



PwC Autofacts[®] Market Update

Automotive industry outlook
March 2025

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1 Executive summary

The PwC Base Scenario forecasts a 1% YoY growth for 2025 amid impactful events

25%

additional tariffs on all imported cars

The initially imposed 25% on non-USMCA-compliant cars has now been extended to include all imported cars. Non-US brands are heavily affected as import shares to the US range between 40 to 80%.

The EU is in talks to relax CO₂ fleet emission targets to relieve already pressured OEMs
The EU is expected to change the regulation, that came into effect in January, to a 3-year average, letting OEMs offset 2025 results by over-performing in 2026 and 2027.

Global passenger car sales in February jumped by 7% to 5.4 million units
This marked the highest February result since 2018 and was kickstarted by China with a 42% YoY jump, while Europe* and USA saw sales declines of 4% and 2% YoY, respectively.

China controls almost the entire value chain of lithium-ion batteries
Not only are most critical anode materials such as silicon (76%) and graphite (67%) sourced in China, but also the production of LFP batteries is dominated by it (98%).

The BEV share jumped by double-digits in all key regions, outgrowing the rest of the market
Europe* saw a 31% YoY jump, USA grew by 8% and China by a staggering 59% YoY in BEV sales despite already having the highest BEV share at 26%.

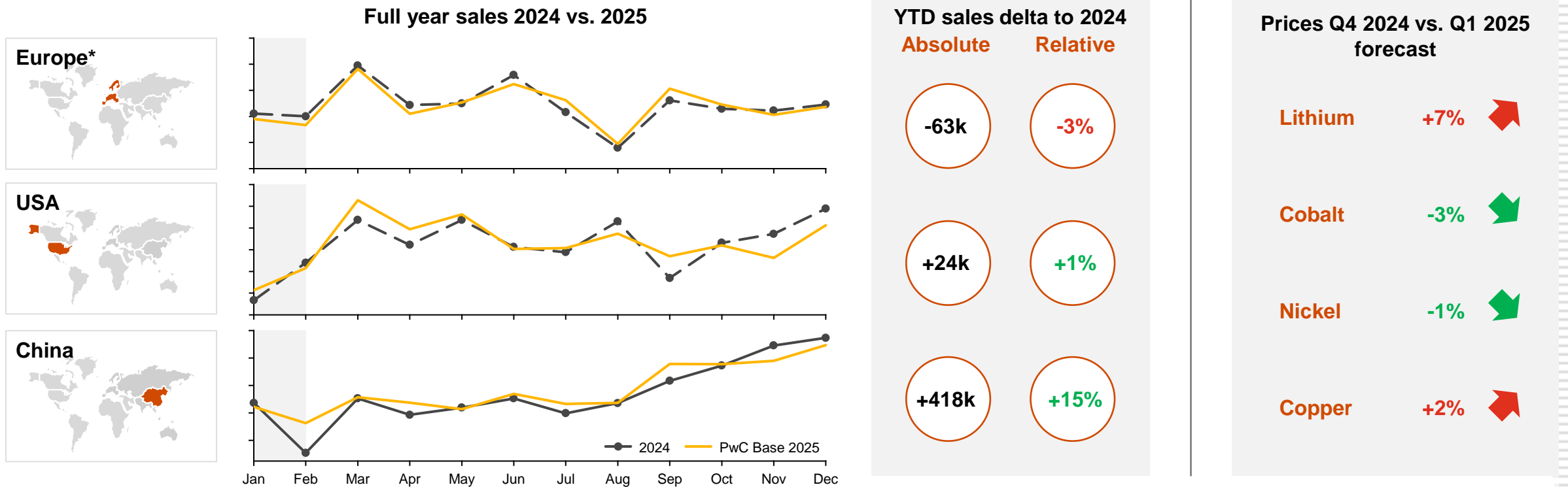
Price discrepancies between ICEs and BEVs vary drastically within Europe*
While prices across segments in Germany and UK vary only lightly for most, the bonus-malus on large and heavy ICEs causes price discrepancies of up to 48% in France and the Netherlands.

2

Industry overview

2 Automotive dashboard

After a slow start, China sales caught up quickly, while Europe* remains behind



- Global passenger car sales reached 5.4 million units in February and up by 7% YoY, marking the strongest February since 2018
- Europe* continues a downward trend with a 4% YoY sales decline to 964,000 units in February, YTD sales are already 63,000 units behind YTD last year
- China sales jumped by 42% YoY in February to mark the strongest February since 2018, due in part to the timing of the Chinese New Year

2 Hot topics

Overview of latest developing stories in the automotive industry



Countries affected by US tariffs look for work-arounds

Ahead of "Liberation Day" on 2nd April, countries are negotiating to avoid US tariffs; the EU, India, and others offer concessions, while global concerns about a trade war grow.



BYD's 1 MW chargers will be available from the beginning of April

BYD's 1 MW fast chargers will be installed nationwide in China starting from the beginning of April with a target of 4,000 units and 500 units available immediately.



Xiaomi increases BEV sales target and aims to attack the global market

Due to rising Q4 sales, Xiaomi has raised its electric vehicle sales target to 350,000 units by the end of 2025 and intends to launch overseas stores within the next five years.



GM extends their co-operation with NVIDIA to boost innovation

The companies will collaborate to develop custom AI systems using NVIDIA's accelerated compute platforms to train AI models for enhancing GM's factory planning and robotics.



Current security situation is leading to a rethink among European automakers

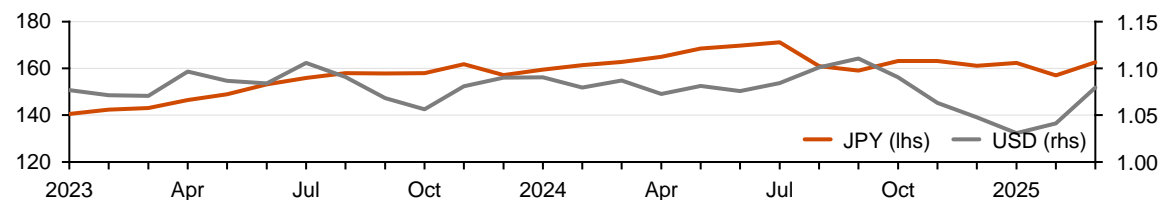
Amid global security tensions and a weakening European automotive market, some OEMs and suppliers are turning to the defense industry to strengthen their positions.

2 Economic indicators

Economic indicators stabilized amid a potential global trade war on the horizon

Exchange rates

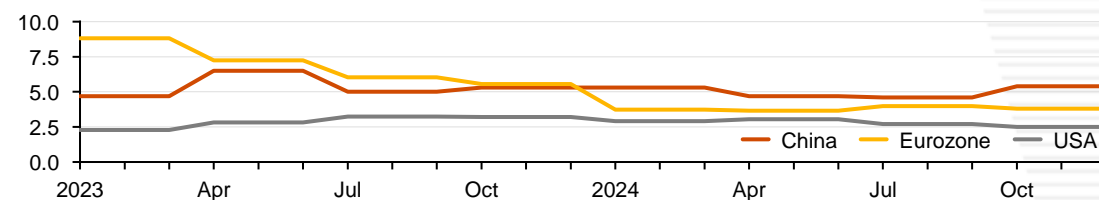
(per EUR)



Both the Japanese Yen and the US dollar weakened against the Euro since February, the trend is especially apparent for the US dollar. Traders of the US dollar are facing uncertainties amid Trump's reciprocal tariffs.

Real GDP change

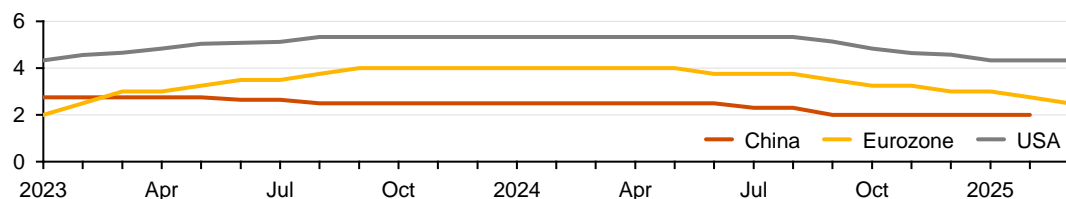
(in % over previous year)



In Q4 2024, YoY growth of real GDP was 5.4% in China, representing a more robust growth compared to the recent quarters. Q4 YoY growths in the U.S. and the Eurozone were comparatively weaker.

Central bank policy rates

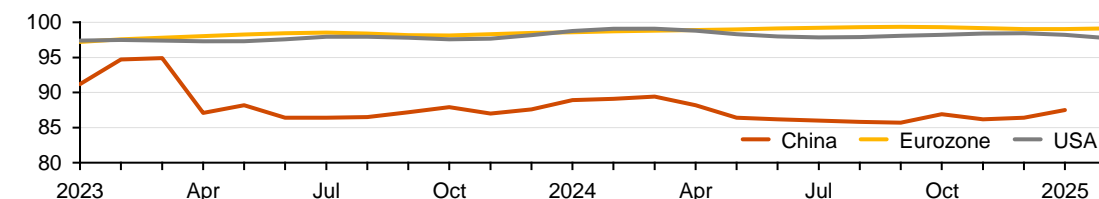
(in %)



Interest rates were further cut by 25bp to 2.5% in the Eurozone amid stabilising economics in the EU. The Fed, on the other hand, did not adjust rates and is expected to keep it unchanged for now.

