,000 2,200,000 2,200,000 2,200,000 2,200,000 2,200,000 2,200,000 2,200,000 2,250,000 2,000,00 2,250,000 2,000,00 2,500,00 2,500,00 2,000,00 3,00,000	Total Production	930,422	1,369,611	1,845,985	1,825,000	2,080,000	2,485,000	2,610,000	3,185,000	3,475,000	3,730,000	3,930,000	4,070,000	4,200,000
add 3/Y Deliveries 911,208 1,247,146 1,739,707 1,704,663 1,920,000 2,175,000 2,250,000 2,750,000 3,150,000 3,300,000 3,400,000 3,500,000 growth 105,5% 36,5% 36,5% 36,5% 36,5% 30,5% 20,000 12,6% 13,3% 3,4% 22,2% 7,3% 6,8% 4,8% 3,0% 22,000 growth -56,2% 167,2% 3,3% -1,07% 33,3% 107,3% 11,8% 5,3% 12,5% 8,9% 6,1% 3,8% 3,0% 22,000 230,000 250,000 230,000 365,000 365,000 420,000 3,175,000 3,725,000 3,292,000 4,200,000 4,200,000 3,175,000 3,725,000 3,292,000 4,200,000 3,175,000 3,725,000 3,292,000 4,200,000 3,175,000 3,725,000 3,292,000 4,200,000 3,175,00 3,725,000 3,292,000 4,200,000 3,175,000 3,725,000 3,292,000 4,200,000 3,175,000 3,725,000 3,292,000 4,200,000 3,175,000 3,725,000 3,292,000 4,200,000 3,133,000 <td>growth</td> <td>82.5%</td> <td>47.2%</td> <td>34.8%</td> <td>-1.1%</td> <td>14.0%</td> <td>19.5%</td> <td>5.0%</td> <td>22.0%</td> <td>9.1%</td> <td>7.3%</td> <td>5.4%</td> <td>3.6%</td> <td>3.2%</td>	growth	82.5%	47.2%	34.8%	-1.1%	14.0%	19.5%	5.0%	22.0%	9.1%	7.3%	5.4%	3.6%	3.2%
growth J05.9% 36.9% 36.9% 36.9% 12.6% 13.3% 3.4% 2.22% 7.3% 6.8% 4.4% 3.0% 2.9% odel S/X Deliveries 24,964 66,705 68,874 61,493 82,000 170,000 220,000 225,000 226,000 226,000 266,000 270,000 280,000 200,000 326,000 326,000 365,000 326,000 365,000 326,000 365,000 326,000 365,000 326,000 365,000 326,000 365,000 328,8 1.06% 8.2,% 6.3% 6.3% 6.3% 6.3% 6.3% 6.3% 6.3% 6.3% 6.3% 6.3% 6.3% 6.3% 6.3% 3.2% 2.5% 0.3% 7.5% 5.4% 3.3% 1.1% 5.7% 2.1% 5.7% 2.1% 5.7% 2.1% 5.7% 2.1% 5.7% 2.1% 5.7% 2.1% 5.7% 2.1% 5.7% 2.1% 5.7% 2.1% 5.7% 2.1% 5.7% 5.6% <td>Model 3/Y Deliveries</td> <td>911,208</td> <td>1,247,146</td> <td>1,739,707</td> <td>1,704,663</td> <td>1,920,000</td> <td>2,175,000</td> <td>2,250,000</td> <td>2,750,000</td> <td>2,950,000</td> <td>3,150,000</td> <td>3,300,000</td> <td>3,400,000</td> <td>3,500,000</td>	Model 3/Y Deliveries	911,208	1,247,146	1,739,707	1,704,663	1,920,000	2,175,000	2,250,000	2,750,000	2,950,000	3,150,000	3,300,000	3,400,000	3,500,000
odel S/D Celiveries 24,964 66,705 68,874 61,493 82,000 170,000 190,000 220,000 226,000 260,000 270,000 280,000 growth -56,2% 167,2% 3.3% 107,3% 11,2% 5.3% 12,5% 8,9% 6.1% 3.8% 3.7% 3.3% 107,3% 11,2% 5.3% 12,5% 8,9% 6.1% 3.8% 3.7% 3.7% 11,0% 123,1% 12,0% 22,3% 22,5% 33,3% 10,6% 8.2.% 6.3% 3.3% 10,6% 8.2.% 6.3% <	growth	105.9%	36.9%	39.5%	-2.0%	12.6%	13.3%	3.4%	22.2%	7.3%	6.8%	4.8%	3.0%	2.9%
growth (bertruck, Robotasi and Other growth	Model S/X Deliveries	24,964	66,705	68,874	61,493	82,000	170,000	190,000	200,000	225,000	245,000	260,000	270,000	280,000
obserturel, Robotaxi and Other - - 23,000 125,000 127,000 225,000 330,000 365,000 395,000 420,000 growth - 139,1% 127,3% 36,0% 32,4% 28,5% 138% 13.8%	growth	-56.2%	167.2%	3.3%	-10.7%	33.3%	107.3%	11.8%	5.3%	12.5%	8.9%	6.1%	3.8%	3.7%
growth - <td>Cybertruck, Robotaxi and Other</td> <td>-</td> <td>-</td> <td>-</td> <td>23,000</td> <td>55,000</td> <td>125,000</td> <td>170,000</td> <td>225,000</td> <td>290,000</td> <td>330,000</td> <td>365,000</td> <td>395,000</td> <td>420,000</td>	Cybertruck, Robotaxi and Other	-	-	-	23,000	55,000	125,000	170,000	225,000	290,000	330,000	365,000	395,000	420,000
stal Deliveries 936,172 1,313,851 1,808,581 1,789,156 2,057,000 2,470,000 2,610,000 3,175,000 3,465,000 3,725,000 3,925,000 4,065,000 4,200,000 growth 87.4% 40.3% 37.7% -1.1% 15.0% 20.1% 5.7% 21.6% 9.1% 7.5% 5.4% 3.6% 3.3% shicle Surplus (Shortage) (5,750) 55,760 37.404 35,844 23,000 15,000 - 10,000 10,000 5,000 5,000 5,000 - . <td< td=""><td>growth</td><td>-</td><td>-</td><td>-</td><td>-</td><td>139.1%</td><td>127.3%</td><td>36.0%</td><td>32.4%</td><td>28.9%</td><td>13.8%</td><td>10.6%</td><td>8.2%</td><td>6.3%</td></td<>	growth	-	-	-	-	139.1%	127.3%	36.0%	32.4%	28.9%	13.8%	10.6%	8.2%	6.3%
growth 87.4% 40.3% 37.7% consensus -1.1% 15.0% 2,058,000 20.1% 2,459,000 5.7% 3,133,000 9.1% 7.5% 5.4% 3.6% 3.3% ehicle Surplus (Shortage) (5,750) 55,760 37,404 35,844 23,000 15,000 - 10,000 5,000	Total Deliveries	936,172	1,313,851	1,808,581	1,789,156	2,057,000	2,470,000	2,610,000	3,175,000	3,465,000	3,725,000	3,925,000	4,065,000	4,200,000
conservation conservation conservation conservation conservation conservation ehicle Surplus (Shortage) (5,750) 55,760 37,404 35,844 23,000 15,000 - 10,000 5,000 5,000 5,000 - ehicle Surplus (Shortage) 47,133 51,155 43,409 41,890 41,052 41,052 42,078 41,237 42,268 44,592 47,937 50,094 51,597 growth -10.1% 8.5% -15.1% -3.50% -2.00% 0.00% 2.50% -2.00% 5.50% 7.50% 4.50% 3.00% eographic Breakdown	growth	87.4%	40.3%	37.7%	-1.1%	15.0%	20.1%	5.7%	21.6%	9.1%	7.5%	5.4%	3.6%	3.3%
ehicle Surplus (Shortage) (5,750) 55,760 37,404 35,844 23,000 15,000 - 10,000 10,000 5,000 5,000 5,000 5,000 evenue/Vehicle Delivered growth 47,133 51,155 43,409 41,890 41,052 41,052 42,078 41,237 42,268 44,592 47,937 50,094 51,597 growth -10.1% 8.5% -15.1% -3.50% -2.00% 0.00% 2.50% -2.00% 2.50% 5.50% 7.50% 4.50% 3.00% eographic Breakdown				consensus	1,7 52,000	2,030,000	2,733,000	2,333,000	5,135,000					
evenue/Vehicle Delivered growth 47,133 51,155 43,409 41,890 41,052 42,078 41,237 42,268 44,592 47,937 50,094 51,597 growth -10.1% 8.5% -15.1% -3.50% -2.00% 0.00% 2.50% -2.00% 2.50% 5.50% 7.50% 4.50% 3.00% eographic Breakdown nited States 23,973 40,553 45,235 48,401 59,050 73,812 82,670 100,857 114,977 132,224 154,702 170,172 182,084 growth 57.6% 69.2% 11.5% 7.0% 22.0% 25.0% 12.0% 22.0% 15.0% 170,0% 10.0% 7.0% growth 65.6% 42.2% 30,9% -3.7% 11.7% 16.6% 11.8% 13.1% 56.6% 10.6% 5.3% 6.0% 7.2% uina 13,844 18,145 21,745 22,18 25,507 30,098 32,506 36,732 41,140 45,254 <td< td=""><td>Vehicle Surplus (Shortage)</td><td>(5,750)</td><td>55,760</td><td>37,404</td><td>35,844</td><td>23,000</td><td>15,000</td><td>-</td><td>10,000</td><td>10,000</td><td>5,000</td><td>5,000</td><td>5,000</td><td>-</td></td<>	Vehicle Surplus (Shortage)	(5,750)	55,760	37,404	35,844	23,000	15,000	-	10,000	10,000	5,000	5,000	5,000	-
growth -10.1% 8.5% -15.1% -3.50% -2.00% 0.00% 2.50% -2.00% 2.50% 5.50% 7.50% 4.50% 3.00% eographic Breakdown nited States 23,973 40,553 45,235 48,401 59,050 73,812 82,670 100,857 114,977 132,224 154,702 170,172 182,084 growth 57.6% 69.2% 11.5% 7.0% 22.0% 25.0% 12.0% 22.0% 14.0% 15.0% 17.0% 10.0% 7.0% growth 65.6% 42.2% 30.9% -3.7% 11.7% 16.6% 11.8% 13.1% 5.6% 10.6% 5.3% 6.0% 7.2% growth 65.6% 42.2% 30.9% -3.7% 11.7% 16.6% 11.8% 13.1% 5.6% 10.6% 5.3% 6.0%	Revenue/Vehicle Delivered	47,133	51,155	43,409	41,890	41,052	41,052	42,078	41,237	42,268	44,592	47,937	50,094	51,597
