Goldman Sachs | Equity Research

25 June 2023 | 8:33PM EDT

Neutral

Tesla Inc. (TSLA)

Down to Neutral with stock now better reflecting our positive long-term view

TSLA	12m Price Target: **$248.00**	Price: **$256.60**	Downside: **3.4%**

We're downgrading Tesla shares to Neutral from Buy, as we believe the stock now better reflects our positive long-term view of the company's growth potential and competitive positioning post the substantial move higher YTD (up 108% vs. the S&P 500 up 13%) and in the last month (up 38% vs. the S&P 500 up 5%). While the primary reason for the change in our view is that we think the market is now giving the stock more credit for its longer-term opportunities, we are also cognizant of the difficult pricing environment for new vehicles that we think will continue to weigh on Tesla's automotive non-GAAP gross margin this year.

We attribute the recent move higher in Tesla shares (which significantly exceeded our expectation) to a combination of factors including: 1) relatively solid monthly sales in April and May; 2) less price declines/discounting from Tesla in 2Q than investors (and we) had expected (with prices for some new vehicles being slightly increased in the US recently post the larger cuts in January and April, and price reductions being focused on vehicles in inventory); 3) incremental IRA credits for RWD Model 3; 4) several companies now planning to use Tesla's charging network in North America (which we think will help Tesla to build a small but growing new charging business, drive awareness of Tesla products, and help Tesla/NACS connectors be a larger part of the market all else equal); and 5) incremental market focus on companies that benefit from AI.

While the more measured recent new vehicle pricing trends should positively impact near to intermediate-term earnings (we raise our EPS estimates to now assume a more moderate rate of price declines going forward, with our new estimates about in line with consensus for 2Q23 and 2024/2025 but below in 2H23 on a lower non-GAAP auto gross margin; note we still expect pricing to decline in 2H23 on supply/demand considerations and to support Tesla's

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Key Data

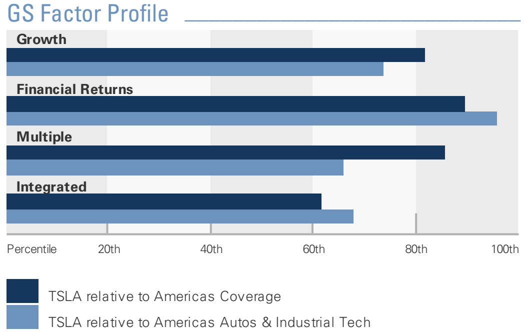
Market cap: $889.9bn
Enterprise value: $869.7bn
3m ADTV: $27.3bn
United States
Americas Autos & Industrial Tech
M&A Rank: 3

GS Forecast

	12/22	12/23E	12/24E	12/25E
Revenue ($ mn) New	**81,462.0**	**97,850.3**	**123,206.1**	**151,952.6**
Revenue ($ mn) Old	81,462.0	96,082.6	120,256.0	148,623.0
EBITDA ($ mn)	19,213.0	17,020.2	23,547.4	30,844.5
EBIT ($ mn)	13,656.0	9,891.6	15,229.5	21,028.1
EPS ($) New	**3.63**	**2.75**	**4.10**	**5.50**
EPS ($) Old	3.63	2.20	3.65	4.75
P/E (X)	72.5	93.3	62.5	46.7
Dividend yield (%)	0.0	0.0	0.0	0.0
Net debt/EBITDA (X)	(0.8)	(1.2)	(1.4)	(1.7)

	3/23	6/23E	9/23E	12/23E
EPS ($)	0.73	0.66	0.67	0.70

GS Factor Profile



Source: Company data, Goldman Sachs Research estimates. See disclosures for details.

Neutral

Tesla Inc. (TSLA)

Rating since Jun 25, 2023

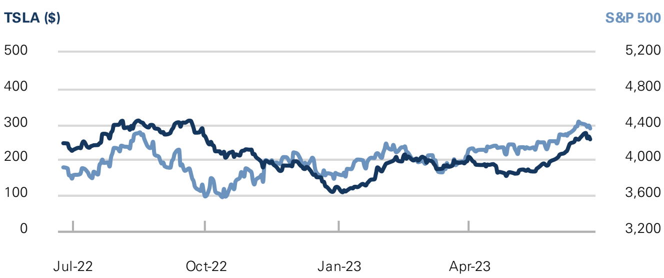
Ratios & Valuation

	12/22	12/23E	12/24E	12/25E
P/E (X)	72.5	93.3	62.5	46.7
EV/EBITDA (X)	42.1	46.9	34.0	25.5
EV/sales (X)	9.9	8.2	6.5	5.2
FCF yield (%)	0.9	0.6	1.5	2.4
EV/DACF (X)	43.7	52.3	38.1	29.0
CROCI (%)	68.2	37.6	41.1	45.1
ROE (%)	33.6	19.0	22.7	23.8
Net debt/EBITDA (X)	(0.8)	(1.2)	(1.4)	(1.7)
Net debt/equity (%)	(33.4)	(34.9)	(43.8)	(54.4)
Interest cover (X)	71.5	111.1	1,015.3	–
Inventory days	56.0	66.2	62.0	56.1
Receivable days	10.9	12.8	14.3	15.0
Days payable outstanding	76.1	74.3	68.2	65.0