Consumer confidence indicators

(in % of long-term average)



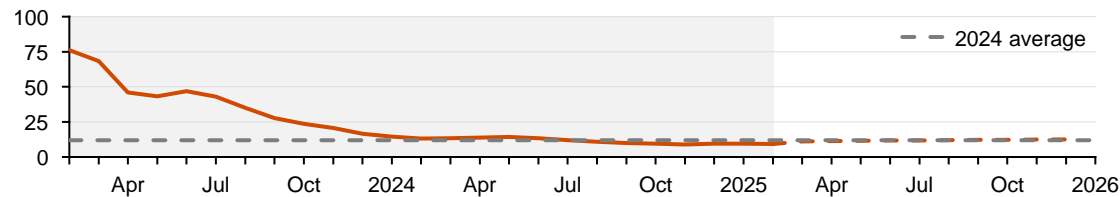
Despite the looming global trade war, consumer confidence has grown for 23 straight months in the Eurozone (up by 0.4% YoY), while it dropped for the second month this year in the US (down by 1% YoY).

2 BEV commodity prices

Prices generally increased in February with bigger jumps expected for Q2 2025

Lithium

(LME, in '000 USD/metric ton)

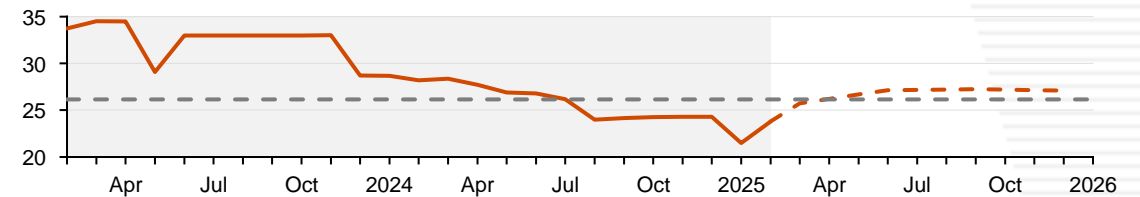


Li

Lithium prices declined by 3% in February over the previous month to \$9,230/ton. The forecast for the running year indicates a horizontal path and slightly below the 2019 average.

Cobalt

(LME, in '000 USD/metric ton)

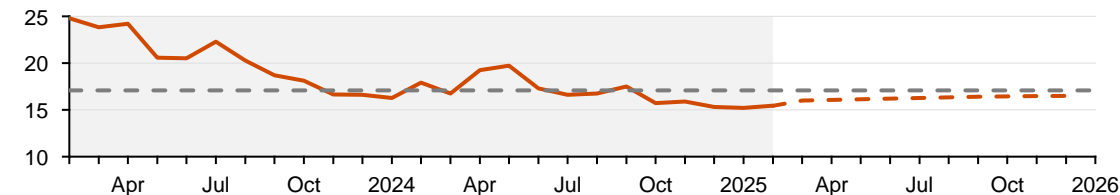


Co

After the major drop in the first month of the year, Cobalt rebounded by +11% in February over January to \$23,800/ton. Major banks expect the upward price development to continue into Q2 2025.

Nickel

(LME, in '000 USD/metric ton)

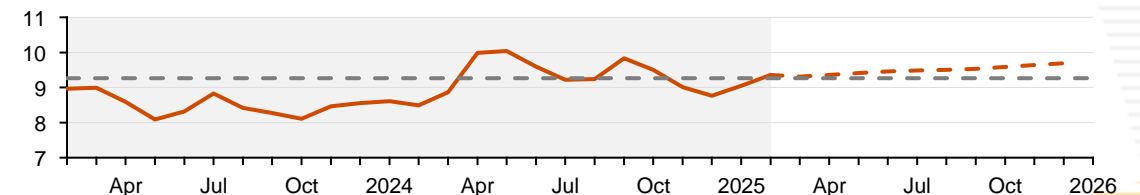


Ni

Nickel prices have somewhat stabilised and only moved marginally by -1% in January and +2% in February over the previous month. For the running year, prices are expected to slowly creep up towards the 2024 average.

Copper

(LME, in '000 USD/metric ton)



Cu

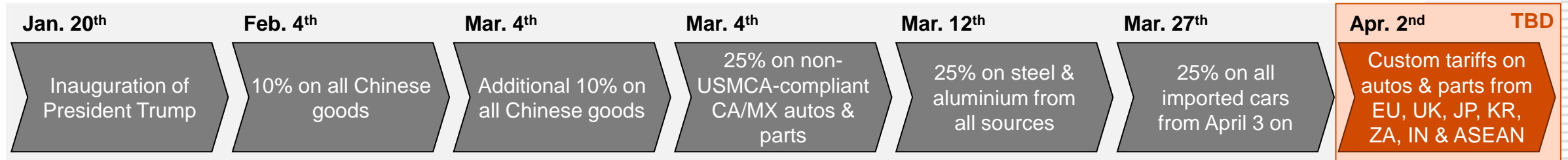
Copper started 2025 with a 3% price jump in January and continued the trajectory with another +3% in February over January to \$9,385/ton. This development is forecasted to continue with a +4% jump in Q2 over Q1 2025.

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Analyst insights

3 Trump tariffs on auto OEMs

Tariffs impact domestic and foreign brands and may force a production shift



Top importing strategic groups* to the US in 2024

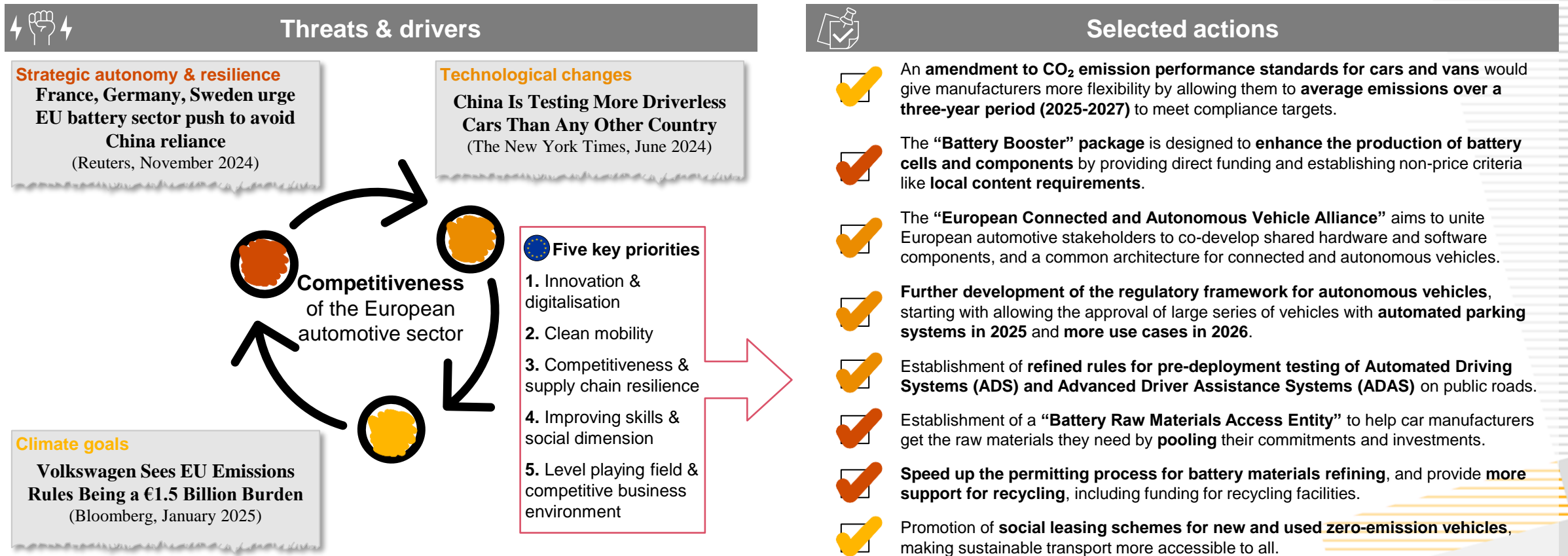
	Strategic group	Total imports	Import share	Canada share	Mexico share	China share	Europe share	Other share
1.	Toyota	1,162,000	50%	34%	17%	0%	0%	49%
2.	Hyundai-Kia	1,127,000	66%	0%	12%	0%	1%	87%
3.	General Motors	1,126,000	42%	6%	53%	4%	0%	37%
4.	Honda	563,000	40%	66%	33%	0%	0%	1%
5.	Stellantis	536,000	41%	35%	57%	0%	9%	0%
6.	RNM**	527,000	51%	0%	54%	0%	0%	46%
7.	VW Group	526,000	80%	0%	55%	0%	45%	0%
8.	Ford	419,000	20%	18%	73%	6%	2%	0%
9.	Mazda	343,000	81%	0%	32%	0%	0%	68%
10.	Subaru	302,000	45%	0%	0%	0%	0%	100%
11.	Mercedes-Benz	218,000	58%	0%	7%	0%	82%	11%
12.	BMW	207,000	52%	0%	19%	0%	81%	0%
	Total	7,057,000	52%	16%	35%	1%	9%	39%

Summary

- **Additional 20% tariffs on Chinese goods** to the existing 25% on ICEs and 100% on BEVs
- The **25% on non-USMCA-compliant auto products** will be expanded to all imported cars on April 2
- **Tesla** is the **only major manufacturer** that produces all US sold vehicles domestically
- **Price hikes of up to \$10,000** are expected due to import tariffs
- **Further country-specific tariffs are highly possible** to force a renegotiation with each country

3 EU action plan

On March 5, the European Commission proposed its action plan to boost the competitiveness of EU's automotive sector



3 Battery supply chain overview

Study by Fraunhofer FFB and the University of Münster finds that China controls nearly the entire value chain of lithium-ion batteries

Key raw materials for lithium-ion batteries (LIBs)

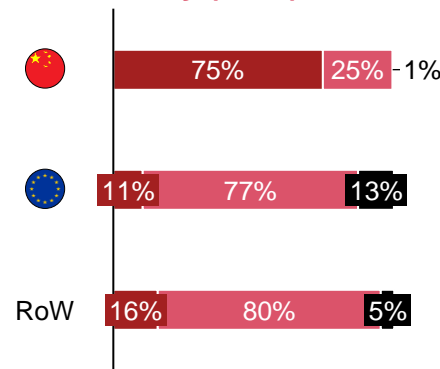
Anode materials

Graphite Main global producers	
China	67%
Brazil	8%
Mozambique	
India	5%
North Korea	