eographic Breakdown nited States 23,973 40,553 45,235 48,401 59,050 73,812 82,670 100,857 114,977 132,224 154,702 170,172 182,084 growth 57,6% 69,2% 11.5% 7.0% 22.0% 25.0% 12.0% 22.0% 14.0% 15.0% 170,172 182,084 growth 57,6% 69,2% 11.5% 7.0% 22.0% 25.0% 12.0% 22.0% 14.0% 15.0% 17.0% 10.0% 7.0% growth 65.6% 42.2% 30.9% -3.7% 11.7% 16.6% 11.8% 13.1% 5.6% 10.6% 5.3% 6.0% 7.2% growth 65.6% 42.2% 30.9% -3.7% 11.7% 16.6% 11.8% 13.1% 5.6% 10.6% 5.3% 6.0% 7.2% growth 107.8% 31.1% 19.8% 2.0% 15.0% 18.0% 8.0% 13.0% 12.0% 80,0% 60,0% 60,0%	arowth	-10.1%	8.5%	-15.1%	-3.50%	-2.00%	0.00%	2.50%	-2.00%	2.50%	5.50%	7.50%	4.50%	3.00%
cographic Breakdown 23,973 40,553 45,235 48,401 59,050 73,812 82,670 100,857 114,977 132,224 154,702 170,172 182,084 growth 57,6% 69,2% 11,5% 7.0% 22.0% 25.0% 12.0% 22.0% 14.0% 15.0% 17.0% 10.0% 7.0% growth 65,6% 42.2% 30.9% -3.7% 11.7% 16.6% 11.8% 13.1% 5.6% 10.6% 5.3% 6.0% 7.2% growth 65,6% 42.2% 30.9% -3.7% 11.7% 16.6% 11.8% 13.1% 5.6% 10.6% 5.3% 6.0% 7.2% growth 107.8% 31.1% 19.8% 2.1,745 22,180 25,507 30,098 32,506 36,732 41,140 45,254 48,874 51,806 54,915 growth 107.8% 31.1% 19.8% 2.0% 15.0% 18.0% 12.0% 12.0% 12.0% 261,771 <td< td=""><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></td<>														
Inited States23,97340,55345,23548,40159,05073,81282,670100,857114,977132,224154,702170,172182,084growth57,6%69,2%11.5%7.0%22,0%25,0%12.0%22,0%14.0%15,0%17,0%10,0%7.0%ther International16,00622,76429,79328,70432,06637,38941,81947,31349,98255,29158,19661,68266,125growth65,6%42.2%30,9%-3.7%11.7%166%11.8%13.1%5.6%10.6%5.3%6.0%7.2%uina13,84418,14521,74522,18025,50730,09832,50636,73241,14045,25448,87451,80654,915growth107.8%31.1%19.8%2.0%15.0%18.0%8.0%13.0%12.0%10.0%8.0%6.0%6.0%otal Revenues53,82381,46296,77399,285116,622141,299156,995184,902206,098232,768261,771283,660303,123growth70.7%51.4%18.8%2.6%17.5%21.2%11.1%11.5%11.2%12.5%8.4%6.0%growth20,7%21.4%2.6%17.5%21.2%52.2%52.7%54.5%55.8%56.8%59.1%60.0%60.1%growth20,7%22.3%22.5%22.3%21.2%21.2%52.2%	Geographic Breakdown													
growth 57.6% 69.2% 11.5% 7.0% 22.0% 25.0% 12.0% 22.0% 14.0% 15.0% 17.0% 10.0% 7.0% ther International 16,006 22,764 29,793 28,704 32,066 37,389 41,819 47,313 49,982 55,291 58,196 61,682 66,125 growth 65,6% 42.2% 30.9% -3.7% 11.7% 16.6% 11.8% 13.1% 5.6% 10.6% 5.3% 6.0% 7.2% growth 13,844 18,145 21,745 22,180 25,507 30,098 32,506 36,732 41,140 45,254 48,874 51,806 54,915 growth 107.8% 31.1% 19.8% 2.0% 15.0% 118.0% 8.0% 13.0% 12.0% 8.0% 6.0% 6.0% 6.0% 6.0% 6.0% 6.0% 6.0% 6.0% 6.0% 6.0% 6.0% 6.0% 6.0% 6.0% 6.0% 6.0% 6.0%	United States	23,973	40,553	45,235	48,401	59,050	73,812	82,670	100,857	114,977	132,224	154,702	170,172	182,084
ther International 16,006 22,764 29,793 28,704 32,066 37,389 41,819 47,313 49,982 55,291 58,196 61,682 66,125 growth 65.6% 42.2% 30.9% -3.7% 11.7% 16.6% 11.8% 13.1% 5.6% 10.6% 5.3% 6.0% 7.2% growth 13,844 18,145 21,745 22,180 25,507 30,098 32,506 36,732 41,140 45,254 48,874 51,806 54,915 growth 107.8% 31.1% 19.8% 2.0% 15.0% 18.0% 8.0% 13.0% 12.0% 0.0% 8.0% 66,08 6.0% <td>growth</td> <td>57.6%</td> <td>69.2%</td> <td>11.5%</td> <td>7.0%</td> <td>22.0%</td> <td>25.0%</td> <td>12.0%</td> <td>22.0%</td> <td>14.0%</td> <td>15.0%</td> <td>17.0%</td> <td>10.0%</td> <td>7.0%</td>	growth	57.6%	69.2%	11.5%	7.0%	22.0%	25.0%	12.0%	22.0%	14.0%	15.0%	17.0%	10.0%	7.0%
growth 65.6% 42.2% 30.9% -3.7% 11.7% 16.6% 11.8% 13.1% 5.6% 10.6% 5.3% 6.0% 7.2% nina 13,844 18,145 21,745 22,180 25,507 30,098 32,506 36,732 41,140 45,254 48,874 51,806 54,915 growth 107.8% 31.1% 19.8% 2.0% 15.0% 18.0% 8.0% 13.0% 12.0% 10.0% 8.0% 6	Other International	16,006	22,764	29,793	28,704	32,066	37,389	41,819	47,313	49,982	55,291	58,196	61,682	66,125
nina 13,844 18,145 21,745 22,180 25,507 30,098 32,506 36,732 41,140 45,254 48,874 51,806 54,915 growth 107.8% 31.1% 19.8% 2.0% 15.0% 18.0% 8.0% 13.0% 12.0% 10.0% 8.0% 6.0% 6.0% otal Revenues 53,823 81,462 96,773 99,285 116,622 141,299 156,995 184,902 206,098 232,768 261,771 283,660 303,123 growth 70.7% 51.4% 18.8% 2.6% 17.5% 21.2% 11.1% 17.8% 11.5% 12.9% 22.5% 8.4% 6.0% inited States 44.5% 49.8% 46.7% 48.7% 50.6% 52.2% 52.7% 54.5% 55.8% 56.8% 59.1% 60.0% 60.1% ther International 29.7% 27.3% 28.3% 27.5% 26.5% 26.6% 25.8% 28.3% 22.2% 21.3% 20.7% 19.9% 20.0% 19.4% 28.3% 21.2% 21.8% 21.3%	growth	65.6%	42.2%	30.9%	-3.7%	11.7%	16.6%	11.8%	13.1%	5.6%	10.6%	5.3%	6.0%	7.2%
growth 107.8% 31.1% 19.8% 2.0% 15.0% 18.0% 8.0% 13.0% 12.0% 10.0% 8.0% 6.0%	China	13,844	18,145	21,745	22,180	25,507	30,098	32,506	36,732	41,140	45,254	48,874	51,806	54,915
btal Revenues 53,823 81,462 96,773 99,285 116,622 141,299 156,995 184,902 206,098 232,768 261,771 283,660 303,123 growth 70.7% 51.4% 18.8% 2.6% 17.5% 21.2% 11.1% 17.8% 11.5% 12.5% 8.4% 6.9% inited States 44.5% 49.8% 46.7% 48.7% 50.6% 52.2% 52.7% 54.5% 56.8% 59.1% 60.0% 60.1% ther International 29.7% 27.9% 30.8% 28.9% 27.5% 26.6% 25.6% 24.3% 23.8% 22.2% 21.7% 21.8% inia 25.7% 22.3% 22.5% 22.3% 21.3% 20.7% 19.9% 20.0% 19.4% 18.3% 18.1% istal Revenues 100.0% 100.0% 100.0% 100.0% 100.0% 100.0% 100.0% 100.0% 100.0% 100.0% 100.0% 100.0% 100.0% 100.0% 100.0% <	growth	107.8%	31.1%	19.8%	2.0%	15.0%	18.0%	8.0%	13.0%	12.0%	10.0%	8.0%	6.0%	6.0%
growth 70.7% 51.4% 18.8% 2.6% 17.5% 21.2% 11.1% 17.8% 11.5% 12.9% 12.5% 8.4% 6.9% nited States 44.5% 49.8% 46.7% 48.7% 50.6% 52.2% 52.7% 54.5% 56.8% 59.1% 60.0% 60.1% ther International 29.7% 27.9% 30.8% 28.9% 27.5% 26.6% 25.6% 24.3% 23.8% 22.2% 21.7% 21.8% nina 25.7% 22.3% 22.5% 22.3% 21.9% 21.3% 20.7% 19.9% 100.0% 19.4% 18.3% 18.1% stal Revenues 100.0%<	Total Revenues	53,823	81,462	96,773	99,285	116,622	141,299	156,995	184,902	206,098	232,768	261,771	283,660	303,123
Inted States 44.5% 49.8% 46.7% 48.7% 50.6% 52.2% 52.7% 54.5% 55.8% 59.1% 60.0% 60.1% ther International 29.7% 27.9% 30.8% 28.9% 27.5% 26.5% 26.6% 25.6% 24.3% 23.8% 22.2% 21.7% 21.8% inia 25.7% 22.3% 22.3% 21.9% 21.3% 20.7% 19.9% 20.0% 19.4% 18.7% 18.3% 18.1% tal Revenues 100.0%	growth	70.7%	51.4%	18.8%	2.6%	17.5%	21.2%	11.1%	17.8%	11.5%	12.9%	12.5%	8.4%	6.9%
ther International 29.7% 27.9% 30.8% 28.9% 27.5% 26.5% 26.6% 25.6% 24.3% 23.8% 22.2% 21.7% 21.8% nina 25.7% 22.3% 22.5% 22.3% 21.9% 21.3% 20.7% 19.9% 20.0% 19.4% 18.7% 18.3% 18.1% otal Revenues 100.0% 10														
nina 25.7% 22.3% 22.5% 22.3% 21.9% 21.3% 20.7% 19.9% 20.0% 19.4% 18.7% 18.3% 18.1% 18.1% tal Revenues 100.0% 100.0	United States	44.5%	49.8%	46.7%	48.7%	50.6%	52.2%	52.7%	54.5%	55.8%	56.8%	59.1%	60.0%	60.1%
otal Revenues 100.0% 100.0% 100.0% 100.0% 100.0% 100.0% 100.0% 100.0% 100.0% 100.0% 100.0% 100.0% 100.0% 100.0%	United States Other International	44.5% 29.7%	49.8% 27.9%	46.7% 30.8%	48.7% 28.9%	50.6% 27.5%	52.2% 26.5%	52.7% 26.6%	54.5% 25.6%	55.8% 24.3%	56.8% 23.8%	59.1% 22.2%	60.0% 21.7%	60.1% 21.8%
	United States Other International China	44.5% 29.7% 25.7%	49.8% 27.9% 22.3%	46.7% 30.8% 22.5%	48.7% 28.9% 22.3%	50.6% 27.5% 21.9%	52.2% 26.5% 21.3%	52.7% 26.6% 20.7%	54.5% 25.6% 19.9%	55.8% 24.3% 20.0%	56.8% 23.8% 19.4%	59.1% 22.2% 18.7%	60.0% 21.7% 18.3%	60.1% 21.8% 18.1%

