

## Tesla Inc. (TSLA): Updates on Model Y, auto market share, recent US consumer survey data; and key topics for 4Q results

In this note, we examine several topics on Tesla including: 1) the refreshed Model Y launch in the US and Europe (which comes after Tesla launched the refreshed Model Y in China earlier this month). We think the new Model Y offers several good feature upgrades, and the updates are similar to what Tesla did with the Model 3. Tesla plans to begin deliveries of the refreshed Model Y in March. 2) Regional market share data for 4Q24/2024, which shows that Tesla's EV share has trended lower. 3) Recent US consumer survey data for Tesla, looking at Tesla's brand and net purchase intent scores per HundredX. 4) We also highlight key topics ahead of Tesla's upcoming 4Q24 EPS report scheduled for 1/29/25 (we assume a lower gross margin than consensus for 4Q).

**Mark Delaney, CFA**  
+1 (212) 357-0535 |  
mark.delaney@gs.com  
Goldman Sachs & Co. LLC

**Will Bryant**  
+1 (212) 934-4705 | will.bryant@gs.com  
Goldman Sachs & Co. LLC

**Morgan Leung**  
+1 (212) 934-4683 |  
morgan.leung@gs.com  
Goldman Sachs & Co. LLC

**Aman Gupta**  
+1 (212) 357-1549 |  
aman.s.gupta@gs.com  
Goldman Sachs & Co. LLC

### Refreshed Model Y unveiled for the US & Europe

On 1/23/25, Tesla officially launched the refreshed Model Y in North America and Europe, and Tesla expects deliveries of the new version to begin in March. Recall on 1/10/25, Tesla unveiled the refreshed version of the Model Y for China and other APAC countries (and it also expects to begin deliveries in March in those geographies).

The new Model Y has between 3% and 7% more range depending on the measurement method by region (EPA in the US and WLTP in Europe). Some of the changes made in the refresh, beyond the extended range, include updated exterior lighting, an added screen for the back seat, ambient lighting, and better outside noise reduction (with acoustic glass). In addition, the company added a front bumper camera, which may assist with parking (recall Tesla removed the ultrasonic sensors it had previously used to aid in parking), and we believe that this camera may also provide an additional input for Autopilot/FSD to utilize.

The refreshed version of the Y in the US and Europe is being offered in a launch edition available with a Long Range AWD format. The launch edition for the US market also includes FSD (which is typically priced at \$8K). The launch edition also has special badges, and some interior upgrades.

We note that in the US and Europe, the previous version of the Model Y can still be

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ordered, while in China only the refreshed Model Y can now be ordered in the configurator.

On pricing, in the US the refreshed Model Y Launch series is priced at ~\$60K vs. the list price for the prior Long-Range AWD at ~\$48K, or 25% more. Excluding the bundled FSD (which is typically priced separately at ~\$8K) the Launch series price increased by ~8% in the US. In Europe, the launch edition (which does not include FSD) price increased by ~10%. At the same time, Tesla is offering discounts on Model Y units in inventory of about \$1K to \$4K depending on the trim. Therefore, mix and how fast Tesla ramps up production of the refreshed version will help determine the effect on blended ASPs.

We believe the new version offers several good enhancements. We also think that the refresh is relatively in line with investor expectations, as the upgrades are generally similar to what Tesla did with the Model 3. Additionally, to the extent that the refreshed Model Y launch series in the US is able to improve deliveries in the US, Tesla can increase its FSD attach rates given the launch series in the US includes FSD. As we highlighted in our recent [updated thoughts on FSD note](#), each \$1 bn of incremental revenue from FSD would add roughly 75-100 bps to Tesla's automotive gross margin excluding regulatory credits, all else equal.