Growth & Margins (%)

	12/22	12/23E	12/24E	12/25E
Total revenue growth	51.4	20.1	25.9	23.3
EBITDA growth	84.5	(16.8)	43.7	33.6
EPS growth	121.8	(24.2)	49.2	33.9
DPS growth	NM	NM	NM	NM
Gross margin	25.6	18.0	19.1	20.1
EBIT margin	16.8	10.1	12.4	13.8

Price Performance



	3m	6m	12m
Absolute	33.5%	108.4%	9.2%
Rel. to the S&P 500	21.2%	84.2%	(4.7)%

Source: FactSet. Price as of 23 Jun 2023 close.

Income Statement ($ mn)

	12/22	12/23E	12/24E	12/25E
Total revenue	81,462.0	97,850.3	123,206.1	151,952.6
Cost of goods sold	(60,609.0)	(80,263.9)	(99,660.8)	(121,362.0)
SG&A	(4,122.0)	(4,443.1)	(4,724.3)	(5,275.3)
R&D	(3,075.0)	(3,251.8)	(3,591.5)	(4,287.2)
Other operating inc./(exp.)	–	–	–	–
EBITDA	**17,403.0**	**14,481.2**	**20,802.4**	**27,794.5**
Depreciation & amortization	(3,747.0)	(4,589.6)	(5,572.9)	(6,766.4)
EBIT	**13,656.0**	**9,891.6**	**15,229.5**	**21,028.1**
Net interest inc./(exp.)	106.0	804.0	1,150.0	1,485.0
Income/(loss) from associates	–	–	–	–
Pre-tax profit	**13,749.0**	**10,652.6**	**16,379.5**	**22,513.1**
Provision for taxes	(1,132.0)	(956.0)	(1,500.0)	(2,350.0)
Minority interest	(34.0)	(59.0)	(200.0)	(250.0)
Preferred dividends	–	–	–	–
Net inc. (pre-exceptionals)	**12,583.0**	**9,637.6**	**14,679.5**	**19,913.1**
Net inc. (post-exceptionals)	**12,583.0**	**9,637.6**	**14,679.5**	**19,913.1**
EPS (basic, pre-except) ($)	**4.02**	**3.02**	**4.52**	**6.08**
EPS (diluted, pre-except) ($)	**3.63**	**2.75**	**4.10**	**5.50**
EPS (ex-ESO exp., dil.) ($)	**--**	**--**	**--**	**--**
DPS ($)	–	–	–	–
Div. payout ratio (%)	0.0	0.0	0.0	0.0
Wtd avg shares out. (basic) (mn)	3,129.8	3,192.7	3,244.1	3,274.1
Wtd avg shares out. (diluted) (mn)	3,468.8	3,505.2	3,577.5	3,623.2

Balance Sheet ($ mn)

	12/22	12/23E	12/24E	12/25E
Cash & cash equivalents	16,924.0	20,672.3	32,458.3	52,140.0
Accounts receivable	2,952.0	3,933.9	5,723.8	6,743.9
Inventory	12,839.0	16,297.7	17,553.1	19,782.2
Other current assets	8,579.0	9,236.0	9,236.0	9,236.0
Total current assets	**41,294.0**	**50,139.9**	**64,971.3**	**87,902.2**
Net PP&E	26,111.0	30,193.4	33,692.4	36,006.0
Net intangibles	409.0	351.0	279.0	199.0
Total investments	0.0	0.0	0.0	0.0
Other long-term assets	14,901.0	15,743.0	15,843.0	15,943.0
Total assets	**82,338.0**	**96,050.3**	**114,408.8**	**139,673.2**
Accounts payable	15,255.0	17,421.7	19,842.7	23,379.0
Short-term debt	–	–	–	–
Current lease liabilities	1,502.0	1,404.0	1,404.0	1,404.0
Other current liabilities	9,952.0	10,128.0	10,128.0	10,128.0
Total current liabilities	**26,709.0**	**28,953.7**	**31,374.7**	**34,911.0**
Long-term debt	1,597.0	522.0	0.0	–
Non-current lease liabilities	–	–	–	–
Other long-term liabilities	8,134.0	8,890.0	8,890.0	8,890.0
Total long-term liabilities	**9,731.0**	**9,412.0**	**8,890.0**	**8,890.0**
Total liabilities	**36,440.0**	**38,365.7**	**40,264.7**	**43,801.0**
Preferred shares	–	–	–	–
Total common equity	**44,704.0**	**56,503.6**	**72,963.1**	**94,691.2**
Minority interest	1,194.0	1,181.0	1,181.0	1,181.0
Total liabilities & equity	**82,338.0**	**96,050.3**	**114,408.8**	**139,673.2**
BVPS ($)	12.89	16.12	20.39	26.13