Cathode materials

LFP	
Iron	Fe
Phosphate	PO ₄ ³⁻
Lithium	Li

EV sales by battery chemistry (2024)

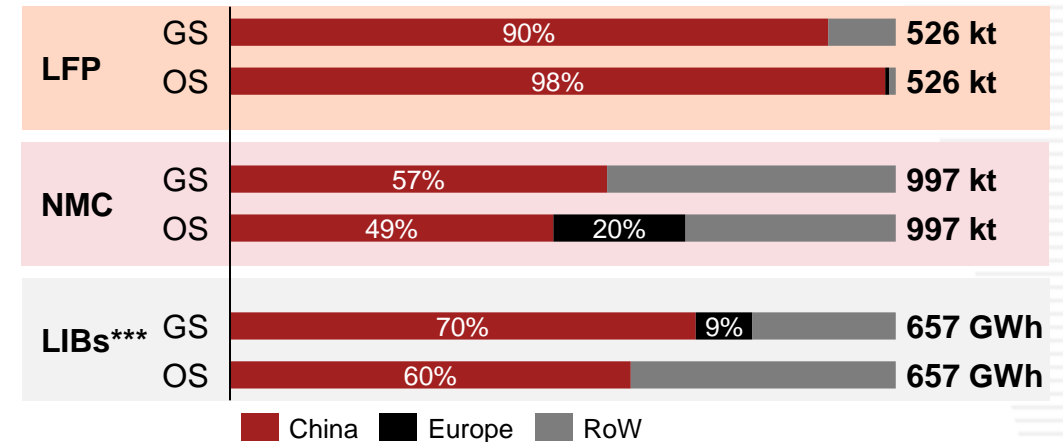


Silicon Main global producers	
China	76%
Brazil	7%
Norway	6%

NMC	
Nickel	Ni
Manganese	Mn
Cobalt	Co
Lithium	Li



NMC is most prevalent in the U.S. and Europe, while LFP is the main chemistry utilized in China. LFP cells are approximately 30% cheaper compared to NMC cells. Regardless of which cathode material is selected, **lithium plays an essential role in the production of lithium-ion batteries.**



GS = Geographical production share

OS = Company ownership share

Key insights

- The production of **LFP batteries is almost entirely dominated by China**, with a share of **98%** considering ownership distribution. Major companies include Hunan Yuneng and Shenzhen Dynanonic.
- The **NMC ownership share is lower in China compared to its geographical production share**, due to foreign companies owning factories or shares in companies and joint ventures in China.

3 2025 Two Sessions in China

Automotive industry representatives propose key topics including energy diversification, autonomous driving and strengthening policy support

Deputies to the National People's Congress (NPC) and their proposals

(Non-exhaustive)



Huarong Zhu, Chairman of Chongqing Changan Automobile
Levying vehicle purchase tax by tier and category: The proposal is to levy the vehicle purchase tax on fuel-powered passenger vehicles based on engine displacement. It is also proposed to implement a tiered vehicle purchase tax on NEVs* after December 31, 2027.



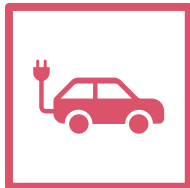
Xingya Feng, Chairman of GAC Group
Facilitating the swift return of defective auto parts sold overseas: The proposal is to gradually ease import restrictions. In the short term, a pilot program can be established, while in the long term, regulations and standards can be revised, and processes optimized to resolve the issue of returning defective parts.



Xiaopeng He, Chairman of Xpeng
Promoting low-speed autonomous driving in parking lots to enable driverless parking and retrieval: The proposal is to allow the evaluation and pilot operation of low-speed autonomous parking and retrieval in parking lots, provided that vehicle hardware and software are capable and cloud-based supervision is secure.



Jun Lei, Chairman of Xiaomi
Proposal on accelerating the mass production of autonomous driving:** The proposal is to promote large-scale testing and validation of autonomous vehicles to expedite their mass production and commercial deployment. It advocates for the rapid introduction of relevant laws and regulations to clarify the legal status of autonomous vehicles on the road.



Zuoping Yao, Vice President of SAIC-GM-Wuling
Supporting the development of micro and small NEVs*: Optimize purchase tax reduction policies to encourage continuous technological innovation in micro and small NEVs; improve the ecosystem for rural NEV usage; enhance policies on insurance and vehicle trade-in programs for NEVs.



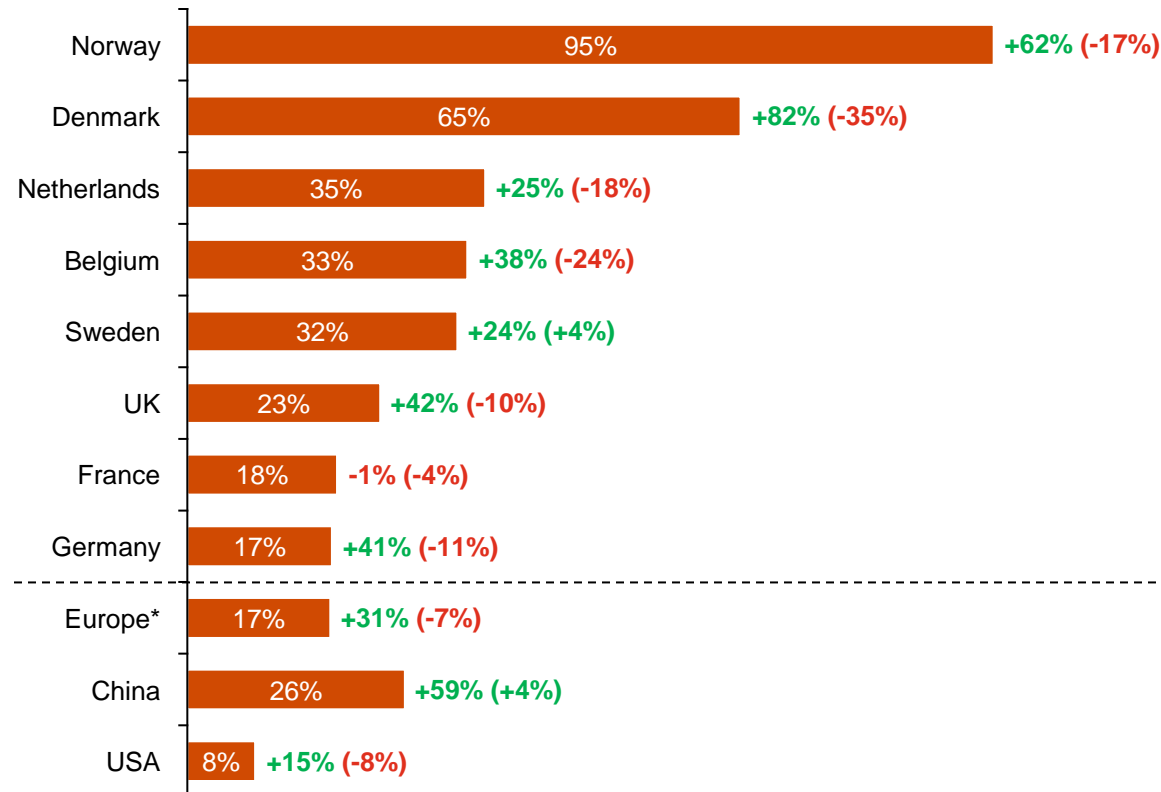
Bo Ding, General Manager of SAIC Motor's Zhengzhou base
Improving charging infrastructure in third- and fourth-tier cities to support the healthy development of the NEV* industry, through three key aspects:** policy and support, power grid upgrades, and business and operational models.

3 Leading countries in EV penetration

BEV growths outpace rest of the market while PHEV growths vary

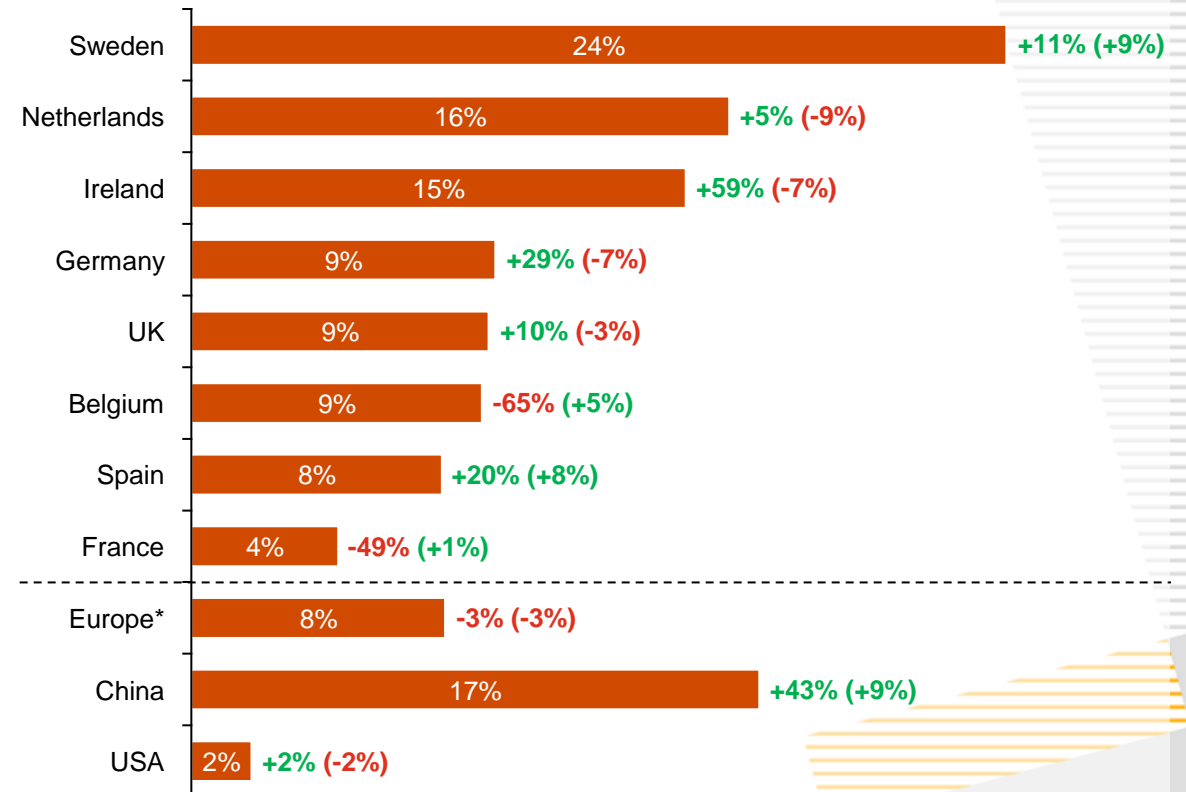
BEV market share of leading European* countries**