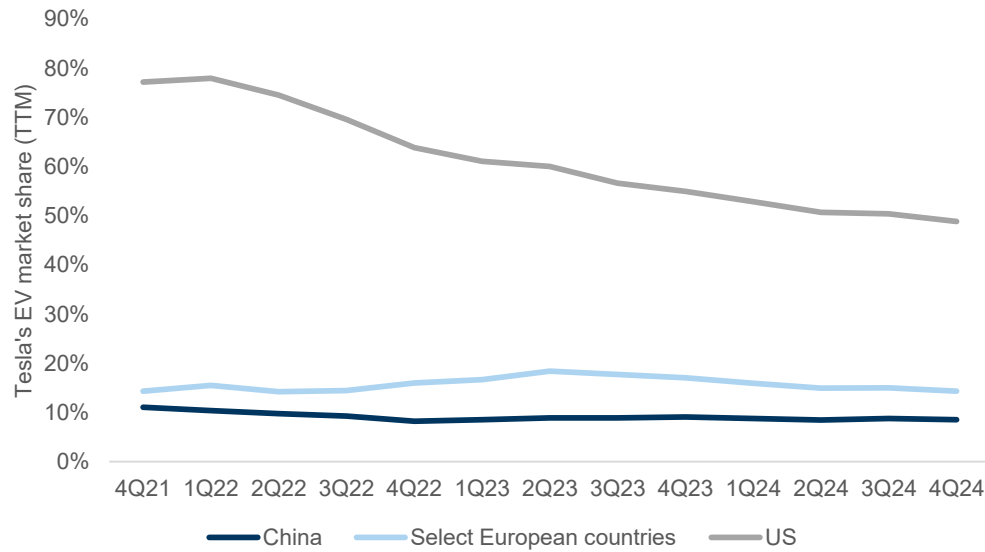
## Regional market share update

On 1/2/25 Tesla reported preliminary 4Q24 vehicle deliveries of about 496k (up 7% qoq and up 2% yoy). Model 3/Y deliveries in the quarter were about 472k (up 7% qoq and up 2% yoy), and other model deliveries (e.g. S/X/Cybertruck) were about 24k (up 3% qoq and up 3% yoy).

We examine Tesla's market share for 4Q24 by region in this section of the note, based on Tesla's results as well as market updates/country registration data.

In the US, we estimate that Tesla's sales were about flat yoy in 4Q24, and that its share of the BEV market in 4Q24 declined into the mid 40% range from about 50% in 4Q23 (based on data from Motor Intelligence, and considering reported data for other countries). For the European BEV market, we estimate that Tesla's sales declined by about 10% yoy, and its share in 4Q was about 13% compared to about 16% in 4Q23. Tesla's market share on a TTM basis has been stable to modestly lower and in the mid-teens range in Europe. For China, based on CPCA data, Tesla's unit sales were up about 16% yoy in 4Q24, and we think Tesla has roughly a high-single digit percentage share of the China BEV market.

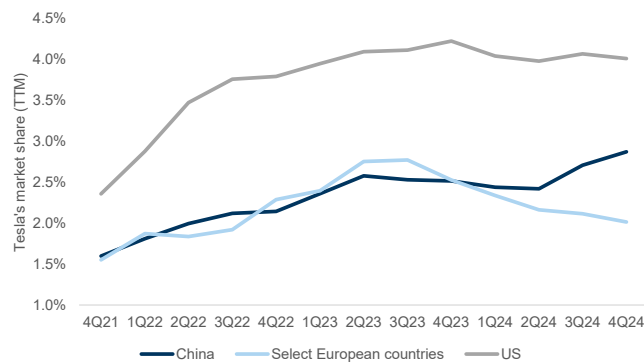
Exhibit 1: Tesla TTM EV market share in the US, China, and select European countries



Source: CPCA, ACEA, Motor Intelligence, Goldman Sachs Global Investment Research

For the auto market in total (i.e. including ICE and hybrid vehicles), market share trends on a trailing twelve month (TTM) basis have been somewhat mixed by region in recent months. Tesla's US and European market share has declined slightly (we estimate Tesla's share is in the low to mid single digit range in the US and in the low single digit range in Europe). For the China market, while Tesla's share declined sequentially in 4Q, on a trailing 12 month basis, Tesla's market share increased in 2024 relative to 2H23.

Exhibit 2: Tesla TTM market share in the US, China, and select European countries



Source: CPCA, ACEA, Motor Intelligence, Goldman Sachs Global Investment Research

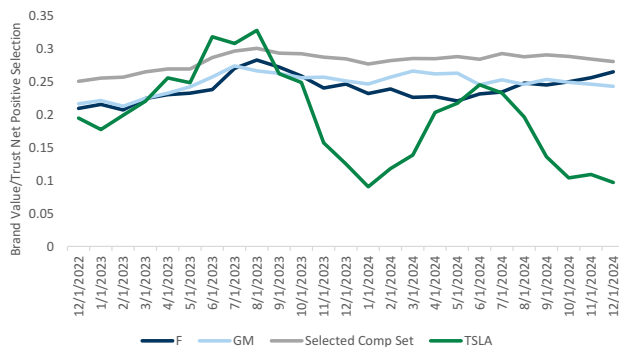
## US consumer feedback on Tesla based on surveys from HundredX

We examine how Tesla's brand sentiment and net purchase intentions have trended per surveys of US consumers from HundredX (which conducts surveys on brands for a wide set of the US population across demographics including age, income, gender, and geography) to better understand potential demand trends for Tesla within the US

market.