Income Statement

in millions (mm), except share data

Fiscal Years Ending Dec. 31	2021	2022	2023	2024E	2025E	2026E	2027E	2028E	2029E	2030E	2031E	2032E	2033E
Total revenues	53,823	81,462	96,773	99,285	116,622	141,299	156,995	184,902	206,098	232,768	261,771	283,660	303,123
Cost of goods sold	37,306	57,066	74,446	75,751	88,241	107,215	115,025	136,376	150,115	166,511	182,478	192,205	201,709
Gross profit (loss)	16,517	24,396	22,327	23,534	28,382	34,084	41,969	48,526	55,983	66,256	79,293	91,455	101,414
Depreciation and amortization	2,911	3,543	4,667	6,746	7,720	8,103	8,566	8,878	9,418	10,080	10,540	11,191	11,813
Research and development	2,593	3,075	3,969	4,369	5,131	5,935	6,123	7,026	8,038	9,078	10,471	11,346	12,125
Selling, general & administrative	4,517	3,946	4,800	5,461	6,064	6,782	6,908	7,951	8,862	10,242	11,256	12,197	13,034
EBIT (Operating Income)	6,496	13,832	8,891	6,959	9,466	13,263	20,373	24,671	29,665	36,857	47,026	56,720	64,442
Interest income	56	297	1,066	1,222	1,379	1,518	1,684	2,106	2,700	3,471	4,421	5,611	6,967
Interest expense	(371)	(191)	(156)	(300)	(388)	(401)	(383)	(363)	(365)	(439)	(482)	(525)	(545)
Other income (expense), net	135	(43)	172	128	-	-	-	-	-	-	-	-	-
Restructuring & other	27	(176)	-	(677)	-	-	-	-	-	-	-	-	-
Income (loss) before income taxes	6,343	13,719	9,973	7,332	10,457	14,380	21,674	26,414	32,001	39,888	50,965	61,806	70,864
Provision for income taxes (benefit)	699	1,132	(5,001)	1,026	1,464	2,013	3,034	3,698	4,480	5,584	7,135	8,653	9,921
Net income (loss)	5,644	12,587	14,974	6,305	8,993	12,367	18,639	22,716	27,521	34,304	43,830	53,153	60,943
Net income (loss) attributable to noncontrolling interests	(125)	(31)	23	13	18	25	37	45	55	69	88	106	122
Net income (loss) attributable to common stockholders	5,519	12,556	14,997	6,318	9,011	12,392	18,677	22,761	27,576	34,372	43,917	53,259	61,065
Weighted average shares outstanding - basic	2,958	3,130	3,174	3,225	3,305	3,385	3,464	3,517	3,529	3,528	3,525	3,520	3,515
Year end shares outstanding	3,099	3,164	3,185	3,265	3,345	3,424	3,504	3,529	3,529	3,527	3,523	3,517	3,513
Net income (loss) per share - basic	\$ 1.87	\$ 4.01	\$ 4.72	\$ 1.96	\$ 2.73 \$	3.66	\$	\$ 6.47 \$	7.81 \$	9.74	\$ 12.46 \$	\$	17.37
Dividends pre share	\$-	\$-	\$-	\$ - \$	\$-\$	5 - 9	\$-\$	\$-\$	- \$		\$-\$	5 - \$	-

Balance Sheet

in millions (mm), except share data													
Fiscal Years Ending Dec. 31	2021	2022	2023	2024E	2025E	2026E	2027E	2028E	2029E	2030E	2031E	2032E	2033E
ASSETS													
Current Assets													
Cash and cash equivalents	17,576	16,253	16,398	21,196	30,018	38,894	58,839	79,959	107,495	141,502	184,251	233,023	287,283
Short-term investments	131	5,932	12,696	16,085	16,680	17,222	17,739	18,227	18,728	19,243	19,772	20,316	20,875
Accounts receivable, net	1,913	2,952	3,508	3,376	4,432	5,652	5,809	7,211	7,832	8,380	9,162	9,928	10,609
Inventory	5,757	12,839	13,626	13,900	15,627	18,086	19,153	24,037	26,174	28,630	31,413	33,188	34,859
Prepaid expenses and other current assets	1,723	2,941	3,388	3,674	4,665	5,935	5,966	6,656	7,213	8,147	9,162	9,928	10,609
Total current assets	27,100	40,917	49,616	58,230	71,422	85,790	107,506	136,090	167,442	205,902	253,759	306,384	364,235
Operating vehicle leases, net	4,511	5,035	5,989	6,062	6,653	7,765	8,894	9,595	10,135	10,578	10,737	10,737	10,737
Solar energy systems, net	5,765	5,489	5,229	4,956	4,708	4,478	4,258	4,050	3,843	3,642	3,441	3,248	3,054
Property, plant & equipment, net	18,884	23,548	29,725	35,045	39,094	42,834	45,936	49,794	54,456	58,926	62,909	66,714	70,373
Operating lease ROU assets	2,016	2,563	4,180	4,928	5,497	6,023	6,460	7,002	7,658	8,286	8,846	9,382	9,896
Intangible assets, net	1,517	399	362	342	334	327	319	313	306	300	294	289	284
Goodwill	200	194	253	253	253	253	253	253	253	253	253	253	253
Deferred tax assets	-	328	6,733	6,486	6,193	5,791	5,184	4,444	3,548	2,431	1,004	-	-
Other non-current assets	2,138	3,865	4,531	4,766	5,015	6,076	6,437	7,581	8,244	8,845	9,686	10,495	13,641
Total assets	62,131	82,338	106,618	121,068	139,170	159,336	185,246	219,122	255,885	299,164	350,929	407,501	472,472
LIABILITIES AND STOCKHOLDERS' EQUITY LIABILITIES Current Liabilities													
Accounts payable	11,147	16,490	15,635	17,871	21,575	24,021	25,904	30,509	33,594	37,941	42,407	45,669	48,500
Accrued liabilities & other current liabilities	5,154	6,485	7,204	7,248	8,164	9,608	10,519	12,388	13,602	15,363	17,015	18,438	19,703
Deferred revenue	1,447	1,747	2,864	2,979	3,265	3,674	4,317	5,177	5,977	6,750	7,591	7,942	8,336
Operating lease liabilities, current portion	368	485	672	739	825	873	937	980	1,072	1,160	1,238	1,313	1,385
Current portion of long-term debt and finance leases	1,589	1,502	2,373	1,978	1,667	494	276	44	45	45	45	45	45
Total current liabilities	19,705	26,709	28,748	30,815	35,496	38,670	41,953	49,099	54,290	61,259	68,297	73,408	77,969
Long-term debt and finance leases	5,245	1,597	2,857	5,405	5,458	5,420	4,424	4,175	5,936	6,701	7,501	7,677	7,963
Deferred revenue, net of current portion	2,052	2,804	3,251	3,475	3,849	4,239	4,867	6,102	6,801	7,449	8,115	8,510	9,094
Operating lease liabilities	1,671	2,164	3,671	4,263	4,838	5,421	5,943	6,442	6,969	7,458	7,962	8,350	8,708
Other long-term liabilities	1,875	3,166	4,482	4,369	4,956	5,793	6,751	8,321	9,274	10,242	10,994	11,630	12,125
Total liabilities	30,548	36,440	43,009	48,326	54,596	59,544	63,937	74,138	83,270	93,108	102,868	109,574	115,859
STOCKHOLDERS' EQUITY	20.004	22.400	24.005	27.07	40.500	42,202	46 405	46.074	46.074	46.074	46.074	46.074	46.074
Common equity	29,804	32,180	34,895	37,697	40,500	43,302	46,105	46,974	46,974	46,974	46,974	46,974	46,974
Accumulated other comprehensive income (loss)	54	(361)	(143)	(143)	(143)	(143)	(143)	(143)	(143)	(143)	(143)	(143)	(143)
Retained earnings	331	12,885	27,882	34,200	43,211	55,603	74,280	97,041	124,616	158,989	202,906	256,165	317,230
Ireasury Stock	-	-	-	-	-	-	-	-	-	(1,000)	(3,000)	(6,500)	(9,000)
Total stockholders' equity	30,189	44,704	62,634	71,755	83,568	98,762	120,241	143,871	171,447	204,819	246,737	296,496	355,060
Minority Interest	1,394	1,194	975	988	1,006	1,030	1,068	1,113	1,168	1,237	1,324	1,431	1,553
Total equity	31,583	45,898	63,609	72,742	84,574	99,793	121,309	144,984	172,615	206,056	248,061	297,926	356,613
lotal liaplilities and edulty	62,131	82,338	106,618	121,068	139,170	123,330	185,246	219,122	255,885	299,164	350,929	407,501	4/2,4/2