(February 2025 YTD, YoY change BEV (rest of market))



PHEV market share of leading European* countries**

(February 2025 YTD, YoY change PHEV (rest of market))

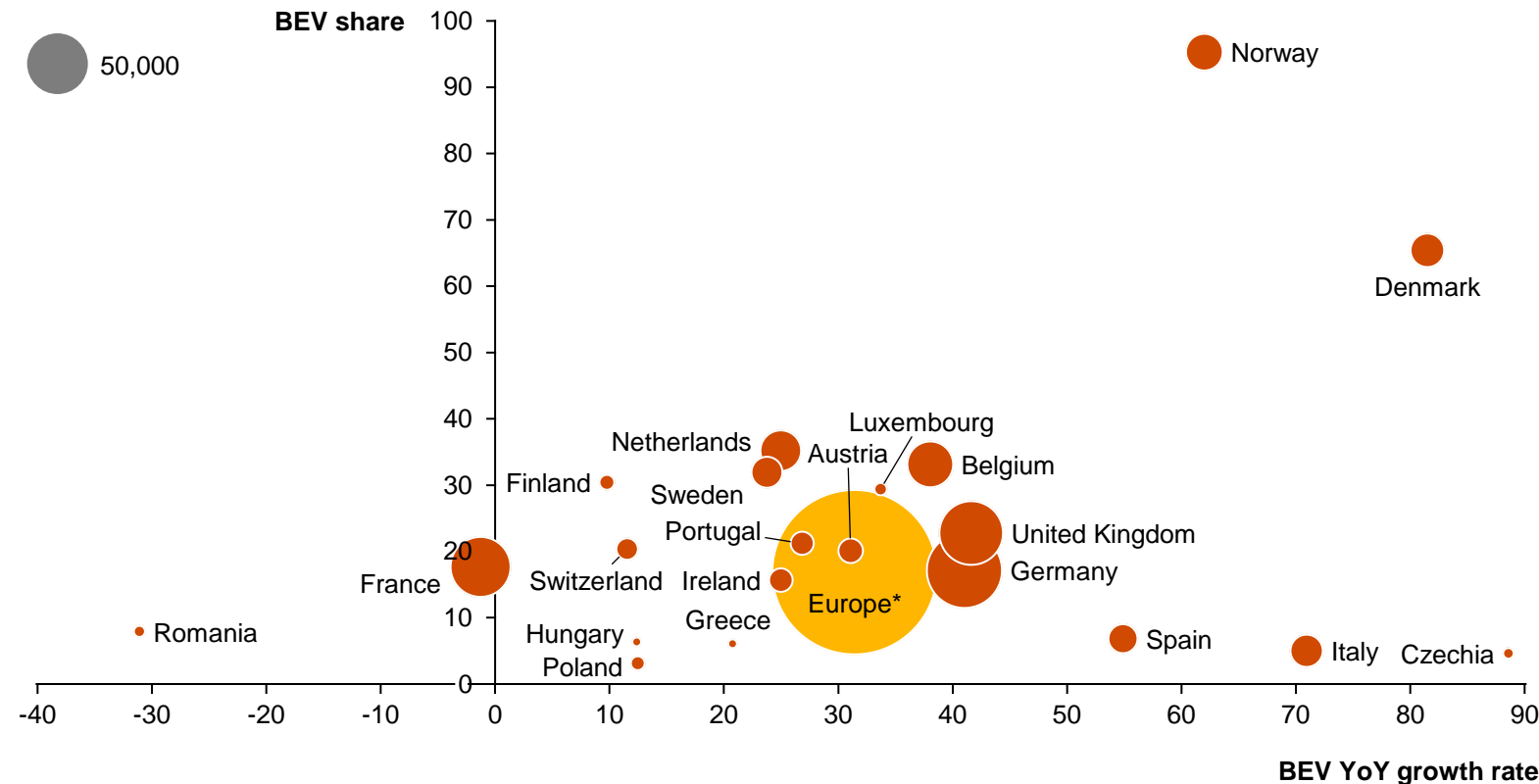


3 European* BEV penetration

The share of BEVs is up by 31%, whereas the total market is down by 3% YoY

Europe* BEV sales development**

(in %, February 2025 YTD)

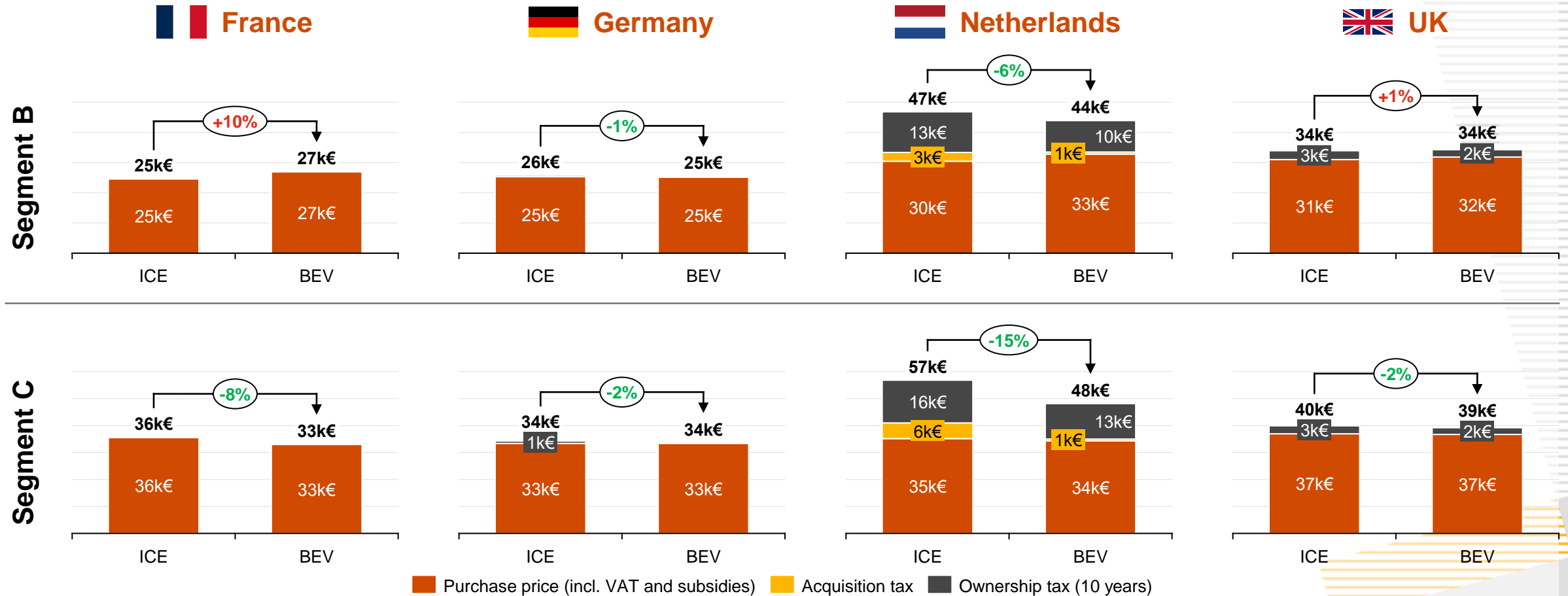


Key insights

- In **20 out of the 21 viewed European* countries**, BEVs grew stronger YoY than the overall market
- **Norway, Denmark and the Netherlands led the BEV share ranking** once again with 95%, 65% and 35%, respectively
- The **biggest markets by volume** were **Germany, UK and France** with 70,000, 51,000 and 45,000 units, respectively
- Despite an already very high market share, **Denmark also had the second highest YoY growth** at 81%, only topped by Czechia with 89%
- **ICE sales in contrast declined by 23%** in Europe*, reaching a 38% market share

