



Tesla (TSLA.O/TSLA US)

Delivery momentum to resume in 4Q23F

Outperform · Maintained

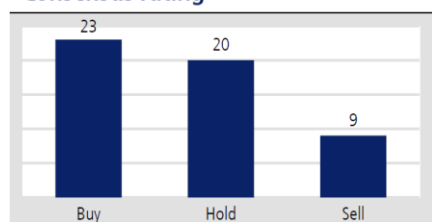
Price as of October 2 (US\$)	251.6
3M target price (US\$)	266
12M target price (US\$)	309
Previous target price (US\$)	335
Revised down (%)	-7.8
Upside (%)	22.8

Trading data

Mkt cap (US\$bn)	798.6
Outstanding shares (mn)	3,174
Institutional ownership (%)	46.9
3M avg. daily trading (mn)	116.6
52-week trading range (US\$)	101.8-299.3

Performance	3M	6M	12M
Absolute (%)	(10.1)	29.2	3.8
Relative (%)	(6.3)	25.2	(12.8)

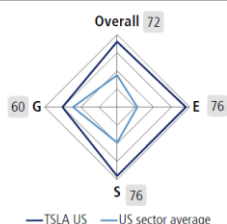
Consensus rating



12M street target price	Low	Average	High
Target price (US\$)	24	267	400
Return potential (%)	(90.3)	6.3	59.0

Source: Bloomberg

ESG score card



Source: Refinitiv, KGI securities

Event

Tesla (US) reported 3Q23 delivery of 435,059 units, down 7% QoQ, but up 27% YoY. The company's 3Q23 earnings call is scheduled for October 18.

Impact

3Q23 deliveries missed consensus by 7%; we trim 3Q23 EPS to US\$0.7, down 23% QoQ and 34% YoY. Tesla's EV production declined 10% QoQ, but increased 18% YoY to 430,488 units in 3Q23, with the firm citing sequential decline was the result of factory upgrades. Despite being 7% below consensus, EV deliveries in 3Q23 outpaced production, suggesting supply constraints and low inventory. Deliveries of Models 3 and Y declined 6% QoQ, but grew 29% YoY to 419,074 units, representing 96% of the total. Considering production downtime and sequential sales declines, as well as further price cuts, we revise down 3Q23F gross and operating margins to a respective 17.3% and 8.5%, for 3Q23F EPS of NT\$0.70.

2023 target of 1.8mn units implies delivery recovery in 4Q23. Tesla reiterates 2023 volume target of 1.8mn units, suggesting production and deliveries will recover in 4Q23. Assuming 2023 production of 1.8mn units, with the firm managing to sell most of its production, we estimate deliveries in 4Q23 will reach 473,600 units, for 9% QoQ and 17% YoY growth. The Model 3 refresh, which will commence delivery in October in Europe, will be a near-term demand catalyst, while Cybertruck will start to be delivered in 4Q23. The firm's sales of 1.8mn units in 2023 would imply 37% YoY growth and market share of 13%, based on our global EV market forecast.

We trim 2024 EV deliveries to 2.24mn units amid macro uncertainties, but remain positive on the firm's cost reduction efforts & growth potential due to software. As the high interest rate environment and global economic uncertainties persist, we trim Tesla's 2024 EV delivery growth to 24% YoY in 2024, and project momentum will accelerate on the availability of new mass-market EV models. We expect production challenges to constrain Cybertruck output in 2024. While EV sales have slowed in 2023 and could potentially slow further in 2024, we notice the firm's ongoing EV cost reduction efforts, via supply chain management, as well as vehicle design and production optimization, are ongoing. We expect these efforts to bear fruit in the mid- to long-term. The recently reported technological breakthroughs in one-piece chassis die casting could potentially cut related costs by over 30%. In addition to cost reduction efforts, we are also positive on the firm's AI investments and software development, which could help sustain its leading position in terms of vehicle self-driving capabilities. We lower 2023-24F EPS to a respective US\$3.25 and US\$4.68 to reflect macro impacts, but maintain our forecast that gross margin will bottom in 2023, with recovery in 2024.

Valuation & Action

We maintain Outperform, but trim our 12M target price from US\$335 to US\$309, based on 4Q 2025-26F average EPS. We reiterate our positive outlook on Tesla's long-term growth and recommend accumulating shares on 3Q23 earnings headwinds.

Risks

Aggressive pricing strategy weighs on near-term profitability.