Cash Flow ($ mn)

	12/22	12/23E	12/24E	12/25E
Net income	12,587.0	9,658.6	14,679.5	19,913.1
D&A add-back	3,747.0	4,569.6	5,572.9	6,766.4
Minority interest add-back	–	–	–	–
Net (inc)/dec working capital	(3,908.0)	(2,875.9)	(624.4)	287.1
Others	2,298.0	1,788.0	1,780.0	1,815.0
Cash flow from operations	**14,724.0**	**13,140.3**	**21,408.1**	**28,781.6**
Capital expenditures	(7,158.0)	(7,972.0)	(9,000.0)	(9,000.0)
Acquisitions	(4,810.0)	(411.0)	–	–
Divestitures	–	–	–	–
Others	(5.0)	(76.0)	(100.0)	(100.0)
Cash flow from investing	**(11,973.0)**	**(8,459.0)**	**(9,100.0)**	**(9,100.0)**
Dividends paid	–	–	–	–
Share issuance/(repurchase)	–	–	–	–
Inc/(dec) in debt	(3,364.0)	(877.0)	(522.0)	–
Others	(105.0)	238.0	–	–
Cash flow from financing	**(3,971.0)**	**(933.0)**	**(522.0)**	**0.0**
Total cash flow	**(1,220.0)**	**3,748.3**	**11,786.1**	**19,681.6**
Free cash flow	7,566.0	5,168.3	12,408.1	19,781.6
Free cash flow per share (basic) ($)	2.26	1.53	3.82	6.04

Source: Company data, Goldman Sachs Research estimates.

volume plans), other contributors to the recent move in the stock such as opening up parts of the charging network and the impact of AI on Tesla's full self driving (FSD) product are likely to have a more limited near-term contribution to EPS (although both could be more material long-term, in particular AI/FSD).

Overall we believe our view that Tesla is well positioned for long-term growth, given its leading position in the EV and clean energy markets (which we attribute in part to its ability to offer full solutions including charging, storage, software/FSD and services with a direct sales model), is now better reflected in the stock.

We believe there are both positive and negative fundamental factors to consider over the next 6 to 12 months. Positively, we believe that 2Q23 deliveries are tracking well, and our base case is that volumes will be similar to consensus of 445-450K (per FactSet and Visible Alpha) given solid sales data in April and May. We also believe that product updates (Cybertruck and the potential for a refreshed Model 3), strength in Energy, growing EV adoption more broadly (including continued government support), and cost reductions will be tailwinds. However, we believe that the trend lower in new vehicle pricing and softening auto supply/demand for the industry will be a headwind. We continue to see Tesla as a long-term winner in AI/FSD, given the breadth and depth of its engineering resources and data access (including custom silicon and software both for AI development and for use in vehicles), although the timing of when Tesla will enable situational eyes-off (e.g. L3) or robotaxi-type (L4) functionality could occur beyond the next 12 months in our view.

Longer-term, we believe Tesla will launch a vehicle using its third generation platform (where recall that Tesla is targeting to reduce costs by about 50% to roughly $20K per vehicle). We believe that Tesla is targeting to ramp this product in 2025, and this could be a positive driver for the stock. We see Tesla as well positioned to maintain a strong competitive position in the EV market, as evidenced by what it is doing in areas like the third generation platform and with software. To the extent we thought that the company was closer to a catalyst as meaningful as the ramp of the third generation platform, or if Tesla made faster progress with FSD/AI products than we anticipate, then we could be more positive on the stock.

We are raising our EPS estimates (on higher pricing assumptions, which now assume a more measured rate of decline in vehicle pricing than our prior estimates) and a higher target multiple (to 55X on Q5-Q8 EPS including SBC from 45X prior to better reflect market and peer multiples). Our EPS estimates including SBC for 2023/2024/2025 move to $2.75/$4.10/$5.50 from $2.20/$3.65/$4.75 (and excluding SBC we now model $3.25/$4.60/$6.00; our estimates are slightly below Visible Alpha consensus for 2H23 but about in line for 2024/2025). Our 12-month price target moves to $248 from $185. Key downside risks to our view relate to potentially larger vehicle price reductions than we expect, increased competition in EVs, delays with products/capabilities like FSD/the third generation platform/4680, key person risk, the internal control environment, margins, and operational risks associated with Tesla's high degree of vertical integration. Upside risks include faster EV adoption and/or share gain from Tesla, a stronger macroeconomic environment for new vehicle sales more generally, earlier new product launches than we expect (e.g. a vehicle using the third generation platform), and an earlier/larger impact from AI enabled products (e.g. FSD and Optimus) than we currently anticipate.