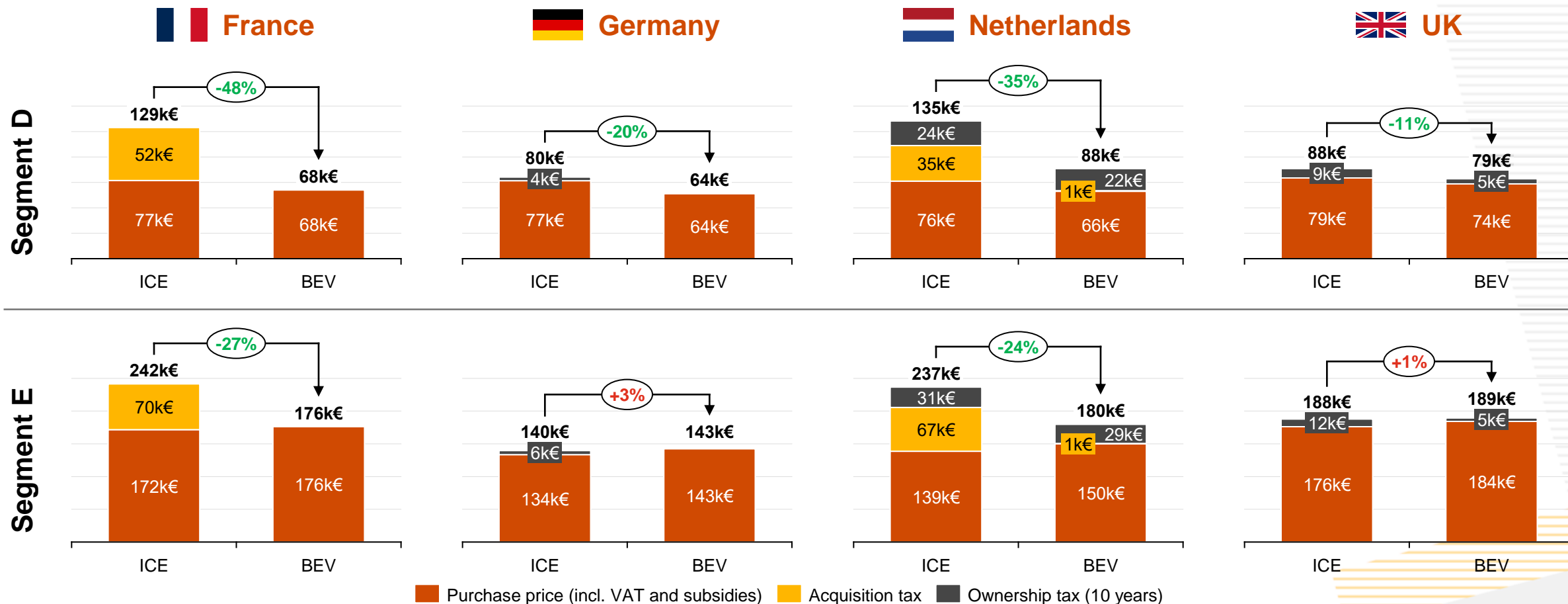
3 PT* price comparison mid segments

BEVs from mid-tier segments have similar prices contrasted to comparable ICEs



3 PT* price comparison large segments

Premium ICEs are heavily penalised with CO₂ taxes in France and Netherlands

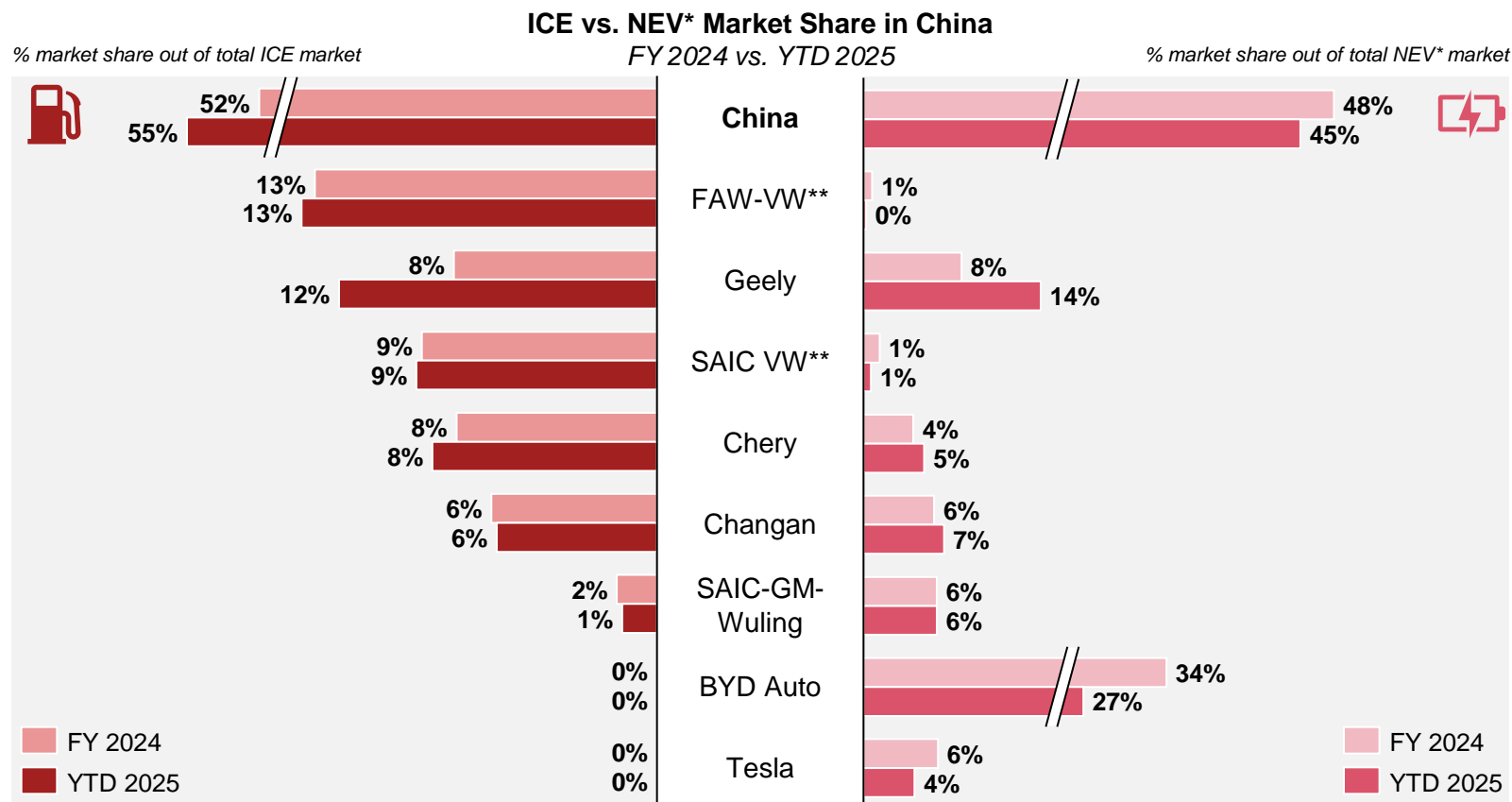


3 ICE vs. NEV* market share China

While February performance was good, 2025 YTD NEV share remains laggard



Key insights



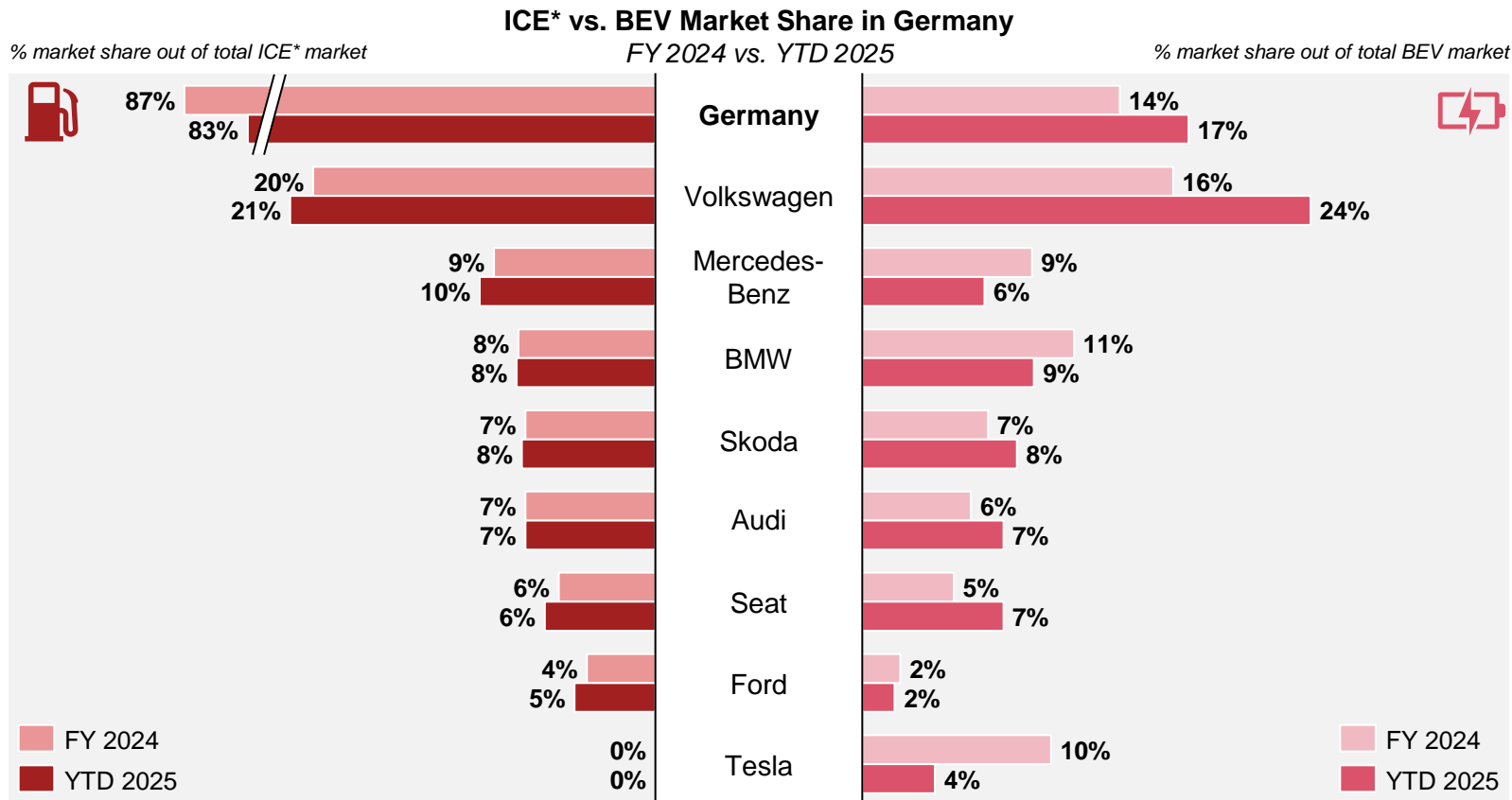
- Performance of the Chinese passenger car market was **exceptionally good in February**, up by **26%**, while **YTD sales increased by 1%** over the first two months
- **NEV sales** during YTD February increased by **35%** over YTD February 2024
- Market share of the NEV sector remains behind ICEs during January and February, while China's top NEV maker **BYD falls behind Geely in terms of overall performance**
- Following **China's 2025 Two Sessions**, the overall approach of the automotive industry this year is defined by "**rectifying intense competition and promoting automobile consumption**" – carmakers have already been **actively stabilizing prices** over the past two months