Key financials

	Dec-22A	Dec-23F	Dec-24F	Dec-25F	Dec-26F
Revenue (US\$m)	81,462	96,629	119,360	155,781	187,135
Gross profit (US\$m)	20,853	17,629	25,388	35,585	45,070
Operating profit (US\$m)	13,656	9,492	16,075	24,680	31,970
EBITDA (US\$m)	17,403	14,150	14,697	59,475	64,961
Net profit (US\$m)	14,116	11,306	16,276	23,513	30,232
EPS (US\$)	4.07	3.25	4.68	6.76	8.69
Revenue growth (%)	51.4	18.6	23.5	30.5	20.1
EPS growth (%)	80.1	(20.0)	43.8	44.5	28.6
Gross margin (%)	25.6	18.2	21.3	22.8	24.1
Operating margin (%)	16.8	9.8	13.5	15.8	17.1
EBITDA margin (%)	21.4	14.6	12.3	38.2	34.7
Net debt to equity (%)	Net cash	Net cash	Net cash	Net cash	Net cash
Return on average equity (%)	27.4	16.7	20.5	22.9	22.7

Source: Company data, KGI Research estimates

Figure 1: Breakdown of 3Q-4Q23 forecast revisions vs. consensus

US\$m	3Q23F							4Q23F						
	Revision	Previous	Chg. (%)	QoQ (%)	YoY (%)	Consensus	Diff. (%)	Revision	Previous	Chg. (%)	QoQ (%)	YoY (%)	Consensus	Diff. (%)
Revenue	23,235	25,214	(7.9)	(6.8)	8.3	24,508	(5.2)	25,138	25,739	(2.3)	8.2	3.4	26,586	(5.4)
Gross profit	4,026	4,780	(15.8)	(11.2)	(25.2)	4,608	(12.6)	4,559	4,998	(8.8)	13.2	(21.1)	5,198	(12.3)
Operating profit	1,982	2,713	(27.0)	(17.4)	(46.3)	2,692	(26.4)	2,448	2,939	(16.7)	23.5	(37.3)	2,857	(14.3)
Net income	2,418	3,078	(21.4)	(23.2)	(33.8)	2,867	(15.6)	2,809	3,319	(15.4)	16.1	(32.2)	3,122	(10.0)
EPS (US\$)	0.70	0.88	(21.4)	(23.2)	(34.0)	0.81	(14.2)	0.81	0.95	(15.4)	16.1	(32.3)	0.89	(9.4)
Gross margin (%)	17.3	19.0	(1.6) ppts	(0.9) ppts	(7.8) ppts	18.8	(1.5) ppts	18.1	19.4	(1.3) ppts	0.8 ppts	(5.6) ppts	19.6	(1.4) ppts
Op. margin (%)	8.5	10.8	(2.2) ppts	(1.1) ppts	(8.7) ppts	11.0	(2.5) ppts	9.7	11.4	(1.7) ppts	1.2 ppts	(6.3) ppts	10.7	(1.0) ppts
Net margin (%)	10.4	12.2	(1.8) ppts	(2.2) ppts	(6.6) ppts	11.7	(1.3) ppts	11.2	12.9	(1.7) ppts	0.8 ppts	(5.9) ppts	11.7	(0.6) ppts