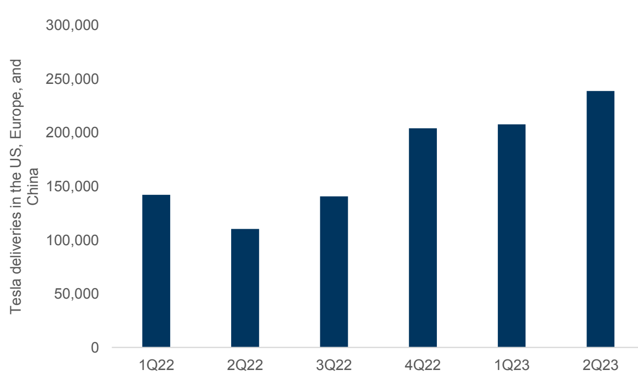
Since being added to the Americas Buy list on 12/2/2020, Tesla shares are up 35% vs. the S&P 500 up 19%. We attribute this to higher earnings expectations, with Street EPS estimates for 2024 now at $4.83 compared to $2.53 at the time of our upgrade (per FactSet), and recently more credit from the market for opportunities such as FSD. However, the 2024 Street consensus for EPS has been revised down by about 32% YTD driven primarily by lower vehicle pricing and margins (given the price reductions Tesla made in 1Q23 and in April 2023).

Importantly, we remain positive on EV adoption, and we continue to see the most investing opportunities among our broader set of suppliers, especially those with higher content to enable the shift to EVs and electrification.

We believe that 2Q deliveries are doing well, and tracking to 445-450K

We believe that Tesla's deliveries are off to a solid start for 2Q, with volumes in the first two months of the quarter for the US, Europe and China higher than the first two months of deliveries in prior quarters (Exhibit 1). It's important to note that Tesla has been in the process of transitioning to a more even delivery schedule throughout the quarter in order to ease logistics and operational constraints. As a result, we expect less of an increase in the last month of the quarter than was the case historically. We believe that volumes are tracking to be roughly in line with consensus at ~445-450K (per FactSet and Visible Alpha) as our base case.

Exhibit 1: Tesla's deliveries in key regions are tracking higher in the first two months of 2Q23
Tesla deliveries in the first two months of each quarter from 1Q22-2Q23

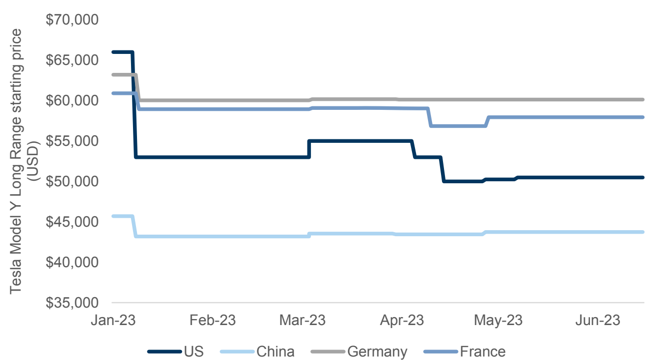


Source: Motor Intelligence, CPCA, ACEA, CCFA, KBA, PFA

Tesla's pricing for new orders has been relatively stable recently, post larger cuts earlier in 2023

The price for Tesla vehicles has been a key focus for investors given the importance on its volumes and margins. Tesla significantly reduced pricing in January 2023 and further in April in the US, which significantly expanded its addressable market (as we previously detailed in our note exploring volume by price band). We had previously been expecting additional price reductions in 2Q given company commentary on the 1Q23 earnings call and due to a relatively tepid macroeconomic backdrop (with easing vehicle supply/demand). However, Tesla pricing has been stronger than we had expected (with some small price increases on certain models, and discounting focused on vehicles in inventory).