3 ICE* vs. BEV market share Germany

The rising BEV market share is driven by the VW Group's growing BEV business



Key insights



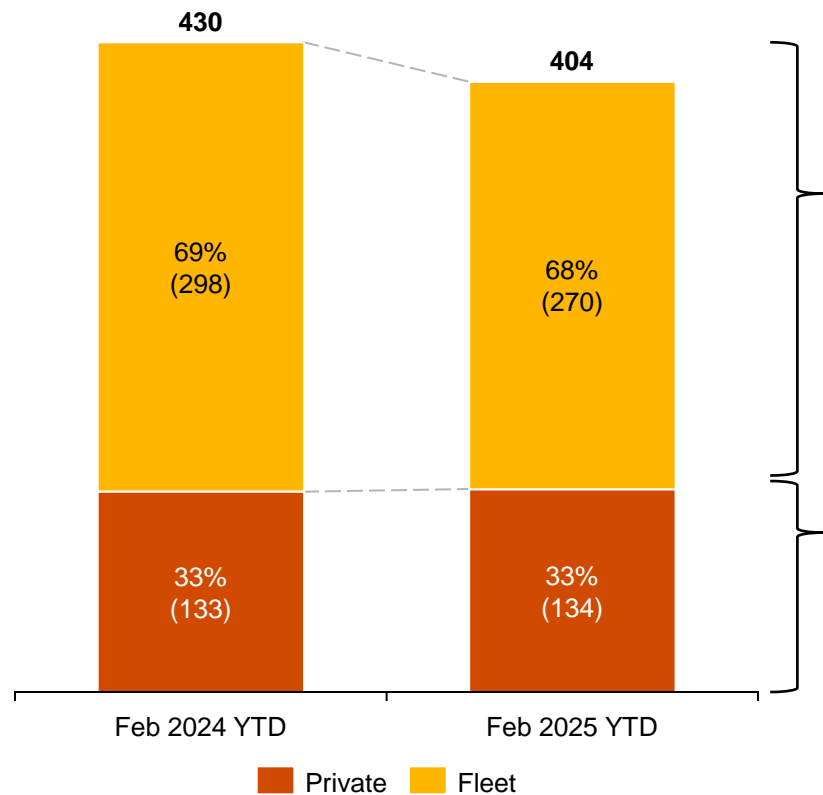
- The German market share of ICEs* fell to 83%, while the BEV market share increased to 17%
- Nevertheless, the ICE share of the top 7 OEMs grew or remained at the same level
- Regarding the BEV share, there were different trends depending on the OEM
- Except for the Volkswagen brands, including Volkswagen, Skoda, and Seat, no OEM increased their market share within the BEV market
- The BEV share of Mercedes-Benz, BMW, and Tesla are currently below 2024 levels

3 German private and fleet sales

Total fleet sales declined at the cost of ICE sales, BEVs grow overall market share

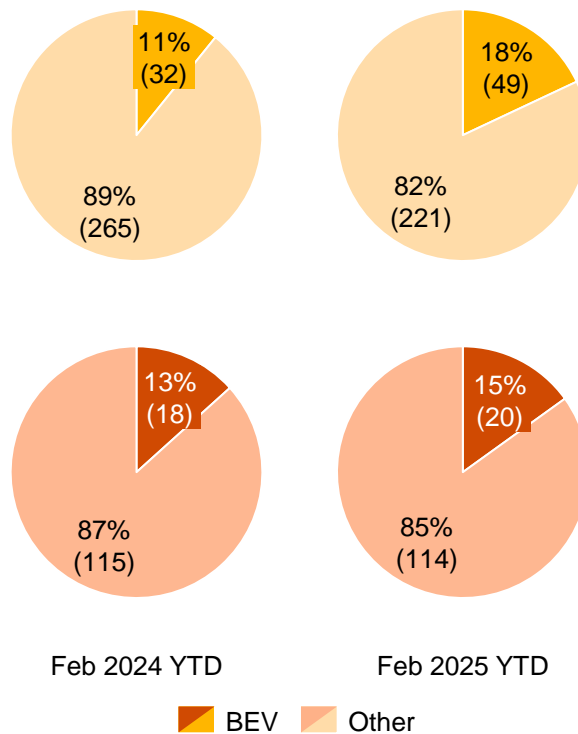
Total passenger car sales

(volume in thousand)



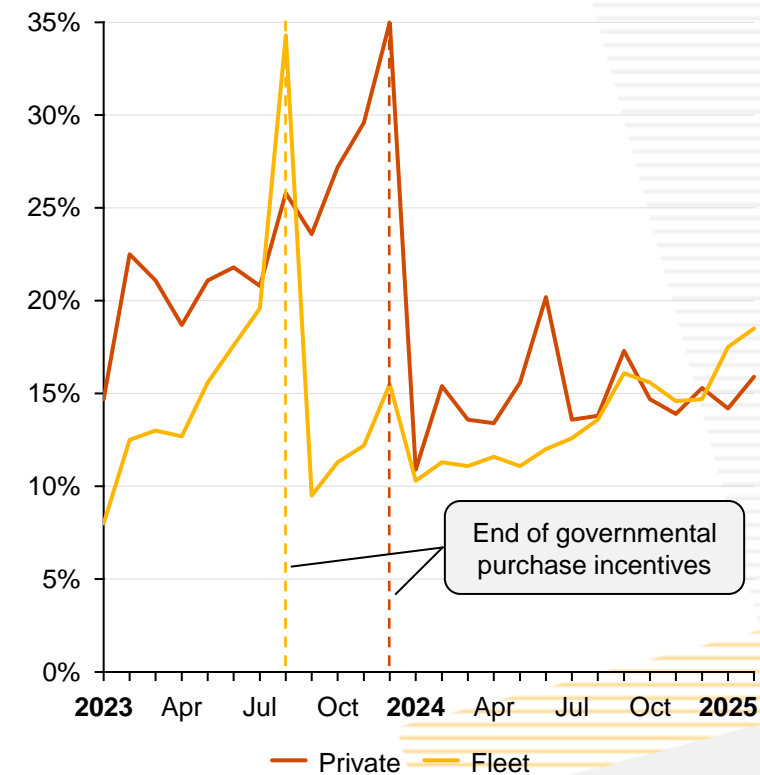
BEV share in private and fleet

(volume in thousand)



BEV share in private and fleet sales

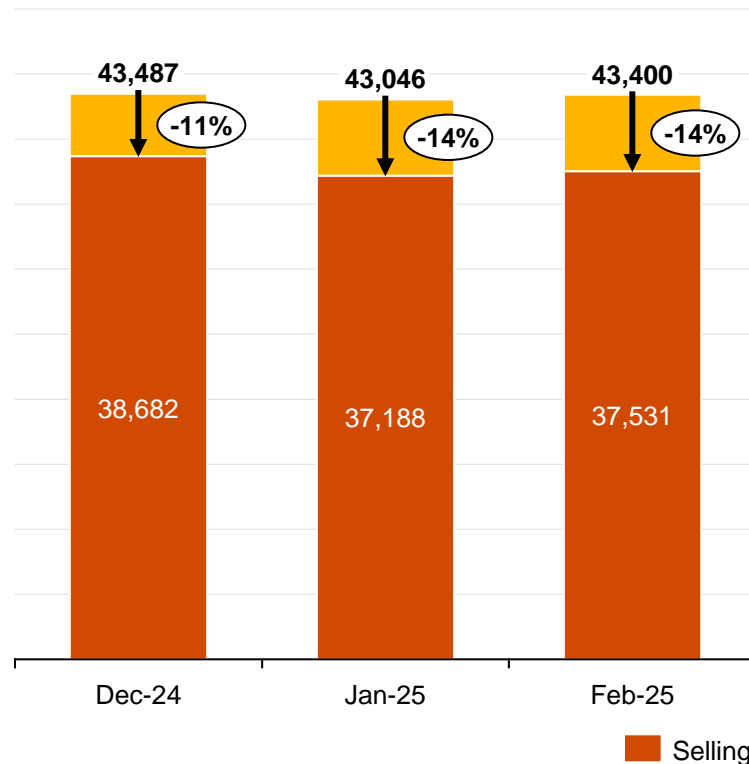
(in %)



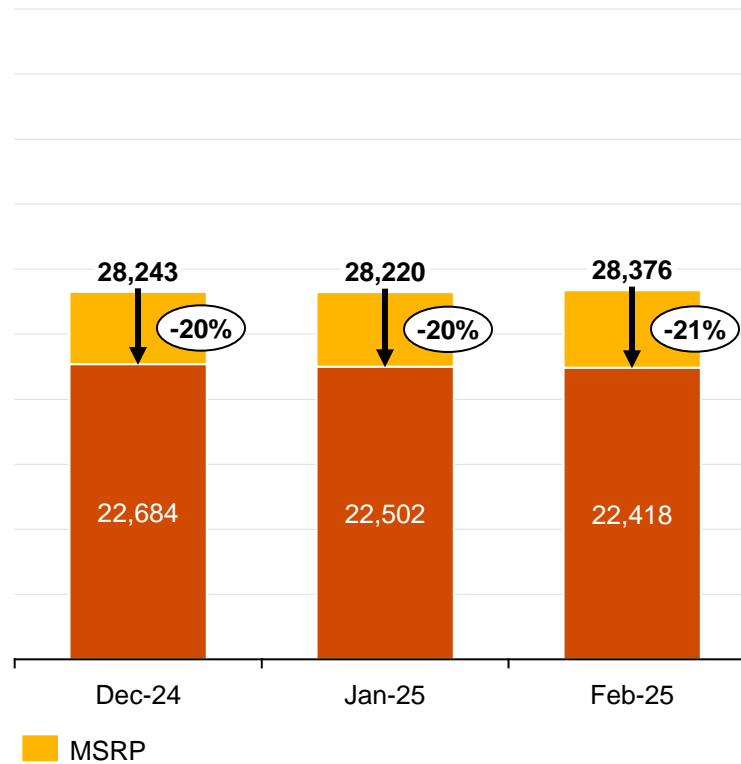
3 Dealership discounts in Germany

ICEs continue to see greater discounts over BEVs despite lower selling prices

Average BEV prices*
(in €)