Historical Cash Flow Statement

in millions (mm), except share data

Fiscal Years Ending Dec. 31	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Cash flows from operating activities:										
Net income (loss)	(294)	(889)	(773)	(2,241)	(1.063)	(775)	862	5.644	12,587	14,974
Depreciation & amortization	232	423	947	1 636	1 901	2 154	2 322	2 911	3 747	4 667
Stock-based compensation	156	198	334	467	749	898	1 734	2,311	1,560	1,812
Amortization of debt discounts & issuance costs	70	72	87	149	159	188	180		-	-
Inventory & purchase commitments write-downs	16	45	66	132	85	193	202	140	177	463
Loss (gain) on disposals of fixed assets	10	38	35	106	161	146	117	(27)	140	
Loss (gain) on the acquisition of SolarCity Corporation	-	50	(89)	100	101	140	-	(27)	140	-
Foreign currency transaction net unrealized loss (gain)	(2)	56	(29)	52	(2)	(48)	114	(55)	81	-
Non-cash interest & other operating activities	(2)	26	(2)	135	(2)	186	228	245	340	81
Account receivables	(184)	46	(217)	(25)	(497)	(367)	(652)	(130)	(1 124)	(586)
Inventories & operating lease vehicles	(104)	(1 574)	(2.466)	(1 701)	(1 238)	(1 193)	(1 494)	(3.823)	(8,035)	(3 147)
Prenaid expenses & other current assets	(1,050)	(1,374)	(2,400)	(1,701)	(1,238)	(1,193)	(1,454)	(3,823)	(1,033)	(2,652)
Other non-current assets	(01)	(30)	(52)	(12)	(207)	(200)	(231)	(1 201)	(1,417)	(2,052)
Accounts navable & accrued liabilities	(4)	(24)	(53)	(13)	(207)	(73)	(344)	(1,291)	(2,331)	2 605
Deferred revenue	415	205	292	300	1,725	801	2,102	4,576	0,029	2,005
Customer deposits	210	322	202	469	407	(59)	521	195	1,151	1,552
Desale value guerantee	106	37	388	170	(97)	(58)	/	180	155	-
Athen long term lichilities	249	442	327	209	(111)	(150)	-	-	-	-
Not each flows from operating activities	62	(524)	132	81	160	109	495	476	1,904	- 12.250
Net cash hows from operating activities	(57)	(524)	(124)	(61)	2,098	2,405	5,943	11,497	14,724	13,250
Cash flows from investing activities:										
Purchases of property & equipment	(970)	(1,635)	(1,281)	(3,415)	(2,101)	(1,327)	(3,157)	(6,482)	(7,158)	(8,898)
Purchases of fixed assets		-	(160)	(667)	(219)	(105)	(75)	(1.532)	(5)	(1)
Purchases of short-term investments & marketable securities	(206)	-		-	-	-	-	(132)	(5.835)	(19.112)
Purchase of intangible assets	-	-	-	-	-	(5)	(10)	-	(9)	-
Proceeds from sales/maturities of investments	189	-	17	-	-	-	-	272	958	12,491
Receipt of government grants	-	-	-	-	-	46	123	6	76	,
Decrease (increase) in restricted cash	(4)	(26)	(206)	(223)	-	-	-	-	-	-
Payments related to acquisitions, net of cash acquired	-	(12)	214	(115)	(18)	(45)	(13)	-	-	(64)
Net cash flows from investing activities	(990)	(1,674)	(1,416)	(4,419)	(2,337)	(1,436)	(3,132)	(7,868)	(11,973)	(15,584)
Cash flows from financing activities:										
Proceeds from issuances of common stock	-	750	1,702	400	-	848	12,269	-	-	-
Proceeds from issuance of convertible & other debt	2,300	319	2,853	7,138	6,176	10,669	9,713	8,883	-	3,931
Repayments of convertible, other debt, and related parties	-	-	(1,858)	(4,160)	(5,347)	(9,161)	(11,623)	(14,167)	(3,364)	(1,351)
Collateralized lease (repayments) borrowings	3	569	770	511	(559)	(389)	(240)	(9)	-	-
Proceeds from exercise of stock options & other stock issuances	100	107	164	259	296	263	417	707	541	700
Principal payments on finance leases	(11)	(204)	(47)	(103)	(181)	(321)	(338)	(439)	(502)	(464)
Common stock & debt issuance costs	(35)	(17)	(20)	(63)	(15)	(37)	(6)	(9)	-	(29)
Proceeds (purchase) of convertible note hedges	(603)	-	-	83	-	(476)	-	-	-	-
Proceeds (payments) from issuance of warrants	389	-	-	(177)	-	174	-	-	-	-
Proceeds (buy-outs) from investment by noncontrolling interests in subsidiaries	-	-	202	789	431	270	(11)	(8)	(45)	(54)
Distributions paid to noncontrolling interests in subsidiaries	-	-	(21)	(262)	(227)	(311)	(208)	(161)	(157)	(144)
Net cash flows from financing activities	2,143	1,524	3,744	4,415	574	1,529	9,973	(5,203)	(3,527)	2,589
Effect of exchange rate changes on cash	(36)	(34)	(7)	39	(23)	8	334	(183)	(444)	4
Net increase (decrease) in cash during the period	1,060	(709)	2,196	(25)	311	2,506	13,118	(1,757)	(1,220)	265
Cash & cash equivalents & restricted cash, beginning of period	846	1,906	1,197	3,393	3,965	4,277	6,783	19,901	18,144	16,924
Cash & cash equivalents & restricted cash, end of period	1,906	1,197	3,393	3,368	4,276	6,783	19,901	18,144	16,924	17,189

Forecasted Cash Flow Statement

Forecastea	Cash Flow Statement	
in millions	(mm), except share data	

Fiscal Years Ending Dec. 31	202 <mark>4</mark> E	2025E	2026E	2027E	2028E	2029E	2030E	2031E	2032E	2033E
Cash flows from operating activities:										
Net Income	6,318	9,011	12,392	18,677	22,761	27,576	34,372	43,917	53,259	61,065
Adjustments to reconcile Net Income			·				-	-		
Depreciation Expense	5,945	7,009	7,428	7,924	8,268	8,839	9,530	10,017	10,694	11,341
Deferred Income Taxes	247	293	403	607	740	896	1,117	1,427	1,004	-
Changes in working capital accounts:										
Changes in accounts receivable	132	(1.056)	(1.220)	(157)	(1.402)	(621)	(548)	(782)	(766)	(681)
Changes in inventory	(274)	(1,727)	(2,459)	(1,067)	(4,884)	(2,137)	(2,456)	(2,782)	(1,776)	(1,671)
Changes in prepaid expenses and other current assets	(286)	(991)	(1.270)	(31)	(691)	(557)	(933)	(1.015)	(766)	(681)
Changes in operating lease vehicles, net	(73)	(591)	(1,112)	(1.129)	(700)	(541)	(442)	(159)	-	-
Changes in operating ROU assets	(748)	(569)	(526)	(436)	(543)	(656)	(629)	(560)	(535)	(514)
Changes in other non-current assets	(235)	(249)	(1,061)	(361)	(1,144)	(663)	(601)	(840)	(810)	(3,145)
Changes in accounts payable	2,236	3,704	2,446	1,883	4,605	3,085	4,347	4,466	3,262	2,830
Changes in accrued and other current liabilities	44	916	1,445	910	1,870	1,214	1,760	1,652	1,423	1,265
Changes in deferred revenue	115	287	408	644	860	800	773	841	351	393
Changes in deferred revenue, net of current portion	224	374	390	628	1,235	699	647	666	395	584
Changes in other long-term liabilities	(113)	588	837	957	1,570	954	967	753	636	495
Net cash flows from operating activities	13,532	16,997	18,100	29,049	32,544	38,888	47,905	57,601	66,372	71,281
Cash flows from investing activities:										
Capital Expenditures	(11 265)	(11.058)	(11 168)	(11.026)	(12 127)	(13 500)	(14,000)	(14,000)	(14 500)	(15,000)
Sale of solar energy systems, net	273	2/18	230	220	208	208	201	201	19/	19/
Proceeds from sale of intangible assets	275	240	250	7	200	200	201	201	104	104
Proceeds from sale of business	-	-	-	,	,	-	-	-	-	-
Changes in short-term investments	(3 389)	(595)	(542)	(517)	(488)	(501)	(515)	(529)	(544)	(559)
Net cash flows from investing activities	(14,361)	(11,397)	(11,472)	(11,316)	(12,400)	(13,787)	(14,308)	(14,323)	(14,845)	(15,360)
Cash flows from financing activities:										
Changes in operating lease liabilities, current portion	67	85	49	63	44	92	88	78	75	72
Changes in current portion of long-term debt	(205)	(211)	(1 172)	(218)	(222)	1	00	70	75	, 2
Changes in long-term debt and finance leases	(353)	(311)	(1,173)	(218)	(232)	1 761	765	800	176	286
Changes in operating lease liabilities	2,540	55	(30)	(990)	(249)	526	/05	504	200	200
Proceeds from issuance of common stock	2 802	2 802	2 802	2 802	455	520	489	504	388	333
Purchases of stock for treasury	2,802	2,802	2,802	2,802	803	_	(1,000)	(2,000)	(2 500)	(2 500)
Payments to subsidiaires with minority interest	- 13	- 18	- 25	37	- 45	55	(1,000)	(2,000)	(3,300)	(2,300)
Net cash flows from financing activities		2 2 2 2 2	23	2 211	976	2 / 25	411	(520)	(2 754)	(1 661)
net cash hows non-mancing activities	5,027	3,222	2,249	2,211	570	2,433	411	(550)	(2,754)	(1,001)
Net increase (decrease) in cash and cash equivalents	4,798	8,822	8,877	19,945	21,120	27,536	34,008	42,748	48,773	54,260
Cash and cash equivalents at beginning of year	16,398	21,196	30,018	38,894	58,839	79,959	107,495	141,502	184,251	233,023
Cash and cash equivalents at end of year	21.196	30.018	38.894	58.839	79.959	107.495	141.502	184.251	233.023	287.283