Exhibit 2: Starting prices for Long Range Model Y in key geographies

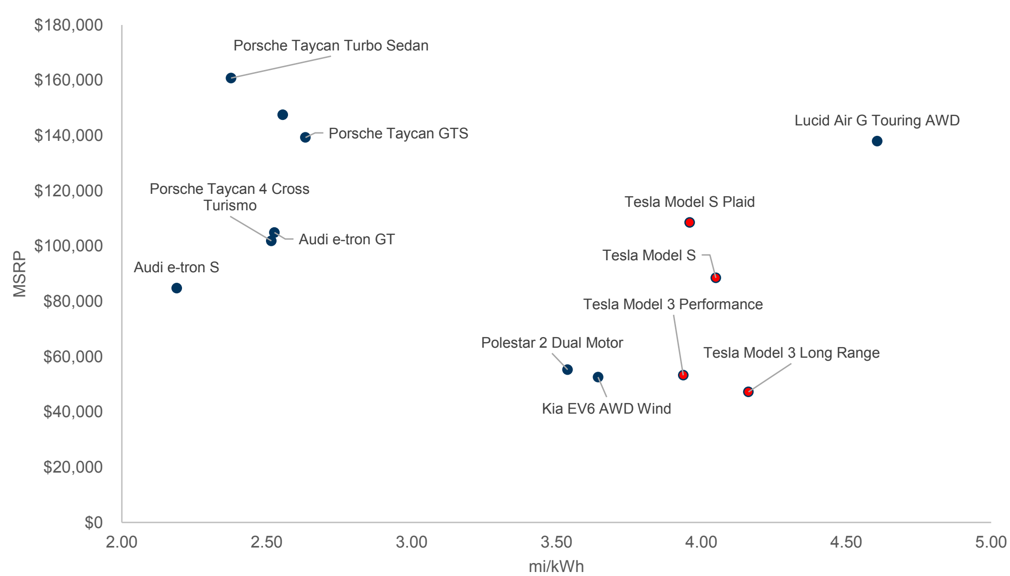


Source: Company data

Tesla is well positioned in terms of cost and capabilities, and the company continues to innovate

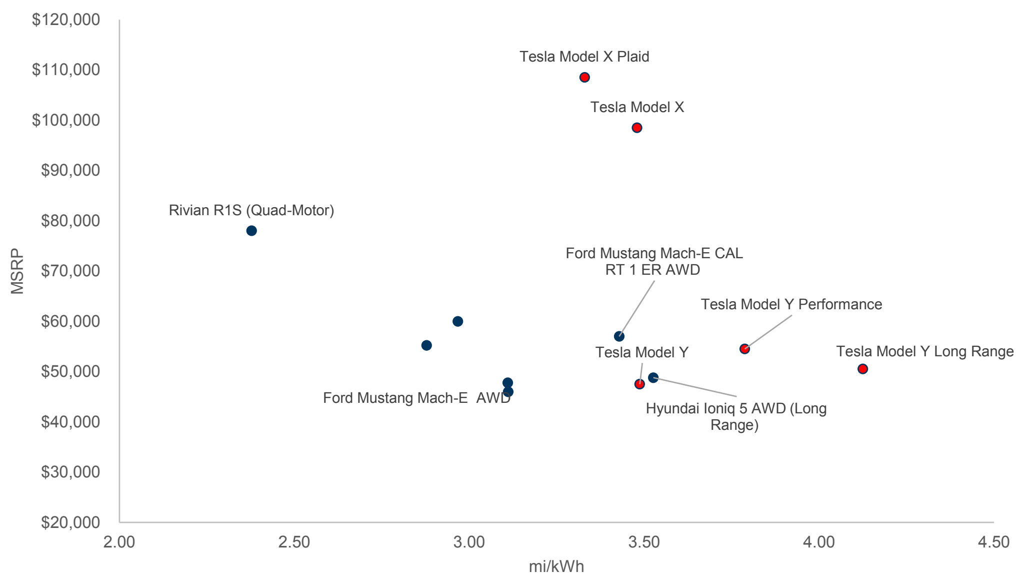
We view Tesla as an industry leader in terms of powertrain technology and costs, as evidenced by powertrain efficiency compared to vehicle price (Exhibit 3 and Exhibit 4).

Exhibit 3: Tesla model 3 long range screens as a leader in efficiency (mi/kWh) relative to price
Efficiency (mi/kWh) with price for AWD sedans



Source: InsideEVs, Company data, Goldman Sachs Global Investment Research

Exhibit 4: Tesla Model Y long range screens well for efficiency and price
Efficiency (mi/kWh) with price for AWD SUVs

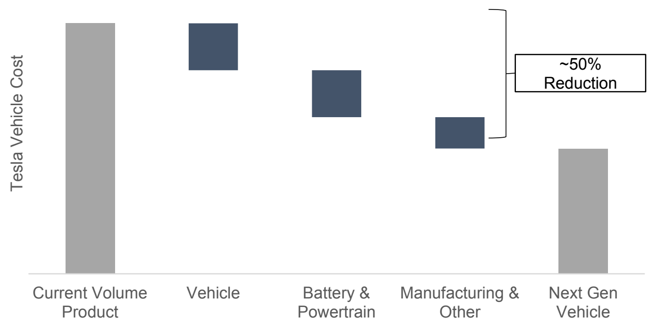


Source: InsideEVs, Company data, Goldman Sachs Global Investment Research

Importantly, Tesla continues to innovate in terms of cost and capabilities. At its 2023 investor day, Tesla highlighted its cost reduction opportunities, and it targets a roughly 50% reduction in cost with its third generation platform (to about $20K per vehicle) driven by changes in areas including manufacturing and design (e.g. casting and a reduced part count). On powertrain specifically, Tesla believes its next drive unit will be even more scalable with a roughly 75% reduction in silicon carbide, while also reducing the rare earth materials required to zero.