Average ICE prices*
(in €)



Key insights

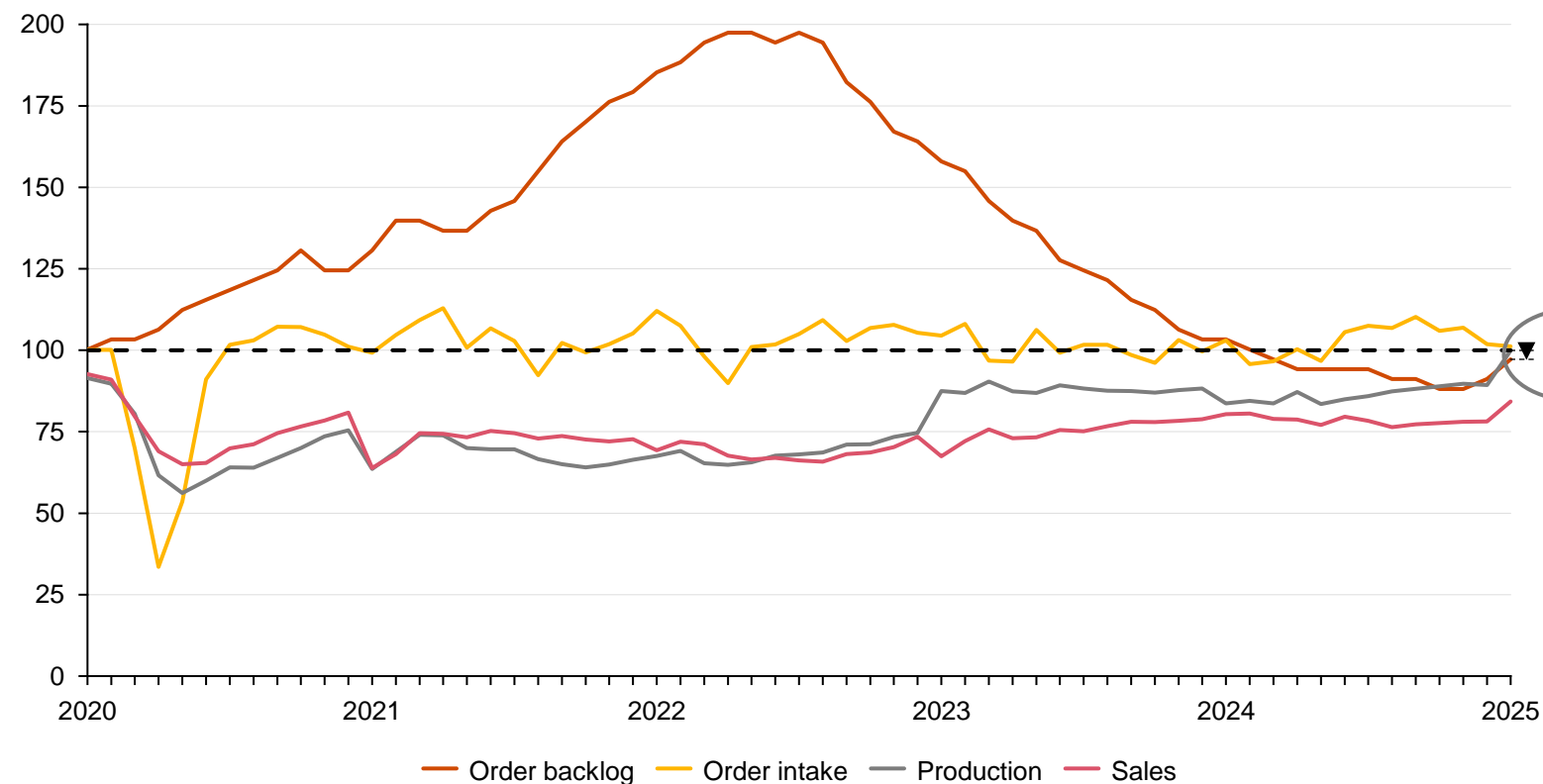
- Two months into the **first year of new CO₂ fleet emission targets**, prices of both BEVs or ICEs only **changed marginally**
- The average **MSRP** of the top 10 best selling **BEVs** was **€43,400**, **53% higher** than that of ICEs
- Taking into account, that the **dealership discount for ICEs** was **overall higher** at 21%, the **price gap between the best-selling BEVs and ICEs** expand to 67%
- With **relaxed CO₂ fleet emission targets for the EU** in the talks, OEMs are **less pressured to force BEVs into the market**

3 Order backlog in Germany

Order backlog reaches highest value since early 2024, while prod. and sales gain

German passenger car demand and supply

(in %, indexed to 2019 average, through December 2024)



Key insights

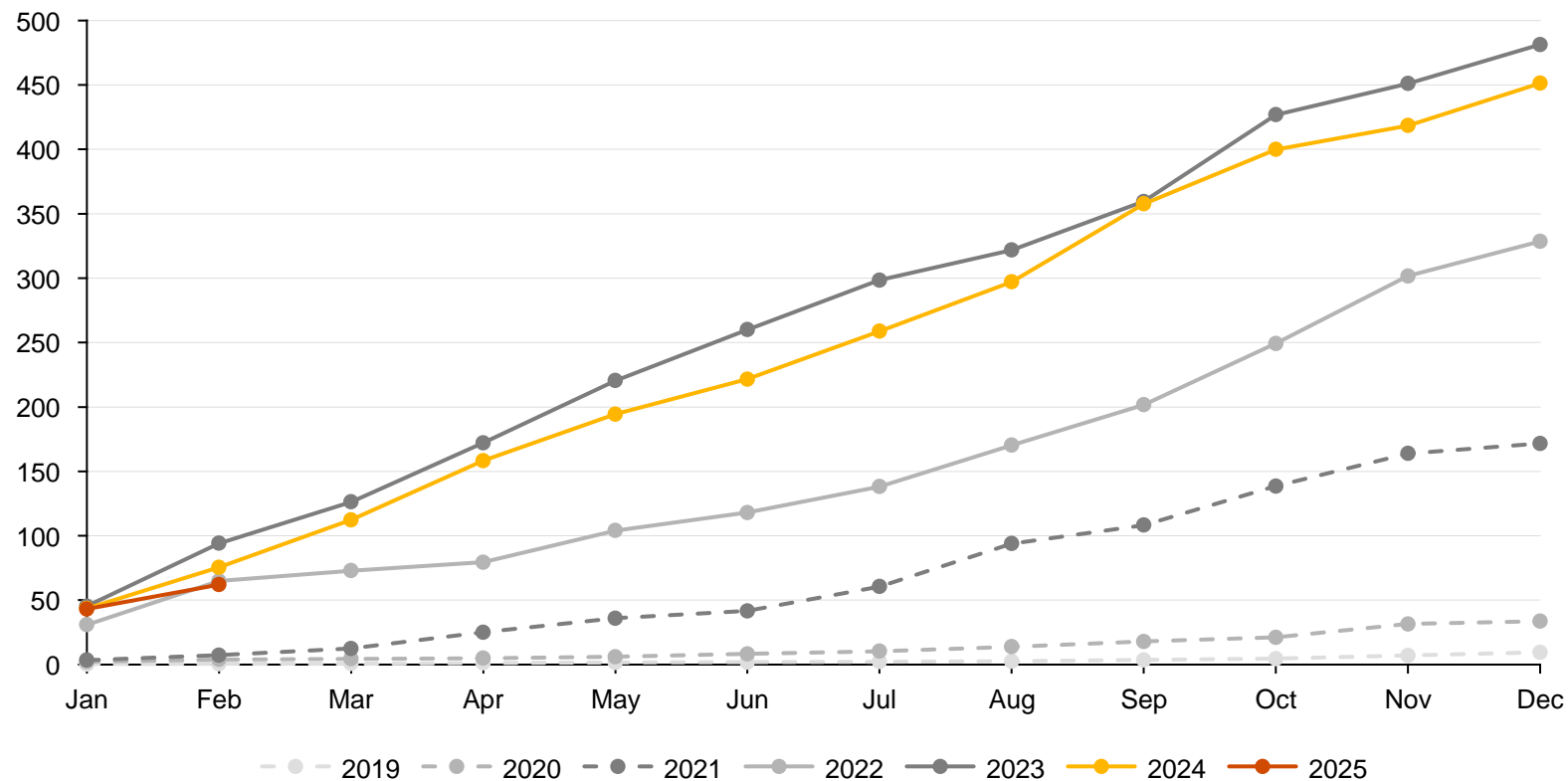
- The **order backlog** jumped by **6%** in January over December 2024 and reached the **highest volume since dropping below the 2019 average** in early 2024
- The **order intake in contrast further dropped** and is now only 1% above the 2019 average
- Both **domestic production and sales saw a 11%pt and 6%pt incline** over December, respectively
- Especially **sales markedly closed the gap to the 2019 level** and is now only marginally off

3 EU BEV imports from China

BEV import volumes fell by 18% YoY to 62,000 units during YTD February 2025

Imported BEVs from China to the EU

(in thousands, accumulated)