Source: Bloomberg; KGI Research

Figure 2: Breakdown of 2023-25 forecast revisions vs. consensus

US\$m	2023F						2024F						2025F					
	Revision	Previous	Chg. (%)	YoY (%)	Consensus	Diff. (%)	Revision	Previous	Chg. (%)	YoY (%)	Consensus	Diff. (%)	Revision	Previous	Chg. (%)	YoY (%)	Consensus	Diff. (%)
Revenue	96,629	99,210	(2.6)	18.6	99,823	(3.2)	119,360	126,532	(5.7)	23.5	126,309	(5.5)	155,781	166,691	(6.5)	30.5	158,201	(1.5)
Gross profit	17,629	18,823	(6.3)	(15.5)	18,913	(6.8)	25,388	28,607	(11.3)	44.0	26,197	(3.1)	35,585	41,143	(13.5)	40.2	34,299	3.8
Operating profit	9,492	10,715	(11.4)	(30.5)	10,524	(9.8)	16,075	19,172	(16.2)	69.4	16,581	(3.0)	24,680	29,398	(16.0)	53.5	22,843	8.0
Net income	11,311	12,481	(9.4)	(20.0)	11,050	2.4	16,276	19,748	(17.6)	43.9	15,870	2.6	23,513	29,146	(19.3)	44.5	20,924	12.4
EPS (US\$)	3.25	3.59	(9.4)	(20.0)	3.32	(1.8)	4.68	5.68	(17.6)	43.8	4.70	(0.5)	6.76	8.38	(19.3)	44.5	6.09	11.0
Gross margin (%)	18.2	19.0	(0.7) ppts	(7.4) ppts	18.9	(0.7) ppts	21.3	22.6	(1.3) ppts	3.0 ppts	20.7	0.5 ppts	22.8	24.7	(1.8) ppts	1.6 ppts	21.7	1.2 ppts
Op. margin (%)	9.8	10.8	(1.0) ppts	(6.9) ppts	10.5	(0.7) ppts	13.5	15.2	(1.7) ppts	3.6 ppts	13.1	0.3 ppts	15.8	17.6	(1.8) ppts	2.4 ppts	14.4	1.4 ppts
Net margin (%)	11.7	12.6	(0.9) ppts	(5.7) ppts	11.1	0.6 ppts	13.6	15.6	(2.0) ppts	1.9 ppts	12.6	1.1 ppts	15.1	17.5	(2.4) ppts	1.5 ppts	13.2	1.9 ppts

Source: Bloomberg; KGI Research

Figure 3: Breakdown of 2023-25 forecast revisions

Unit	2023F				2024F				2025F			
	Revision	Previous	Chg. (%)	YoY (%)	Revision	Previous	Chg. (%)	YoY (%)	Revision	Previous	Chg. (%)	YoY (%)
Total	1,797,774	1,830,465	(1.8)	36.8	2,235,300	2,336,300	(4.3)	24.3	2,953,000	3,073,160	(3.9)	32.1
Model S/X	64,405	67,820	(5.0)	(3.4)	74,500	75,500	(1.3)	15.7	74,000	74,000	0.0	(0.7)
Model 3/Y	1,733,169	1,762,095	(1.6)	39.0	2,118,000	2,170,000	(2.4)	22.2	2,577,000	2,691,200	(4.2)	21.7
Cybertruck	100	350	(71.4)	-	42,000	73,000	(42.5)	41900.0	205,000	230,000	(10.9)	388.1
Semi	100	200	(50.0)	-	800	2,800	(71.4)	700.0	2,000	6,960	(71.3)	150.0

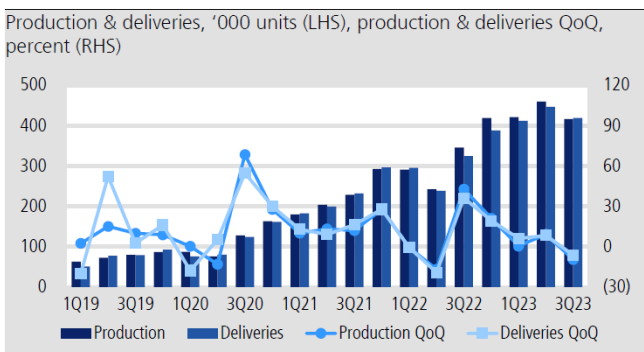
Source: KGI Research

Figure 4: Breakdown of financial assumptions for the auto business

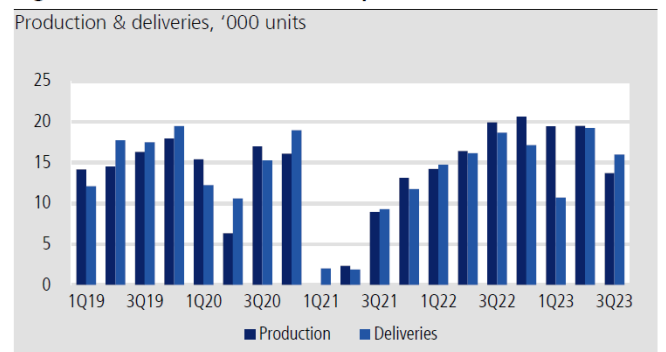
	1Q21	2Q21	3Q21	4Q21	1Q22	2Q22	3Q22	4Q22	1Q23	2Q23	3Q23F	4Q23F	1Q24F	2Q24F	3Q24F	4Q24F
EV shipments (k units)	184.9	201.3	241.4	308.7	310.0	254.7	343.8	405.3	423.0	466.1	435.1	473.6	492.5	544.0	584.3	614.5
Automotive revenue (US\$m)	8,484	9,854	11,778	15,653	16,182	14,258	18,406	20,840	19,442	20,986	19,079	20,816	21,653	23,990	26,006	27,453
ASP (US\$)	45.9	49.0	48.8	50.7	52.2	56.0	53.5	51.4	46.0	45.0	43.9	44.0	44.0	44.1	44.5	44.7
Cost per vehicle (US\$)	35.8	36.3	34.7	35.9	36.5	41.3	39.2	38.9	37.2	36.9	36.6	36.2	35.6	35.1	34.6	34.2
Automotive gross margin (%)	22.0	25.8	28.8	29.2	30.0	26.2	26.8	24.3	19.0	18.1	16.6	17.6	19.1	20.5	22.4	23.4