We believe that this program is a priority for Tesla, and we believe the company is targeting a ramp in 2025 based on company commentary. We do not currently include this product in our 2025 estimates given the lack of clarity on when it will ship, and due to the past delays in some of Tesla's product introduction timelines, but we believe a vehicle at that type of cost (and performance) would have significant demand (and we believe it's possible for Tesla to ship this vehicle in 2025).

Exhibit 5: Tesla believes it can lower its next generation vehicle platform cost by ~50%
Tesla Vehicle Cost



Source: Company data

EV charging is a small but growing business; opening the network should help Tesla to sustain a leading charging position

Companies including Ford, General Motors, and Rivian have announced that their EV customers will gain access to more than 12K Tesla Superchargers in North America in 2024.

We note that Tesla currently has about 19K supercharger connectors in the US (per the US Department of Energy) and 45K+ globally (per Tesla), and thus the agreement is only for a portion of Tesla's connectors.

We believe there is the opportunity for Tesla to drive high incremental margins by opening select charging locations given that we estimate that station utilization is only in the mid to high single digits percent range overall (although higher at certain sites/peak times). By opening parts of the network, Tesla could not only support increased EV adoption but also sustain/accelerate its larger charging network (by taking a larger share of charging industry revenue). The biggest risks of opening the charging network in our opinion are potentially losing Tesla car buyers to other OEMs, and decreasing current Tesla owner satisfaction. However, we believe that the cost/capabilities Tesla vehicles offer will mitigate the share loss issue (and at least for now we expect that full access to the Tesla network will be reserved for Tesla owners, and with ease of use for Tesla vehicles specifically like plug and charge, and thus we believe the network will remain a reason to buy a Tesla car).

Recall that Tesla has already been in the process of opening up select chargers in the US and Europe. In Europe, owners have been able to acquire a membership (for about €12.99 or $14 USD per month) or pay a higher rate per charge. We believe that Tesla has not opened up the most highly utilized chargers to preserve a better experience for Tesla drivers.

As we wrote in our 6/29/22 report, *The case for Tesla to open the Supercharging network*, we sized the potential for Tesla opening its network more widely in the next few years (i.e. more than just the 12K chargers in North America) at $1-$3 bn of incremental revenue (although Tesla wouldn't necessarily capture all of this).

In Exhibit 6 we show the potential incremental revenue opportunity from opening up the network. We believe that the EPS impact is modest in the near-term, but it could become more meaningful long-term.

Exhibit 6: Tesla's incremental revenue opportunity from opening up its network

Annual revenue opportunity ($ mn) from non-Tesla BEVs						
		Open Tesla Supercharger ports				
		12,000	35,000	50,000	88,000	100,000
Incremental daily sessions	2	$153	$447	$639	$1,124	$1,278
	4	$307	$894	$1,278	$2,248	$2,555
	5	$383	$1,118	$1,597	$2,811	$3,194

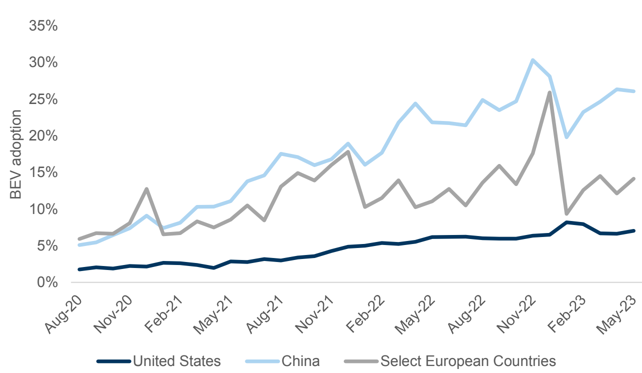
Source: Company data, Goldman Sachs Global Investment Research

We remain positive on EV adoption and believe Tesla will continue to be a market leader

We believe that EV adoption will continue to increase driven by consumer interest, OEM product plans, and improving EV consumer economics/the IRA. We believe that OEMs will need to continue to invest for EVs as we view them as critical to long-term global competitiveness, in part due to government mandates for EVs to be 100% of new sales by 2035 in some regions.

BEV vehicle sales as a percentage of total new vehicle sales have been trending higher in the US, Europe, and China over time.

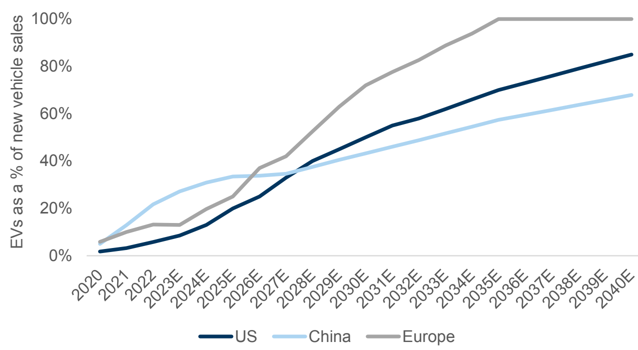
Exhibit 7: BEV penetration rates have increased in 2023
Monthly BEV penetration rates



Source: Autodata, CPCA, ACEA

Together with our global colleagues, we expect increased EV sales and penetration over time (Exhibit 8). Our global estimates for EV penetration are 12%/17%/34%/50%/61% in 2023/25/30/35/2040, up from about 10% in 2022.