Common Size Income Statement

Fiscal Years Ending Dec. 31	2021	2022	2023	2024E	2025E	2026E	2027E	2028E	2029E	2030E	2031E	2032E	2033E
Total revenues	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Cost of goods sold	69.3%	70.1%	76.9%	76.3%	75.7%	75.9%	73.3%	73.8%	72.8%	71.5%	69.7%	67.8%	66.5%
Gross margin	30.7%	29.9%	23.1%	23.7%	24.3%	24.1%	26.7%	26.2%	27.2%	28.5%	30.3%	32.2%	33.5%
Depreciation and amortization	5.4%	4.3%	4.8%	6.0%	6.6%	5.7%	5.5%	4.8%	4.6%	4.3%	4.0%	3.9%	3.9%
Research and development	4.8%	3.8%	4.1%	4.40%	4.40%	4.20%	3.90%	3.80%	3.90%	3.90%	4.00%	4.00%	4.00%
Selling, general & administrative	8.4%	4.8%	5.0%	5.50%	5.20%	4.80%	4.40%	4.30%	4.30%	4.40%	4.30%	4.30%	4.30%
Operating Margin	12.1%	17.0%	9.2%	7.0%	8.1%	9.4%	13.0%	13.3%	14.4%	15.8%	18.0%	20.0%	21.3%
Interest income	0.1%	0.4%	1.1%	1.2%	1.2%	1.1%	1.1%	1.1%	1.3%	1.5%	1.7%	2.0%	2.3%
Interest expense	-0.7%	-0.2%	-0.2%	-0.3%	-0.3%	-0.3%	-0.2%	-0.2%	-0.2%	-0.2%	-0.2%	-0.2%	-0.2%
Other income (expense), net	0.3%	-0.1%	0.2%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Restructuring & other	0.1%	-0.2%	0.0%	-0.7%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Income (loss) before income taxes	11.8%	16.8%	10.3%	7.4%	9.0%	10.2%	13.8%	14.3%	15.5%	17.1%	19.5%	21.8%	23.4%
Provision for income taxes (benefit)	1.3%	1.4%	-5.2%	1.0%	1.3%	1.4%	1.9%	2.0%	2.2%	2.4%	2.7%	3.1%	3.3%
Net income (loss)	10.5%	15.5%	15.5%	6.4%	7.7%	8.8%	11.9%	12.3%	13.4%	14.7%	16.7%	18.7%	20.1%
Net income (loss) attributable to noncontrolling interests	-0.2%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Net margin	10.3%	15.4%	15.5%	6.4%	7.7%	8.8%	11.9%	12.3%	13.4%	14.8%	16.8%	18.8%	20.1%

Common Size Balance Sheet

Fiscal Years Ending Dec. 31	2021	2022	2023	2024E	2025E	2026E	2027E	2028E	2029E	2030E	2031E	2032E	2033E
ASSETS													
Current Assets													
Cash and cash equivalents	32.7%	20.0%	16.9%	21.3%	25.7%	27.5%	37.5%	43.2%	52.2%	60.8%	70.4%	82.1%	94.8%
Short-term investments	0.2%	7.3%	13.1%	16.2%	14.3%	12.2%	11.3%	9.9%	9.1%	8.3%	7.6%	7.2%	6.9%
Accounts receivable, net	3.6%	3.6%	3.6%	3.40%	3.80%	4.00%	3.70%	3.90%	3.80%	3.60%	3.50%	3.50%	3.50%
Inventory	10.7%	15.8%	14.1%	14.00%	13.40%	12.80%	12.20%	13.00%	12.70%	12.30%	12.00%	11.70%	11.50%
Prepaid expenses and other current assets	3.2%	3.6%	3.5%	3.70%	4.00%	4.20%	3.80%	3.60%	3.50%	3.50%	3.50%	3.50%	3.50%
Total current assets	50.4%	50.2%	51.3%	58.6%	61.2%	60.7%	68.5%	73.6%	81.2%	88.5%	96.9%	108.0%	120.2%
Operating vehicle leases, net	8.4%	6.2%	6.2%	6.1%	5.7%	5.5%	5.7%	5.2%	4.9%	4.5%	4.1%	3.8%	3.5%
Solar energy systems, net	10.7%	6.7%	5.4%	5.0%	4.0%	3.2%	2.7%	2.2%	1.9%	1.6%	1.3%	1.1%	1.0%
Property, plant & equipment, net	35.1%	28.9%	30.7%	35.3%	33.5%	30.3%	29.3%	26.9%	26.4%	25.3%	24.0%	23.5%	23.2%
Operating lease ROU assets	3.7%	3.1%	4.3%	5.0%	4.7%	4.3%	4.1%	3.8%	3.7%	3.6%	3.4%	3.3%	3.3%
Intangible assets, net	2.8%	0.5%	0.4%	0.3%	0.3%	0.2%	0.2%	0.2%	0.1%	0.1%	0.1%	0.1%	0.1%
Goodwill	0.4%	0.2%	0.3%	0.3%	0.2%	0.2%	0.2%	0.1%	0.1%	0.1%	0.1%	0.1%	0.1%
Deferred tax assets	0.0%	0.4%	7.0%	6.5%	5.3%	4.1%	3.3%	2.4%	1.7%	1.0%	0.4%	0.0%	0.0%
Other non-current assets	4.0%	4.7%	4.7%	4.80%	4.30%	4.30%	4.10%	4.10%	4.00%	3.80%	3.70%	3.70%	4.50%
Total assets	115.4%	101.1%	110.2%	121.9%	119.3%	112.8%	118.0%	118.5%	124.2%	128.5%	134.1%	143.7%	155.9%
LIABILITIES AND STOCKHOLDERS' EQUITY													
LIABILITIES													
Current Liabilities													
Accounts payable	20.7%	20.2%	16.2%	18.00%	18.50%	17.00%	16.50%	16.50%	16.30%	16.30%	16.20%	16.10%	16.00%
Accrued liabilities & other current liabilities	9.6%	8.0%	7.4%	7.30%	7.00%	6.80%	6.70%	6.70%	6.60%	6.60%	6.50%	6.50%	6.50%
Deferred revenue	2.7%	2.1%	3.0%	3.00%	2.80%	2.60%	2.75%	2.80%	2.90%	2.90%	2.90%	2.80%	2.75%
Operating lease liabilities, current portion	0.7%	0.6%	0.7%	0.7%	0.7%	0.6%	0.6%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%
Current portion of long-term debt and finance lea	3.0%	1.8%	2.5%	2.0%	1.4%	0.3%	0.2%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Total current liabilities	36.6%	32.8%	29.7%	31.0%	30.4%	27.4%	26.7%	26.6%	26.3%	26.3%	26.1%	25.9%	25.7%
Long-term debt and finance leases	9.7%	2.0%	3.0%	5.4%	4.7%	3.8%	2.8%	2.3%	2.9%	2.9%	2.9%	2.7%	2.6%
Deferred revenue, net of current portion	3.8%	3.4%	3.4%	3.50%	3.30%	3.00%	3.10%	3.30%	3.30%	3.20%	3.10%	3.00%	3.00%
Operating lease liabilities	3.1%	2.7%	3.8%	4.3%	4.1%	3.8%	3.8%	3.5%	3.4%	3.2%	3.0%	2.9%	2.9%
Other long-term liabilities	3.5%	3.9%	4.6%	4.40%	4.25%	4.10%	4.30%	4.50%	4.50%	4.40%	4.20%	4.10%	4.00%
Total liabilities	56.8%	44.7%	44.4%	48.7%	46.8%	42.1%	40.7%	40.1%	40.4%	40.0%	39.3%	38.6%	38.2%
STOCKHOLDERS' EQUITY													
Common equity	55.4%	39.5%	36.1%	38.0%	34.7%	30.6%	29.4%	25.4%	22.8%	20.2%	17.9%	16.6%	15.5%
Accumulated other comprehensive income (loss)	0.1%	-0.4%	-0.1%	-0.1%	-0.1%	-0.1%	-0.1%	-0.1%	-0.1%	-0.1%	-0.1%	-0.1%	0.0%
Retained earnings	0.6%	15.8%	28.8%	34.4%	37.1%	39.4%	47.3%	52.5%	60.5%	68.3%	77.5%	90.3%	104.7%
Treasury Stock	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	-0.4%	-1.1%	-2.3%	-3.0%
Total stockholders' equity	56.1%	54.9%	64.7%	72.3%	71.7%	69.9%	76.6%	77.8%	83.2%	88.0%	94.3%	104.5%	117.1%
Minority Interest	2.6%	1.5%	1.0%	1.0%	0.9%	0.7%	0.7%	0.6%	0.6%	0.5%	0.5%	0.5%	0.5%
Total equity	58.7%	56.3%	65.7%	73.3%	72.5%	70.6%	77.3%	78.4%	83.8%	88.5%	94.8%	105.0%	117.6%
Total liabilities and equity	115.4%	101.1%	110.2%	121.9%	119.3%	112.8%	118.0%	118.5%	124.2%	128.5%	134.1%	143.7%	155.9%