Note: All data excludes regulatory credits

Source: Company data; KGI Research

Figure 5: Model 3 & Y combined production & deliveries


Source: Tesla, KGI Research

Figure 6: Model S & X combined production & deliveries


Source: Tesla, KGI Research

Figure 7: Model 3 price trend by variant in US

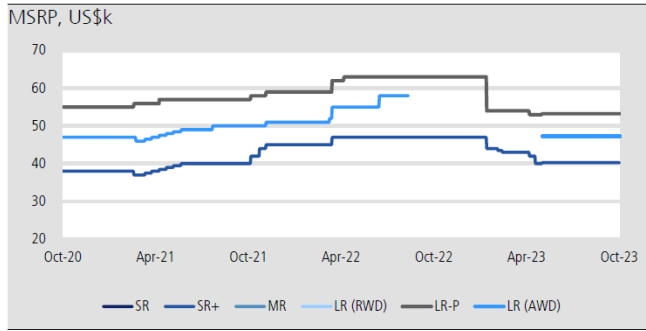


Figure 8: Model Y price trend by variant in US

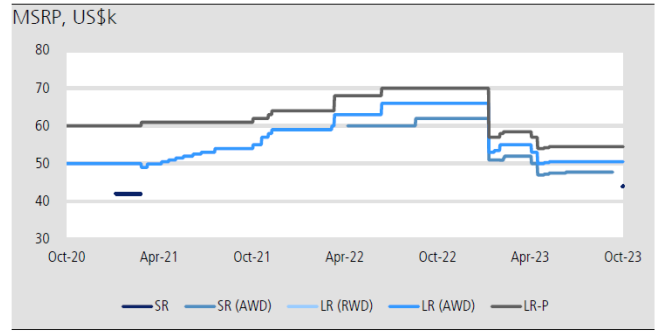
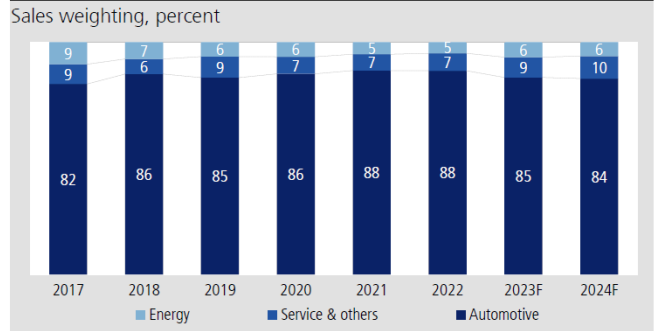


Figure 9: Company profile

Established in 2003, Tesla was a dedicated electric vehicle maker before entering the solar business after acquiring SolarCity (US) in November 2016. As of 2022, Tesla was the second-largest EV vendor worldwide with sales of 1.31mn units, representing a 13% EV market share. Headquartered in Austin, Texas, Tesla opened its first Gigafactory in Fremont, California in 2010, and started its global expansion in 2019. Gigafactory Shanghai commenced deliveries in January 2020, while two more factories, in Berlin and Texas, started deliveries in March and April last year, respectively.