Exhibit 8: We expect EV penetration to increase from current levels
EVs as a percentage of new vehicle sales

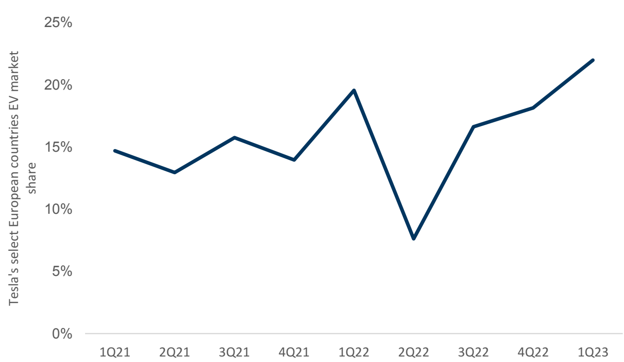


Source: Data compiled by Goldman Sachs Global Investment Research

We believe that Tesla will remain a market leader, and there are signs that Tesla's price reductions from earlier in 2023 led to share gain. For instance, management commented on the 1Q23 call that Model Y became the best-selling vehicle of any kind in Europe and the best-selling non-pickup vehicle in the United States.

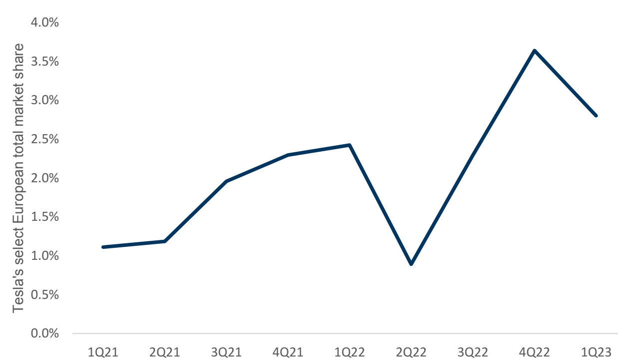
While share can be volatile quarter to quarter (and it will be important to monitor how this could change especially if Tesla is more measured with pricing going forward), Tesla's share in key European countries and in China has been trending higher (both for the market overall and for the BEV market specifically).

Exhibit 9: Tesla's BEV market share in select European countries increased in 1Q23
Tesla's EV market share in select European countries



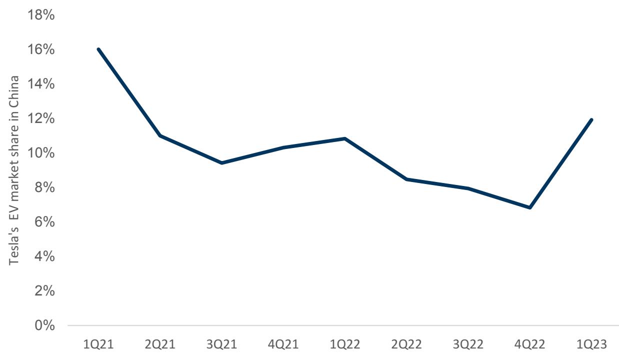
Source: ACEA, Goldman Sachs Global Investment Research

Exhibit 10: Tesla's total market share in select European countries has trended higher, as EVs take share from ICE
Tesla's market share in select European countries



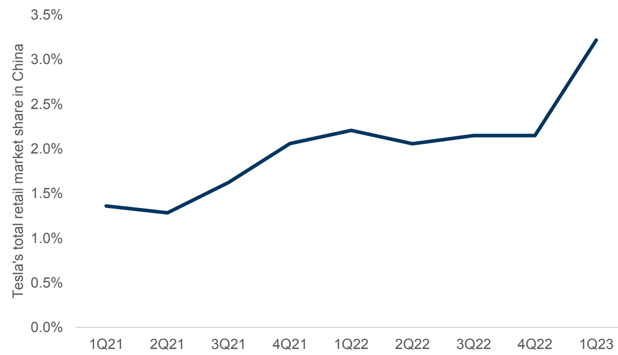
Source: ACEA, Goldman Sachs Global Investment Research

Exhibit 11: Tesla saw a qoq uptick in its BEV market share in 1Q23 in China
Tesla's EV market share in China



Source: CPCA, Goldman Sachs Global Investment Research

Exhibit 12: Tesla's total market share in China is rising as EVs take share from ICE
Tesla's total market share in China



Source: CPCA, Goldman Sachs Global Investment Research

Valuation is full - Tesla trades at a higher multiple than other fast growing tech companies

We believe the stock now better reflects our positive long-term view of the company post the substantial move higher YTD (up 108% vs. the S&P 500 up 13%) and in the past month (up 38% vs. the S&P 500 up 5%). We think it is illustrative that Tesla shares currently trade at a higher P/E multiple than other fast-growing tech companies that could benefit from AI, such as NVDA and AMD.