Value Driver Estimation

Fiscal Years Ending Dec. 31	2021	2022	2023	2024E	2025E	2026E	2027E	2028E	2029E	2030E	2031E	2032E	2033E
NOPLAT:													
Total Revenues	53,823	81,462	96,773	99,285	116,622	141,299	156,995	184,902	206,098	232,768	261,771	283,660	303,123
COGS	(37,306)	(57 <i>,</i> 066)	(74,446)	(75,751)	(88,241)	(107,215)	(115,025)	(136,376)	(150,115)	(166,511)	(182,478)	(192,205)	(201,709)
Depreciation & Amortization	(2,911)	(3,543)	(4,667)	(6,746)	(7,720)	(8,103)	(8,566)	(8,878)	(9,418)	(10,080)	(10,540)	(11,191)	(11,813)
Research & Development	(2,593)	(3,075)	(3,969)	(4,369)	(5,131)	(5,935)	(6,123)	(7,026)	(8,038)	(9,078)	(10,471)	(11,346)	(12,125)
SG&A	(4,517)	(3,946)	(4,800)	(5,461)	(6,064)	(6,782)	(6,908)	(7,951)	(8,862)	(10,242)	(11,256)	(12,197)	(13,034)
Add: Implied Interest on Operating Leases	78	107	144	234	276	308	337	362	392	429	464	495	525
EBIT	6,574	13,939	9,035	7,193	9,742	13,571	20,710	25,032	30,058	37,285	47,490	57,215	64,967
Income Taylor	600	1 1 2 2	(5.001)	1 026	1 464	2 012	2 024	2 609	4 490	5 59/	7 1 2 5	9 652	0 0 2 1
Tax Shield on Implied Interest on Oper Leases	11	1,132	(3,001)	1,020	1,404	2,013	3,034	5,058	4,480	5,584	7,135	8,055	5,521
Tax Shield on Interest Grandes	52	15	20	42	55	43	47	51	55	60	67	23	74
Tax Shield (Europea) on Other European (Income)	(10)	27	(24)	(19)	54	50	54	51	51	02	07	/3	/0
Tax Shield en Bestructuring (Other	(19)	25	(24)	(10)	0	0	0	0	0	0	0	0	0
Tax shield on Restructuring/Other	(4)	(42)	(140)	(171)	(102)	(212)	(226)	(205)	(279)	(486)	(610)	(795)	(075)
Tax on Interest Income	(0)	(42)	(149)	1 007	1 264	(212)	(230)	(293)	(378)	(480)	619)	(785)	(973)
Total Aujusteu Taxes	/31	1,105	(3,132)	1,007	1,504	1,500	2,855	3,303	4,208	5,220	0,045	8,010	5,055
Change in Deferred Taxes	-	(328)	(6,405)	247	293	403	607	740	896	1,117	1,427	1,004	-
NOPLAT	5,843	12,448	7,762	6,433	8,671	12,074	18,418	22,267	26,746	33,182	42,268	50,209	55,872
Invested Capital (IC):													
Operating Current Assets													
Normal cash	9,150	13,849	16,451	16,879	19,826	24,021	26,689	31,433	35,037	39,571	44,501	48,222	51,531
Accounts receivable, net	1,913	2,952	3,508	3,376	4,432	5,652	5,809	7,211	7,832	8,380	9,162	9,928	10,609
Inventory	5,757	12,839	13,626	13,900	15,627	18,086	19,153	24,037	26,174	28,630	31,413	33,188	34,859
Prepaid expenses and other current assets	1,723	2,941	3,388	3,674	4,665	5,935	5,966	6,656	7,213	8,147	9,162	9,928	10,609
Less: Operating Current Liabilities													
Accounts payable	(11,147)	(16,490)	(15,635)	(17,871)	(21,575)	(24,021)	(25,904)	(30,509)	(33,594)	(37,941)	(42,407)	(45,669)	(48,500)
Accrued liabilities and other current liabilities	(5,154)	(6,485)	(7,204)	(7,248)	(8,164)	(9,608)	(10,519)	(12,388)	(13,602)	(15,363)	(17,015)	(18,438)	(19,703)
Deferred revenue	(1,447)	(1,747)	(2,864)	(2,979)	(3,265)	(3,674)	(4,317)	(5,177)	(5,977)	(6,750)	(7,591)	(7,942)	(8,336)
Net Operating Working Capital	795	7,859	11,270	9,730	11,546	16,391	16,877	21,264	23,083	24,673	27,224	29,217	31,070
Non-current operating access													
Operating vehicle leases net	4 5 1 1	5 035	5 989	6.062	6 653	7 765	8 80/	0 505	10 125	10 578	10 737	10 737	10 727
Solar operating vehicle leases, het	4,511	5,035	5,585	4 05 6	4 709	1,705	4 259	3,555	2 9 4 2	2 6 4 2	2 4 4 1	2 2 4 9	2 054
Property plant & equipment net	18 88/	23 548	29 725	35 045	39 094	4,478	4,238	4,050	5,845	58 926	62 909	5,248	70 373
Operating losse BOLL assots	2 016	25,548	4 1 2 0	4 0 2 9	53,034	42,034	45,550	7,002	7 659	0 706	02,505	00,714	0,575
Intengible assets not	2,010	2,303	4,160	4,920	224	0,023	210	7,002	206	200	0,040	3,362	3,630
Other per surrent accets	2 1 2 9	2 965	4 5 2 1	1 766	5 015	6 076	6 4 2 7	7 5 9 1	9 244	9 945	0 6 9 6	10 405	12 6 4 1
Non-surrent exercting lightilities	2,130	3,805	4,551	4,700	5,015	0,070	0,437	7,561	0,244	0,045	3,080	10,495	13,041
Deferred revenue, not of current portion	(2.052)	(2.804)	(2.251)	(2 475)	(2 940)	(1 220)	(4 967)	(6 102)	(6 901)	(7.449)	(9 115)	(9.510)	(0.004)
Other long term liabilities	(1,875)	(2,004)	(4 482)	(4 369)	(4,956)	(5,793)	(4,307)	(8,321)	(0,001)	(10 242)	(10,994)	(11 630)	(12 125)
Invested Capital	31,699	42,788	53,553	57,986	64,042	73,862	77,563	85,176	91,649	97,560	104,028	109,941	117,835
Free Cash Flow (FCF):													
NOPLAT	5,843	12,448	7,762	6,433	8,671	12,074	18,418	22,267	26,746	33,182	42,268	50,209	55,872
Change in IC	8,971	11,089	10,766	4,433	6,056	9,819	3,701	7,613	6,473	5,911	6,468	5,914	7,894
FCF	(3,128)	1,359	(3,004)	2,001	2,615	2,255	14,716	14,654	20,273	27,271	35,801	44,296	47,978
			T										
Return on Invested Capital (ROIC):	F 0.40	12 440	7 700	C 400	0.674	12.074	10 110	22.267	26 746	22.402	43.360	50 200	FF 070
	5,843	12,448	/,/62	6,433	8,6/1	12,074	18,418	22,267	26,746	33,182	42,268	50,209	55,872
	22,728	31,699 39,27%	42,788 18.14%	53,553 12.01%	57,986 14.95%	64,042 18.85%	73,862 24.94%	77,563 28.71%	85,176 31.40%	91,649 36.21%	97,560 43.33%	104,028 48.27%	50.82%
NOIL	_3.7 1/3				2.13370	20.0070			01.40/0		.0.0070		00.02/0
Economic Profit (EP):													
Beginning IC	22,728	31,699	42,788	53,553	57,986	64,042	73,862	77,563	85,176	91,649	97,560	104,028	109,941
x (ROIC - WACC)	15.23%	28.79%	7.66%	1.54%	4.48%	8.38%	14.46%	18.23%	20.92%	25.73%	32.85%	37.79%	40.34%
EP	3,462	9,127	3,280	823	2,596	5,365	10,680	14,142	17,823	23,581	32,048	39,312	44,355

Weighted Average Cost of Capital (WACC) Estimation

Cost of Equity:		ASSUMPTIONS:
Risk-Free Rate	3.80%	YTM on 10Y Treasury Bond
Beta	1.35	5-year adjusted beta (Bloomberg)
Equity Risk Premium	5.00%	Henry Fund Consensus
Cost of Equity	10.55%	
Cost of Debt:		
Risk-Free Rate	3.80%	YTM on 10Y Treasury Bond
Implied Default Premium	1.20%	
Pre-Tax Cost of Debt	5.00%	YTM on BBB rated corporate bonds
Marginal Tax Rate	14%	
After-Tax Cost of Debt	4.30%	
Market Value of Common Equity:		MV Weights
Total Shares Outstanding	3.185	
Current Stock Price	\$250.00	
MV of Equity	796,250	98.81%
Market Value of Debt:		
Operating Lease Liabilities, S-T	672	
Current Portion LTD and Finance Leases	2,373	
Operating Lease Liabilities, L-T	3,671	
Long-term Debt and Finance Leases	2,857	
MV of Total Debt	9,573	1.19%
Market Value of the Firm	805,823	100.00%

Estimated WACC

10.48%

Discounted Cash Flow (DCF) and Economic Profit (EP) Valuation Models

Key Inputs:

CV Growth of NOPLAT	7.00%
CV Year ROIC	50.82%
WACC	10.48%
Cost of Equity	10.55%

Fiscal Years Ending Dec. 31	2024E	2025E	2026E	2027E	2028E	2029E	2030E	2031E	2032E	2033E
DCE Model:										
Eree Cash Flow (FCF)	2 001	2 615	2 255	14 716	14 654	20 273	27 271	35 801	44 296	
Continuing Value (CV)	2,001	2,015	2,235	14,710	14,004	20,275	27,271	55,001	44,200	1 386 055
PV of ECE	1 811	2 1 4 2	1 672	9 879	8 905	11 151	13 578	16 134	18 070	565 429
	1,011	2,142	1,072	5,675	0,505	11,101	10,070	10,104	10,070	505,425
Value of Operating Assets:	648,771									
Add: Excess Cash	0									
Add: Short-term investments	12,696									
Less: Operating lease liabilities, current portion	(672)									
Less: LTD and finance leases, current portion	(2,373)									
Less: LTD and finance leases	(2,857)									
Less: Operating lease liabilities	(3,671)									
Less: Non-controlling interests	(975)									
Less: PV of ESOP	(76,194)									
Value of Equity	574,726									
Shares Outstanding	3,185									
Intrinsic Value of Last FYE	\$ 180.45									
Implied Price as of Today	\$ 196.23									
ED Madala										
EP Model:	011	2 506	E 26E	10 690	14 140	17 0 2 2	22 5 0 1	22.049	20 212	44 255
	823	2,590	5,305	10,680	14,142	17,825	23,381	32,048	39,312	44,300
	745	2 1 2 7	2 0 7 0	7 1 7 0	0 504	0.802	11 7/1	14 442	10.027	1,276,114
PV of EP	745	2,127	3,979	7,170	8,594	9,803	11,741	14,443	16,037	520,579
Total PV of EP	595,218									
Invested Capital (last FYE)	53,553									
Value of Operating Assets:	648,771									
Add: Excess Cash	0									
Add: Short-term investments	12,696									
Less: Operating lease liabilities, current portion	(672)									
Less: LTD and finance leases, current portion	(2,373)									
Less: LTD and finance leases	(2,857)									
Less: Operating lease liabilities	(3,671)									
Less: Non-controlling interests	(975)									
Less: PV of ESOP	(76,194)									
Value of Equity	574,726									
Shares Outstanding	3185.0									
Intrinsic Value of Last FYE	\$ 180.45									
Implied Price as of Today	\$ 196.23									