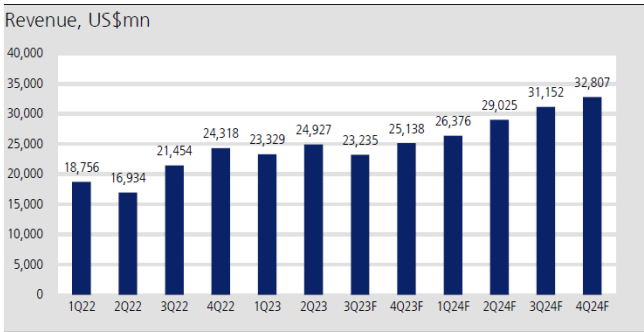
Source: Company data; KGI Research

Figure 10: Sales mix



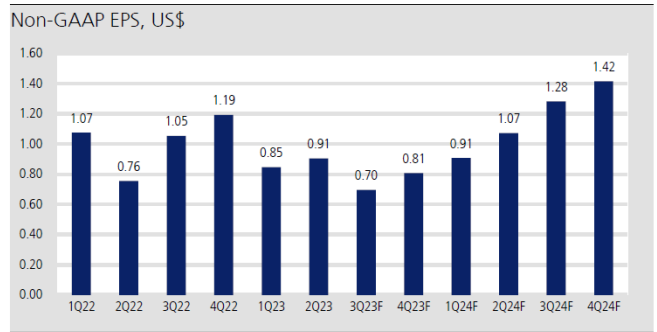
Source: Company data; KGI Research

Figure 11: Revenue



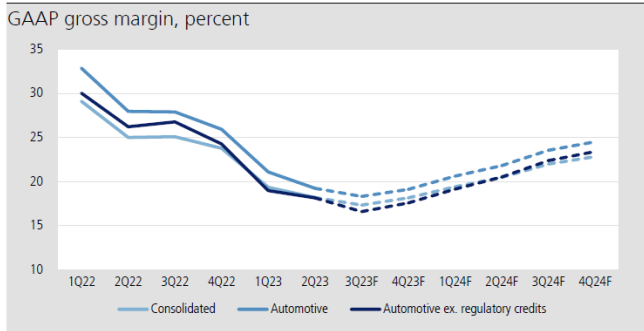
Source: Company data; KGI Research

Figure 12: Non-GAAP EPS



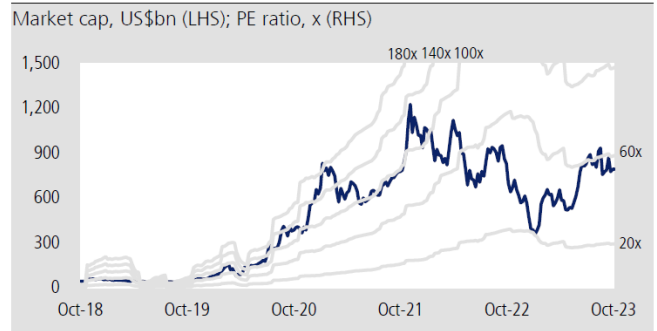
Source: Company data; KGI Research

Figure 13: GAAP gross margin



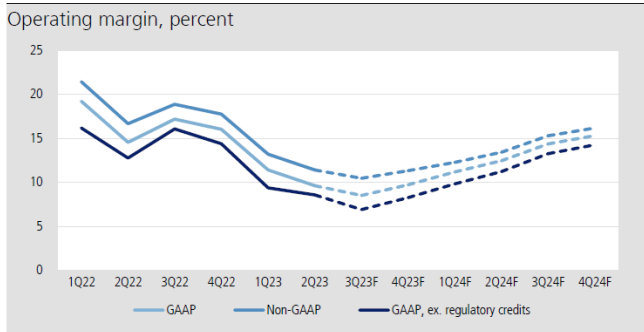
Source: Company data; KGI Research

Figure 14: 12M forward PE band



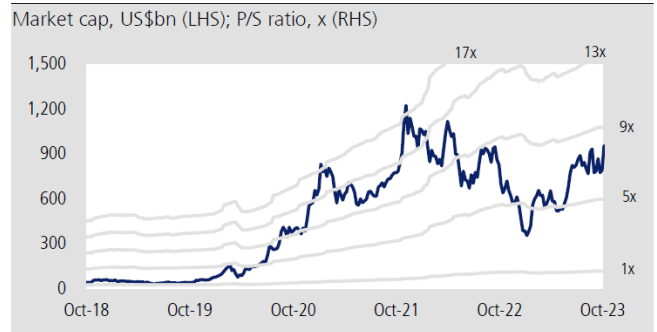
Source: Bloomberg; KGI Research