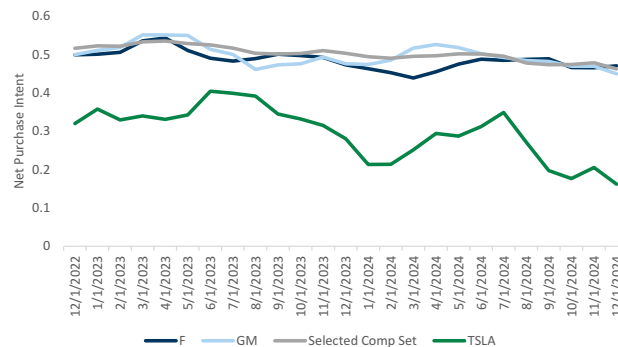
Similar to what we found in our analysis from a few months ago, the survey data still shows a decline for Tesla in the brand/trust metric, whereas scores for the broader industry have been relatively stable ([Exhibit 3](#)). Similarly, Tesla's net purchase intent scores have declined by more than the peer group ([Exhibit 4](#)).

**Exhibit 3: Tesla's Brand/Trust perception scores have declined in recent months**



Source: HundredX

**Exhibit 4: Tesla Net Purchase Intent scores have declined in recent months**



Source: HundredX

We believe it will be important to watch how Tesla scores trend going forward, and how products like Full Self Driving (FSD) and new vehicle model(s) affect demand.

## Key topics for 4Q24 report

Tesla is scheduled to report 4Q24 results on 1/29 after the market close. We believe key topics and focus items will include:

**1) Automotive non-GAAP gross margin excluding regulatory credits:** We expect Tesla's automotive non-GAAP gross margin excluding regulatory credits to remain a key focus for investors, and we're modeling the automotive non-GAAP gross margin to be 15.0% in 4Q (compared to the 17.1% Tesla reported in 3Q24, or ~15.6% in 3Q24 excluding the FSD deferred revenue release). We believe there will be several puts and takes to gross margin in 4Q qoq, including the incremental incentives Tesla used to support 4Q growth, higher tariffs in 4Q, but also higher sales volumes, and we believe lower materials costs.

Based on FactSet/Visible Alpha Consensus Data for total gross margin, we believe our non-GAAP automotive gross margin is ~50-100 bps below sell side consensus. Per our investor discussions, we believe our 15.0% estimate is in line with/near the lower-end of expectations.

**2) Vehicle delivery outlook for 2025, with Tesla having previously guided to 20-30% yoy growth:** We believe a key debate in the market will be whether Tesla can grow more meaningfully in 2025/2026, driven by a refreshed Model Y and a new lower cost model or models (Tesla expects to offer a new model from mid 2025). Recall the

company is targeting 20-30% yoy growth in deliveries in 2025 (we're currently modeling 12% growth, below Visible Alpha consensus at 14%). We expect Tesla will maintain this target on the earnings call, and also speak to good pre-order demand for the new Model Y.

We believe that how quickly production of the new Model Y ramps, and when Tesla launches new model(s) will be key variables in terms of how fast Tesla grows. While Tesla may somewhat cannibalize sales of the current 3/Y with new variants depending on the degree of differentiation, net net as new model(s) fully ramp we'd expect them to add at least 100K to Tesla's annual volumes.

We also believe the implications of the potential removal of the \$7.5K EV purchase tax credit under the IRA to be a focus for investors. As discussed in our 2025 outlook report, our forecast assumes the \$7.5K federal IRA tax credit will be removed this year.

**3) Progress with FSD and AI-related efforts:** We believe investors will be looking for management commentary and data on progress with FSD (full self driving), including the performance of V13 (which we think shows meaningful improvement compared to V12).

We continue to believe the FSD data suggests that Tesla is among the leaders with its AI technology for the auto market, but also that Tesla is unlikely to reach its goal of being safer than a human driver in 2Q25 (as we discussed in detail in our recent note from 1/15).