Dividend Discount Model (DDM) or Fundamental P/E Valuation Model

Fiscal Years Ending		2024E		2025E		2026E		2027E		2028E		2029E		2030E		2031E		2032E		2033E
EPS	\$	1.96	\$	2.73	\$	3.66	\$	5.39	\$	6.47	\$	7.81	\$	9.74	\$	12.46	\$	15.13	\$	17.37
<i>Key Assumptions</i> CV growth of EPS CV Year ROE Cost of Equity		5.00% 20.50% 10.55%																		
Future Cash Flows P/E Multiple (CV Year) EPS (CV Year) Future Stock Price Dividends Per Share	Ś	-	Ś	-	Ś	-	Ś	-	Ś	-	Ś	_	Ś	-	Ś	-	Ś	-	\$ \$	13.62x 17.37 236.69
Discounted Cash Flows	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	95.97
Intrinsic Value as of Last FYE Implied Price as of Today	\$ \$	95.97 104.37																		

Relative Valuation Models

			EPS	EPS			Est. 3-5yr			EV (M)	EBITDA (M)	EV/EBITDA	SPS	SPS		
Ticker	Company	Price	2024E	2025E	P/E 24	P/E 25	EPS gr.	PEG 24	PEG 25	2024	2024E	2024E	2024E	2025E	P/S 24	P/S 25
BYDDY	BYD COMPANY LIMITED	\$ 72.05	\$3.41	\$4.23	21.13	17.03	22.5	0.94	0.76	81,490	12,127	6.72	\$35.87	\$43.13	2.01	1.67
NIO	NIO INC.	\$ 5.10	(\$1.23)	(\$0.92)	(4.14)	(5.54)	18.0	(0.23)	(0.31)	8,167	(2,049)	(3.99)	\$4.69	\$6.58	1.09	0.77
RIVN	RIVIAN AUTOMOTIVE, INC.	\$ 10.18	(\$4.13)	(\$2.87)	(2.46)	(3.55)	14.4	(0.17)	(0.25)	11,841	(2,838)	(4.17)	\$4.81	\$5.95	2.12	1.71
LCID	LUCID GROUP, INC.	\$ 2.20	(\$1.17)	(\$1.03)	(1.88)	(2.14)	15.4	(0.12)	(0.14)	9,419	(2,482)	(3.79)	\$0.33	\$0.71	6.66	3.11
F	FORD MOTOR COMPANY	\$ 10.22	\$1.88	\$1.92	5.43	5.32	1.1	4.73	4.64	155,740	15,707	9.92	\$46.01	\$46.39	0.22	0.22
GM	GENERAL MOTORS COMPANY	\$ 50.98	\$9.87	\$9.65	5.16	5.28	9.0	0.58	0.59	34,969	18,829	1.86	\$158.68	\$158.07	0.32	0.32
VWAGY	VOLKSWAGEN AG	\$ 9.81	\$3.75	\$4.50	2.62	2.18	4.8	0.55	0.46	227,688	52,268	4.36	\$707.51	\$727.68	0.01	0.01
TM	TOYOTA MOTOR CORPORATION	\$ 172.83	\$21.63	\$22.55	7.99	7.66	(0.9)	(8.87)	(8.51)	400,500	51,451	7.78	\$240.72	\$248.25	0.72	0.70
				Average	8.47	7.50		1.70	1.61			6.13			0.93	0.77
TSLA	TESLA, INC.	\$250.00	\$ 1.96	\$ 2.73	127.6	91.7	6.5	19.6	14.1	869,897	13,705	63.47	\$31.17	\$36.62	8.02	6.83

Implied Relative Value:

P/E (EPS24)	\$ 16.59
P/E (EPS25)	\$ 20.44
PEG (EPS24)	\$ 21.63
PEG (EPS25)	\$ 28.51
EV/EBITDA	\$ 28.51
P/S (Sales 24)	\$ 28.89
P/S (Sales 25)	\$ 28.29

Key Management Ratios

Fiscal Years Ending Dec. 31	2021	2022	2023	2024E	2025E	2026E	2027E	2028E	2029E	2030E	2031E	2032E	2033E
Liquidity Ratios:													
Current Ratio (CA / CL)	1.4	1.5	1.7	1.9	2.0	2.2	2.6	2.8	3.1	3.4	3.7	4.2	4.7
Quick Ratio ((Cash + STI* + A/R) / CL)	1.0	0.9	1.1	1.3	1.4	1.6	2.0	2.1	2.5	2.8	3.1	3.6	4.1
Cash Ratio (Cash / CL)	0.9	0.6	0.6	0.7	0.8	1.0	1.4	1.6	2.0	2.3	2.7	3.2	3.7
Asset-Management Ratios:													
Inventory Turnover (COGS / Avg. Inventory)	7.6	6.1	5.6	5.5	6.0	6.4	6.2	6.3	6.0	6.1	6.1	6.0	5.9
Accounts Payable Turnover (COGS / Beg. A/P)	5.5	5.1	4.5	4.8	4.9	5.0	4.8	5.3	4.9	5.0	4.8	4.5	4.4
Days Sales Outstanding ((Beg. A/R / Sales)*365)	12.8	8.6	11.1	12.9	10.6	11.4	13.1	11.5	12.8	12.3	11.7	11.8	12.0
CapEx / Revenue	12.0%	8.8%	9.2%	11.3%	9.5%	7.9%	7.0%	6.6%	6.6%	6.0%	5.3%	5.1%	4.9%
Financial Leverage Ratios:													
D/E Ratio (TL / TSE)	1.0	0.8	0.7	0.7	0.6	0.6	0.5	0.5	0.5	0.5	0.4	0.4	0.3
Debt/Capital (Total Debt / Total Capital)	22.7%	11.4%	13.3%	14.7%	13.3%	11.0%	8.8%	7.5%	7.6%	7.0%	6.4%	5.5%	4.9%
Profitability Ratios:													
Automotive Gross Margin (Auto. Gross Profit / Auto. Revenue)**	27.0%	26.7%	17.7%	15.6%	16.3%	16.9%	20.0%	20.8%	22.6%	24.3%	27.0%	29.6%	31.1%
EBITDA Margin (EBITDA / Revenue)	17.5%	21.3%	14.0%	13.8%	14.7%	15.1%	18.4%	18.1%	19.0%	20.2%	22.0%	23.9%	25.2%
Operating Margin (EBIT / Revenue)	12.1%	17.0%	9.2%	7.0%	8.1%	9.4%	13.0%	13.3%	14.4%	15.8%	18.0%	20.0%	21.3%
Profit Margin (NI / Revenue)	10.3%	15.4%	15.5%	6.4%	7.7%	8.8%	11.9%	12.3%	13.4%	14.8%	16.8%	18.8%	20.1%
Return on Assets (NOPLAT / Beg. TA)	11.2%	20.0%	9.4%	6.0%	7.2%	8.7%	11.6%	12.0%	12.2%	13.0%	14.1%	14.3%	13.7%
Return on Equity (NI/Beg. TSE)	23.3%	39.8%	32.7%	9.9%	12.4%	14.7%	18.7%	18.8%	19.0%	19.9%	21.3%	21.5%	20.5%
Return on Invested Capital (NOPLAT / Beg. IC)	25.71%	39.27%	18.14%	12.01%	14.95%	18.85%	24.94%	28.71%	31.40%	36.21%	43.33%	48.27%	50.82%
Payout Policy Ratios:													
Dividend Payout Ratio (Dividend/EPS)	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Total Payout Ratio ((Divs. + Repurchases)/NI)	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	2.9%	4.6%	6.6%	4.1%

*STI = Short-term investments

**excludes regulatory credits

Present Value of Operating Lease Obligations

Fiscal Years Ending Dec. 31	2021	2022	2023	2024E	2025E	2026E	2027E	2028E	2029E	2030E	2031E	2032E	2033E
Operating lease ROU assets	2016.0	2563.0	4180.0	4928.1	5497.5	6023.4	6459.6	7002.2	7657.7	8286.3	8846.4	9381.5	9896.0
Weighted Avg Discount Rate	5.00%	5.30%	5.60%	5.60%	5.60%	5.60%	5.60%	5.60%	5.60%	5.60%	5.60%	5.60%	5.60%
Interest on Oper. Leases	77.9	106.8	143.5	234.1	276.0	307.9	337.3	361.7	392.1	428.8	464.0	495.4	525.4

Effects of ESOP Exercise and Share Repurchases on Common Stock Account and Number of Shares Outstanding

Number of Options Outstanding (shares):	344
Average Time to Maturity (years):	4.31
Expected Annual Number of Options Exercised:	 80
Current Average Strike Price:	\$ 35.11
Cost of Equity:	10.55%
Current Stock Price:	\$250.00

Fiscal Years Ending Dec. 31	2024E	2025E	2026E	2027E	2028E	2029E	2030E	2031E	2032E	2033E
Increase in Shares Outstanding:	80	80	80	80	25	0	0	0	0	0
Average Strike Price:	\$ 35.11 \$	35.11 \$	35.11 \$	35.11 \$	35.11 \$	35.11 \$	35.11 \$	35.11 \$	35.11 \$	35.11
Increase in Common Stock Account:	2,802	2,802	2,802	2,802	869	-	-	-	-	-
Share Repurchases (\$)	0	0	0	0	0	0	1,000	2,000	3,500	2,500
Expected Price of Repurchased Shares:	\$ 250.00 \$	276.38 \$	305.53 \$	337.77 \$	373.40 \$	412.79 \$	456.34 \$	504.49 \$	557.71 \$	616.55
Number of Shares Repurchased:	 -	-	-	-	-	-	2	4	6	4
Shares Outstanding (beginning of the year)	3,185	3,265	3,345	3,424	3,504	3,529	3,529	3,527	3,523	3,517
Plus: Shares Issued Through ESOP	80	80	80	80	25	0	0	0	0	0
Less: Shares Repurchased in Treasury	-	-	-	-	-	-	2	4	6	4
Shares Outstanding (end of the year)	 3,265	3,345	3,424	3,504	3,529	3,529	3,527	3,523	3,517	3,513

Tesla, Inc.