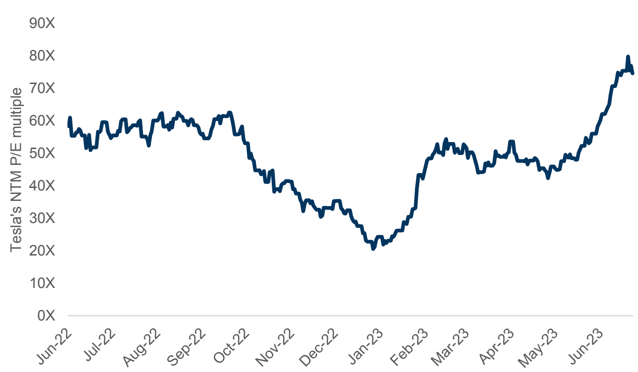
Exhibit 13: Tesla trades at a premium to other fast-growing technology companies
valuation summary using GS estimates

						EXCLUDING SBC			INCLUDING SBC		
	Market Cap ($mn)	Enterprise Value ($mn)	EV/FCF			P/E			P/E		
			NTM	2024	2025	NTM	2024	2025	NTM	2024	2025
Ticker											
AMD	$177,226	$173,814	47X	26X	21X	33X	25X	18X	42X	31X	21X
NVDA	$1,051,004	$1,046,638	54X	42X	36X	46X	42X	35X	55X	50X	42X
TSLA	$889,889	$874,391	187X	70X	44X	79X	56X	43X	93X	63X	47X

Source: Goldman Sachs Global Investment Research, FactSet

Tesla's NTM P/E multiple has expanded in the past year and YTD (Exhibit 14).

Exhibit 14: Tesla's NTM P/E multiple has expanded
Street consensus EPS (ex. SBC)



Source: FactSet

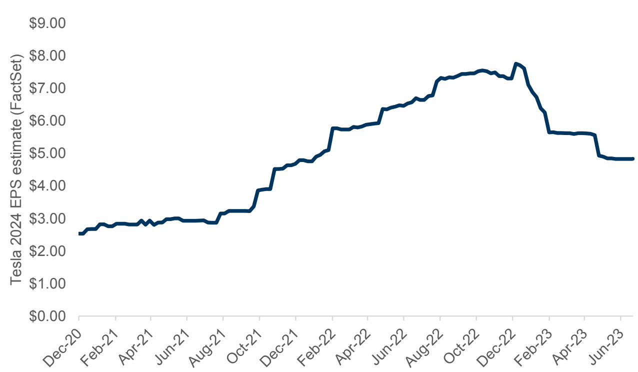
Since adding TSLA to the Americas Buy list on 12/2/2020, Tesla shares are up 35% vs. the S&P 500 up 19%.

Exhibit 15: TSLA shares are +35% since we added TSLA to the GS Americas Buy list, while the S&P 500 is +19%
Indexed stock performance

Source: FactSet

We attribute the outperformance vs. the S&P 500 to higher earnings expectations, with Street EPS estimates for 2024 now at $4.83 compared to $2.53 at the time of our upgrade (per FactSet), and recently more credit from the market for opportunities such as AI/FSD. However, 2024 consensus EPS has been revised down by about 32% since the start of the year driven in particular by lower pricing and margins.

Exhibit 16: Consensus 2024 EPS estimates have been revised up since December 2020
FactSet 2024 EPS estimates



Source: FactSet

Disclosure Appendix

Reg AC

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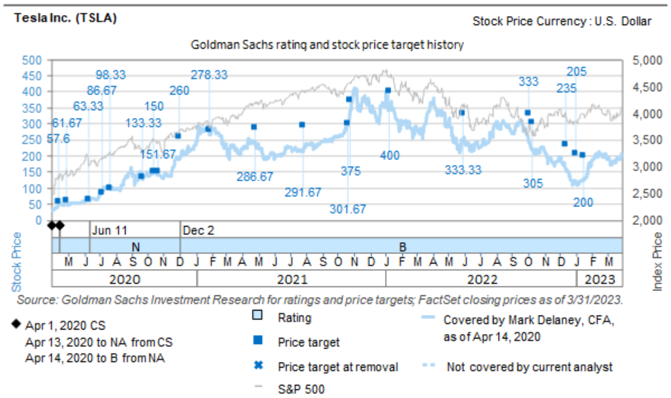
Price target and rating history chart(s)



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