On robotaxis specifically, Tesla is targeting to deploy a robotaxi service in Texas and/or California in 2025 using Model 3/Y vehicles, and expects to start production of its Cybercab robotaxi in 2026 (although we note that the company has historically been optimistic with its timelines). We expect Tesla to begin very limited robotaxi operations in 2H26, in part by making use of more tools than FSD on consumer cars (e.g. location specific maps and/or model training, as well as remote assistance). We expect robotaxis to contribute ~\$115 mn to 2027 revenue and be relatively neutral to consolidated EPS.

**4) Growth in other segments, including Services and Energy:** Tesla deployed 11.0 GWh of energy storage products in 4Q, above the 3Q level of 6.9 GWh and consistent with commentary on its 3Q call for Energy deployments to more than double yoy in 2024. Recall Tesla has previously noted that given the large-scale nature of some projects, deployments by quarter could be lumpy. While we acknowledge energy shipments can be lumpy due to the nature of project size and timing, we continue to expect Energy to grow as the company ramps capacity. Profitability in the Energy segment has also been very strong recently.

**5) Progress with Optimus and expectations on ramp timing:** Tesla has highlighted improved dexterity of its Optimus robot, and per an X post at the end of November, Optimus' new hand and forearm have double the number of degrees of freedom (DoFs) compared to previous robots (there's now 22 DoFs on the hand and 3 on the wrist/arm). Recall that in an X post from June 2024, Tesla said that it had deployed two Optimus robots performing tasks in the factory autonomously. Furthermore, on its 2Q24 EPS call, Tesla commented that it expects to have the first version of Optimus in limited

production starting in early 2025 (for Tesla consumption) and then to produce several thousand Optimus robots by the end of the year and deployed in the Tesla factories. The company also said on X in early January per Barron's that it could ship 10X more units in 2026, and 10X again in 2027.

Rating, price target, and key risks

We are Neutral rated on Tesla shares. Our \$345, 12-month price target is based on 95X Q5-8E EPS including SBC.

Key downside risks to our view relate to potentially larger vehicle price reductions than we expect, increased competition in EVs, slower EV demand, delays with products/capabilities like FSD/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 by Tesla, a stronger macroeconomic environment for new vehicle sales more generally, earlier new product launches than we expect, and an earlier/larger impact from AI enabled products (e.g., FSD, Optimus and robotaxis) than we currently anticipate.

TSLA	12m Price Target: <b>\$345.00</b>	Price: <b>\$406.58</b>	Downside: <b>15.1%</b>
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Neutral	GS Forecast				
Market cap: \$1.4tr Enterprise value: \$1.4tr 3m ADTV: \$33.8bn United States Americas Autos & Industrial Tech M&A Rank: 3	Revenue (\$ mn)	12/23	12/24E	12/25E	12/26E
	EBITDA (\$ mn)	96,773.0	98,877.3	112,170.9	133,017.4
	EBIT (\$ mn)	16,633.0	16,027.8	21,564.5	28,763.5
	EPS (\$)	8,891.0	7,895.2	10,943.5	15,976.3
	P/E (X)	2.60	2.00	2.80	3.95
	EV/EBITDA (X)	83.5	NM	145.3	102.9
	FCF yield (%)	40.6	80.2	59.9	44.8
	Dividend yield (%)	0.6	0.2	0.4	0.8
	Net debt/EBITDA (X)	0.0	0.0	0.0	0.0
		(0.9)	(0.9)	(1.0)	(1.1)
	EPS (\$)	9/24	12/24E	3/25E	6/25E
		0.62	0.62	0.51	0.63

Source: Company data, Goldman Sachs Research estimates, FactSet. Price as of 24 Jan 2025 close.

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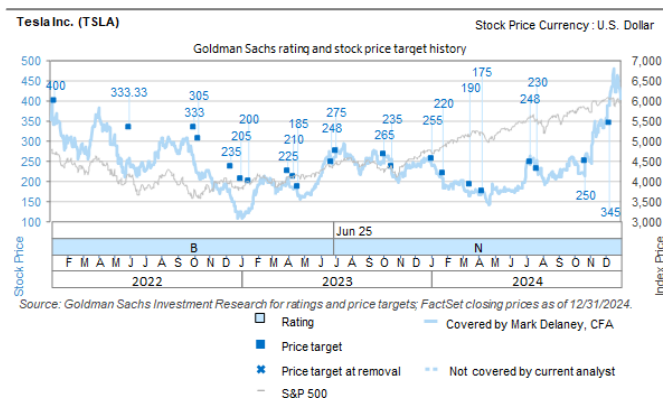
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