Valuation of Options Granted under ESOP

Current Stock Price	\$250.00
Risk Free Rate	3.80%
Current Dividend Yield	0.00%
Annualized St. Dev. of Stock Returns	57.00%

		Average	Average	B-S	Value
Range of	Number	Exercise	Remaining	Option	of Options
Outstanding Options	of Shares	Price	Life (yrs)	Price	Granted
Total	344 \$	35.11	4.31 \$	221.48 \$	76,194

Tesla, Inc. Sensitivity Tables

					Beta			
	196.23	1.05	1.15	1.25	1.35	1.45	1.55	1.65
Ę	4.70%	462.16	350.49	278.64	228.58	191.73	163.48	141.15
ш	4.80%	432.16	330.17	263.66	216.90	182.24	155.56	134.39
Pre	4.90%	405.46	311.80	249.98	206.15	173.48	148.21	128.09
sk F	5.00%	381.55	295.12	237.44	196.23	165.35	141.36	122.21
/ Ri	5.10%	360.01	279.90	225.90	187.05	157.80	134.98	116.71
uit	5.20%	340.51	265.97	215.25	178.53	150.75	129.01	111.55
Eq	5.30%	322.77	253.15	205.39	170.61	144.17	123.42	106.71

	196.23	3.50%	3.60%	3.70%	3.80%	3.90%	4.00%	4.10%
ebt	4.70%	219.72	211.49	203.75	196.46	189.57	183.05	176.87
Ĩ	4.80%	219.63	211.41	203.67	196.38	189.49	182.98	176.81
to	4.90%	219.54	211.32	203.59	196.31	189.42	182.91	176.75
Cos	5.00%	219.45	211.24	203.52	196.23	189.35	182.85	176.68
ах	5.10%	219.36	211.16	203.44	196.16	189.28	182.78	176.62
e-T	5.20%	219.27	211.07	203.36	196.08	189.21	182.71	176.56
Pr	5.30%	219.18	210.99	203.28	196.01	189.14	182.65	176.49

Revenue/Unit Delivered Growth Δ ('24-CV)

	196.23	-3.00%	-2.00%	-1.00%	0.00%	1.00%	2.00%	3.00%
~	(300,000)	159.12	166.31	173.76	181.51	189.55	197.90	206.56
ar /	(200,000)	163.46	170.82	178.47	186.42	194.67	203.23	212.11
γe ((100,000)	167.79	175.34	183.18	191.32	199.78	208.56	217.66
ies, 4-C	-	172.12	179.85	187.89	196.23	204.89	213.89	223.22
ver ('2	100,000	176.45	184.37	192.60	201.14	210.01	219.22	228.77
leli	200,000	180.79	188.89	197.30	206.05	215.12	224.54	234.32
6	300,000	185.12	193.40	202.01	210.95	220.24	229.87	239.87

		Marginal Tax Rate						
[196.23	8.00%	10.00%	12.00%	14.00%	16.00%	18.00%	20.00%
F	5.50%	155.69	151.38	147.06	142.65	138.19	133.72	129.24
PL	6.00%	170.75	166.04	161.33	156.52	151.66	146.79	141.92
2	6.50%	189.59	184.39	179.19	173.88	168.52	163.16	157.78
£	7.00%	213.86	208.02	202.18	196.23	190.24	184.23	178.22
õ	7.50%	246.26	239.58	232.89	226.10	219.25	212.40	205.53
Ū.	8.00%	291.74	283.88	276.01	268.03	260.00	251.95	243.89
Ú	8.50%	360.19	350.57	340.93	331.18	321.37	311.54	301.70

	Energy and Services COGS △ ('27-CV)							
	196.23	-1.50%	-1.00%	-0.50%	0.00%	0.50%	1.00%	1.50%
⊲	-1.50%	214.92	213.25	211.58	209.90	208.23	206.56	204.89
gg	-1.00%	210.36	208.69	207.02	205.35	203.67	202.00	200.33
$\frac{1}{2}$	-0.50%	205.81	204.13	202.46	200.79	199.12	197.45	195.77
7-C	0.00%	201.25	199.58	197.90	196.23	194.56	192.89	191.22
"2 ('2	0.50%	196.69	195.02	193.35	191.67	190.00	188.33	186.66
tor	1.00%	192.13	190.46	188.79	187.12	185.44	183.77	182.10
Au	1.50%	187.58	185.90	184.23	182.56	180.89	179.22	177.54

184.23

187.58

1.50%

185.90

182.56

180.89

179.22

182.10

177.54

_								
	196.23	-6.00%	-4.00%	-2.00%	0.00%	2.00%	4.00%	6.00%
$\widehat{>}$	-6.00%	196.23	199.17	202.10	205.04	207.98	210.91	213.85
4- C	-4.00%	193.30	196.23	199.17	202.10	205.04	207.98	210.91
('2	-2.00%	190.36	193.30	196.23	199.17	202.10	205.04	207.98
γΔ	0.00%	187.42	190.36	193.30	196.23	199.17	202.10	205.04
tor	2.00%	184.49	187.42	190.36	193.30	196.23	199.17	202.10
/en	4.00%	181.55	184.49	187.42	190.36	193.30	196.23	199.17
۱n	6.00%	178.61	181.55	184.49	187.42	190.36	193.30	196.23

Interquartile Price Range

	-	-		
		Q1	Q3	IQR
Beta	ERP	146.19	279.27	133.08
Rf	Pre-Tax rD	182.95	211.11	28.17
Rev/Unit ∆	Delivery/Yr ∆	181.15	211.53	30.39
Tax Rate	CV g NOPLAT	159.56	255.97	96.41
Energy/Service COGS Δ	Auto COGS ∆	187.95	204.51	16.56
Α/Ρ Δ	Inventory D	190.36	202.10	11.75
Avera	age	174.69	227.42	52.73
Med	182.05	211.32	29.28	

Scenario Testing

Scenario	Impact	DCF/E	P Value	% change from IV
	Delivery and Production +100-200k			
	Unit Rev +1-2%	¢.	250.02	22.60/
lesia >25% EV market share (25-CV)	Auto Leasing +10%	Ş	259.83	% change from IV 32.6% -24.5% 45.4% -5.7% 96.8% -20.9% 49.6% 28.5% -11.3% -0.4% -8.2%
	Auto COGS -1-2%			
	Delivery and Production -100-200k			
Tasla <15% EV market share ('25 CV)	Unit Rev -1-2%	4	147.05	24 59/
resia <15% EV market share (25-CV)	Auto Leasing -10%	Ş	147.95	32.6% -24.5% 45.4% -5.7% 96.8% 96.8% 49.6% 28.5% -11.3%
	Auto COGS +1-2%			
	Delivery and Production +150-250k			
Cybertruck, Bebetavi, Madel 2, and/or Beadster Infiltrate	Unit Rev +2-3%			
Cybertruck, Robotaxi, Model 2, and/or Roadster militrate	Auto COGS -1.5-2.5%	\$	285.04	45.4%
Market	CapEx +2bn			
	Dep. +1%			
	Delivery and Production -50-150k			
Cybertruck, Robotaxi, Model 2, and/or Roadster	Unit Rev +0-1%	¢.	104.05	F 70/
Leave/Fail to Enter Market	Auto COGS +1-2%	Ş	104.05	-5.7%
	CapEx -1bn			
	Unit Rev +4-6%			
FSD commercialized by 2027, technological expansion,	Auto COGS -3-5%	ć	205 75	00.00/
ride-hailing market share of 10%	SG&A -2-4%	Ş	565.75	90.8%
	R&D +2%			
	Unit Rev -1-2%			
FSD never commercialized, no regulatory approval,	Auto COGS/SG&A -0-1%	ć	15/ 06	20.0%
Robotaxi never competes with Uber	R&D -1%	Ş	154.90	-20.9%
	CV NOPLAT g = 6%			
Production line efficiencies Ontimus robots	ALL COGS -2-4%			
r_{i}	CapEx +1-2bn	\$	293.13	49.6%
	SG&A -3-5%			
Tesla Solar Energy monopolizes market (>70% market	EG&S Rev +5-10%			
share) ('25 CV)	EG&S COGS -3-5%	\$	251.88	28.5%
	Solar Energy Systems, net +20-50			
Tesla Solar Energy Joses market share (<35% market	EG&S Rev -3-7%			
share) ('25-CV)	EG&S COGS +2-4%	\$	173.92	-11.3%
	Solar Energy Systems, net -10-30			
Automotive Regulatory Credits eliminated in 2026	Auto Reg Credits = 0 ('26 - CV)	\$	195.19	-0.4%
Elon Musk \$50 billion pay package approved	Shares outstanding +304mm	\$	179.97	-8.2%
	rf = 4.0%			
4.50-4.75 FFR by '24 FYE	ERP = 5.25%	\$	164.20	-16.2%
	rD = 5.25%			
	rf = 3.65%			
4.00-4.25 FFR by '24 FYE	ERP = 4.75%	\$	238.30	21.6%
· ·	rD = 4.75%			

Average	\$ 224.23
Median	\$ 195.19