Figure 15: Operating margin



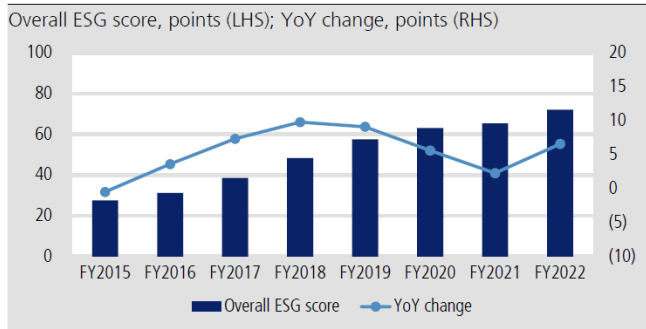
Source: Company data; KGI Research

Figure 16: 12M forward P/S band



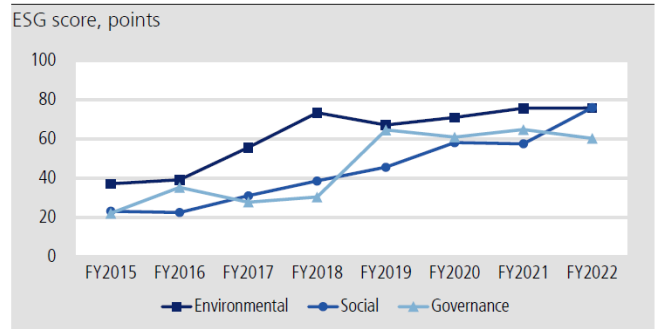
Source: Company data; KGI Research

Figure 17: Overall ESG score



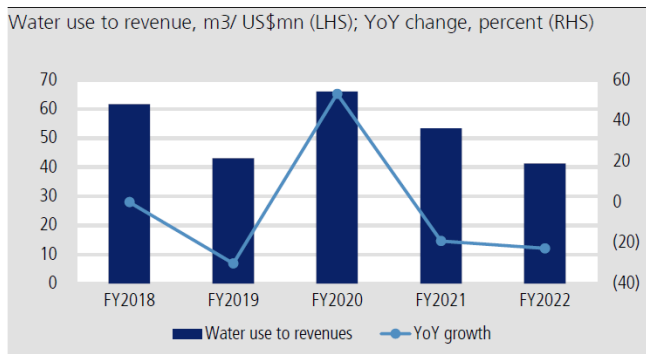
Source: Refinitiv; KGI Research; Company data

Figure 18: ESG score by category



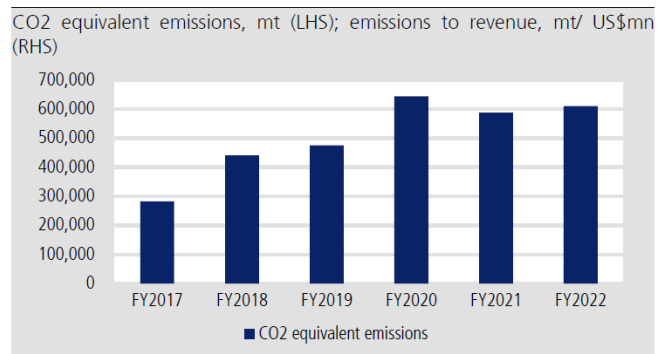
Source: Refinitiv; KGI Research; Company data

Figure 19: Water use to revenue



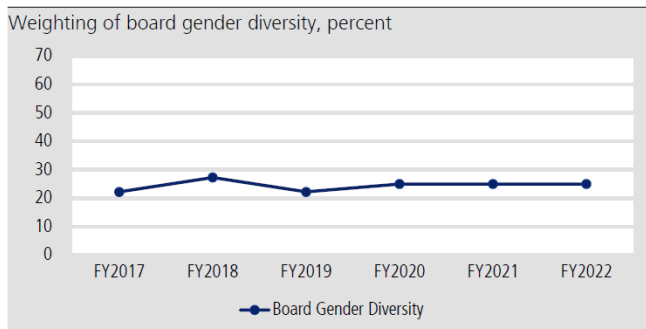
Source: Refinitiv; KGI Research; Company data

Figure 20: CO2 equivalent emissions



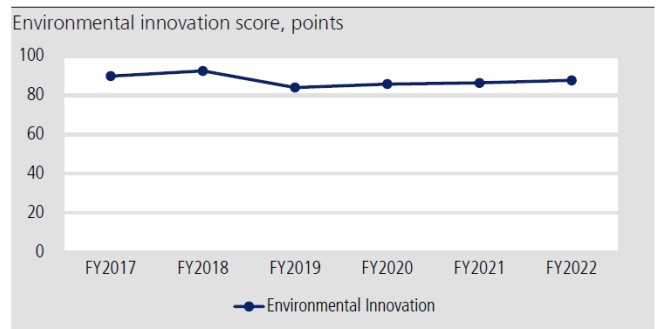
Source: Refinitiv; KGI Research; Company data

Figure 21: Board gender diversity



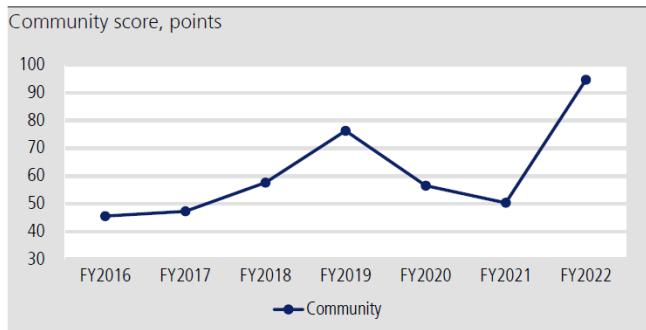
Source: Refinitiv; KGI Research; Company data

Figure 22: Environmental innovation



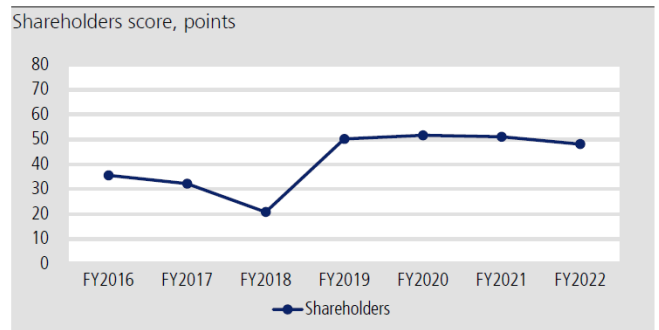
Source: Refinitiv; KGI Research; Company data

Figure 23: Community



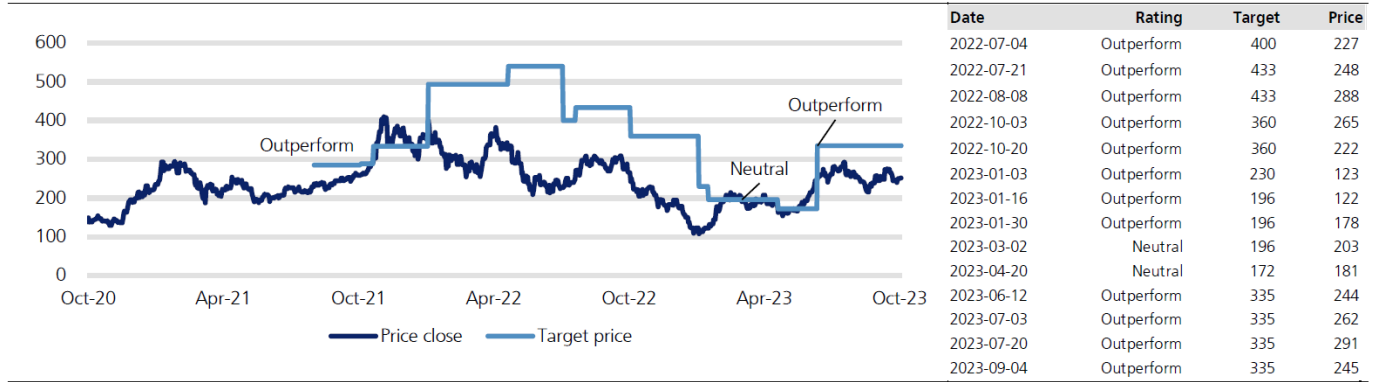
Source: Refinitiv; KGI Research; Company data

Figure 24: Shareholders



Source: Refinitiv; KGI Research; Company data

Item	Definition
Energy use	<p>Total direct and indirect energy consumption in gigajoules.</p> <ul style="list-style-type: none"> - the total amount of energy that has been consumed within the boundaries of the company's operations - total energy use = total direct energy consumption + indirect energy consumption - purchased energy and produced energy are included in total energy use - for utilities, transmission/ grid loss as part of its business activities is considered as total energy consumed and data does not consider electricity produced to answer energy use (utility company produces to sell) - for utilities, raw materials such as coal, gas or nuclear used in the production of energy are not considered under 'total energy use'
Renewable energy purchased	<p>Total primary renewable energy purchased in gigajoules.</p> <ul style="list-style-type: none"> - energy consumed by the company from various sources and among the purchased energy, how much energy is renewable in nature (solar, wind, hydro, biomass, geothermal) are in scope - if there is no evidence that renewable energy is produced by the company, then we consider the reported energy figure as renewable energy purchased
Renewable energy use ratio	Renewable energy to total energy used
CO2 equivalent emissions	<p>Direct CO2 and CO2 equivalent emissions in metric tons.</p> <ul style="list-style-type: none"> - direct emissions from sources that are owned or controlled by the company (scope 1 emissions) - following gases are relevant: carbon dioxide (CO2), methane (CH4), nitrous oxide (N2O), hydrofluorocarbons (HFCs), perfluorinated compound (PFCS), sulfur hexafluoride (SF6), nitrogen trifluoride (NF3)
CO2 equivalent emissions to sales	<p>Direct CO2 and CO2 equivalent emissions (metric tons) to sales (NT\$m)</p> <ul style="list-style-type: none"> - direct emissions from sources that are owned or controlled by the company (scope 1 emissions) - following gases are relevant: carbon dioxide (CO2), methane (CH4), nitrous oxide (N2O), hydrofluorocarbons (HFCs), perfluorinated compound (PFCS), sulfur hexafluoride (SF6), nitrogen trifluoride (NF3)
Waste total	<p>Total amount of waste produced in metric tons.</p> <ul style="list-style-type: none"> - total waste = non-hazardous waste + hazardous waste - only solid waste is taken into consideration, exceptionally if liquid waste is reported in metric tons, then we do the summation to derive total including liquid waste - for sectors like mining, oil & gas, waste generation like tailings, waste rock, coal and fly ash are also considered
Waste recycling ratio	<p>The waste recycling ratio as reported by the company.</p> <ul style="list-style-type: none"> - waste recycling ratio = waste recycled/total waste*100 - waste to energy or waste incinerated with energy recovery are considered as waste recycled - waste recovered via composting is considered as recycled waste
Water withdrawal total	<p>Total water withdrawal in cubic meters.</p> <ul style="list-style-type: none"> - the total volume of water withdrawn from any water source that was either withdrawn directly by the reporting organization or through intermediaries such as water utilities - different sources of water like wells, town/utility/municipal water, river water, and surface water are considered
Environmental expenditures	<p>Total amount of environmental expenditures.</p> <ul style="list-style-type: none"> - all environmental investment & expenditures for environmental protection or to prevent, reduce, control environmental aspects, impacts, and hazards. It also includes disposal, treatment, sanitation, and clean-up expenditures
Turnover of employees	<p>Percentage of employee turnover.</p> <ul style="list-style-type: none"> - includes employees who left the company for any reason (voluntary or involuntary), such as resignations, retirement, natural departure/death, medical incapacitation, redundancy, layoffs, restructuring, dismissal, retrenchment or end of a fixed-term contract - employees turnover rate = (employees leaving/average number of employees)* 100 - where the average number of employees = (employees at the end of the current year + employees at the end of the previous year)/2 - employees at the end of the current fiscal year = employees at the end of the previous fiscal year + new employees - employees leaving
Women managers	<p>Percentage of women managers.</p> <ul style="list-style-type: none"> - percentage of women managers among total managers of the company - if there is a breakdown by category in percentage, such as top, senior, middle, and junior management, then we consider the percentage of middle women managers - percentage of women managers = number of women managers/total number of managers* 100
Women employees	<p>Percentage of women employees.</p> <ul style="list-style-type: none"> - percentage of women employees to the total number of employees of the company - percentage of women employees = number of women/total number of employees* 100
Training hours total	<p>Total training hours performed by all employees.</p> <ul style="list-style-type: none"> - consider only employee training hours - includes all types of training given to general employees (such as health & safety, environmental, emergency response, skills & career development training) - if the value is given in days, multiply by 8, assuming that 1 day = 8 hours worked
Training hours per employee	Training hours per employee per year

Tesla – Recommendation & target price history


Source: Bloomberg; KGI Research

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