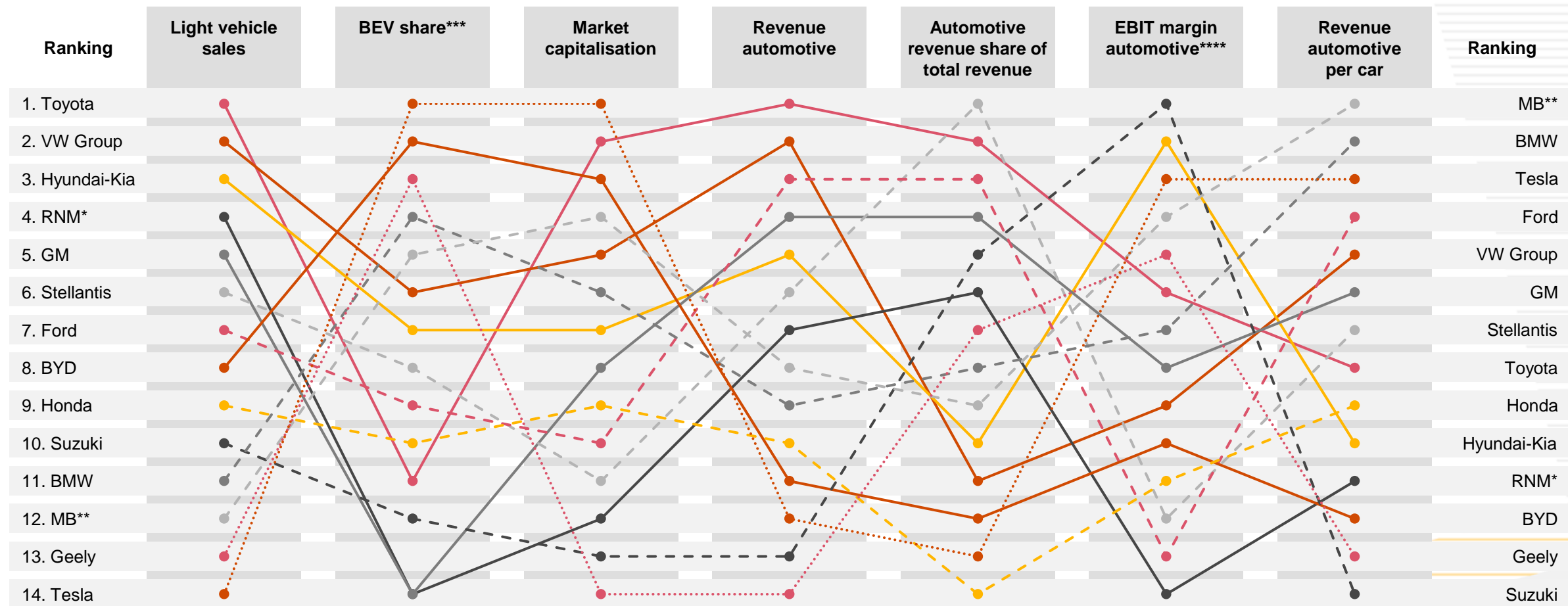


Key insights

- **BEV imports from China to the EU declined by 18% YoY** – from over 75,000 units during January-February in 2024 to **just 62,000 units** during the same period in 2025
- The negative trend can be attributed to **EU's countervailing duties on imports of electric cars made in China**, which have been in force since October 2024
- **Chinese OEMs** such as Chery, Xpeng and BYD are actively seeking a new path in Europe by **launching overseas cooperations, contract manufacturing or planning to build factories in Europe**


3 OEM report card 2024

Financial reports reveal high sales volumes do not equal high margins








3 OEM report card 2024

Financial reports reveal high sales volumes do not equal high margins

	Global light vehicle sales	BEV share of global sales*	Market capitalisation (in billion USD)	Automotive revenue (in billion USD)	Automotive share of total revenue	Automotive EBIT margin**	Revenue per car (in USD)
Toyota	10,821,000	1.3%	244.6	288.2	90.7%	8.3%	26,628
VW Group	9,027,000	8.3%	60.4	287.2	81.9%	6.0%	31,810
Hyundai-Kia	7,130,000	5.9%	56.3	168.5	86.4%	9.7%	23,630
RNM*	6,467,000	N/A	29.5	150.5	91.0%	1.9%	23,267
Stellantis	5,700,000	5.5%	35.6	161.5	95.3%	2.4%	28,335
GM	6,001,000	N/A	48.0	171.6	91.6%	6.2%	28,596
BYD	4,270,000	41.3%	137.9	86.4	79.5%	5.9%	20,243
Ford	4,470,000	3.6%	38.4	172.7	93.4%	2.3%	38,637
Honda	4,061,000	1.6%	43.3	97.6	71.3%	3.5%	24,038
Suzuki	3,248,000	N/A	23.4	36.0	91.2%	9.9%	11,090
Geely	2,177,000	26.5%	22.7	29.9	89.0%	8.6%	13,742
BMW	2,451,000	17.4%	57.9	134.9	87.7%	6.3%	55,046
Mercedes-Benz	2,389,000	8.6%	63.1	137.3	87.3%	3.0%	57,449
Tesla	1,773,000	100.0%	741.7	72.5	74.2%	9.4%	40,870





3 Incentive programs in Europe*

As part of the support for the automotive transformation, subsidies are concentrated on BEV promotions, while PHEV subsidies continue to be phased out

Country	Tax Benefits	Purchase Incentives
 Germany	Ownership: 10-year exemption for BEVs and FCEVs registered until the end of 2025, exemption granted until the end of 2030; Company cars: Reduction of taxable amount for BEVs and PHEVs from 1% to 0.5%, additional reduction to 0.25% for BEVs up to €70,000 (€95,000 from 2025); From 2025: 40% cost write-off, applying to company BEV purchases from July 2024 to December 2028	2025: Newly elected government plans to relaunch a subsidy
 Spain	Acquisition: Exemption from “special tax” for cars ≤120g CO ₂ /km; Canary Islands: VAT exemption partially; Ownership: Road tax reduction of 75% for BEVs in Spanish main cities (e.g., Barcelona); Company cars: 30% for BEVs/PHEVs ≤ €40,000	MOVES III is further extended until 30 June 2025: Subsidy program of €1,550m : Up to €7,000 for passenger BEVs/FCEVs/PHEVs, depending on electric range and whether a vehicle is being scrapped
 France	Acquisition: Exemption from the mass-based malus for BEVs, FCEVs and PHEVs (range of >50km); Company cars: Exemption for CO ₂ -based tax components (“TVS”) for vehicles emitting less than 60g CO ₂ /km	2025: EV purchase subsidy reductions from €4,000-€7,000 to €2,000-€4,000 and a further budget reduction from €1.5B to €1B. The eco-bonus will be income-dependent and tied to CO ₂ emissions from vehicle and battery production. Purchase price of vehicle must not exceed 47.000€ and a weight of 2.4 tons.
 UK	Company cars: Reduced tax rates for BEVs and ultra-low emission cars (<75g CO ₂ /km), 2% until 2025 and progressively increasing afterwards until April 2028 For 2025: EVs registered after 1 April 2025 need to pay £10 VED for the first year. From the second tax payment onwards the standard rate of £195 is applied. On April 1, the expensive car tax supplement for BEVs costing more than £40,000, will come into force.	PiCG (Plug-In Car Grant) ended in March 2023; funding shifted to support improving EV charging infrastructure and funding electric taxis, vans, trucks, motorcycles and wheelchair accessible vehicles
 Italy	Ownership: Five-year exemption for EVs from the date of first registration, 75% reduction afterwards	

3 Incentive programs in RoW*

As part of the support for the automotive transformation, subsidies are concentrated on BEV promotions, while PHEV subsidies continue to be phased out

Country	Tax Benefits	Purchase Incentives
 USA	<p>Acquisition: Federal tax credit up to \$7,500 for BEVs and PHEVs until end of 2032. This is subject to change in the coming months with new presidential administration.</p> <p>Inflation Reduction Act: Effective since August 2022, final assembly of the vehicle must be in North America to qualify for tax credit. As of 1 January 2024, 60% of battery components (100% in 2029) and 50% of the value of minerals need to be sourced from the US or a free trade partner to qualify for full credit</p>	<p>States subsidize electric cars differently (in addition to federal tax credit)</p>
 China	<p>Acquisition: Purchase tax exemption for applicable BEVs, PHEVs and FCEVs of up to ¥30,000 (~€3,800) per vehicle between 2024 and 2025. The exemption will be halved for purchases made in 2026 and 2027</p>	<p>January 2025: National trade-in subsidies, previously set to expire by end of 2024, extended for 2025. Broader scope for 2025: ¥20,000 (~€2,600) if ICE or NEV (ICEs registered before July 2012 and NEVs registered before 2019) is traded in for a new NEV, ¥15,000 (~€1,900) if old vehicle is scrapped for a modern ICE with max. 2L displacement</p>
 Japan	<p>Acquisition: Purchase tax is abolished for private and business cars in favour for a tax based on fuel efficiency and environmental criteria</p>	<p>State subsidy scheme for BEVs: Up to ¥850k (~€5,100) with additional conditions; FCEVs: Up to ¥2.55m (~€15,400); PHEVs: Up to ¥550k (~€3,300). Further evaluation items apply to realize the subsidy amount, such as manufacturers' ability to respond to repair and maintenance needs or efforts to collect used batteries</p>
 South Korea	<p>Acquisition: Up to ₩1.4m can be deducted from the acquisition tax amount. Up to ₩3m can be deducted from the individual consumption tax and up to ₩900k from the education tax. If the individual consumption tax is ₩0, then there is also no education tax (which is 30% of the consumption tax)</p>	<p>2025: Budget for passenger EVs will tighten to ₩780b (~€520m); price criteria for full subsidy will drop from ₩55m (~€37,000) to ₩53m (~€35,000); maximum subsidy reduced by 10% to ₩5.8m (~€3,900); BEVs with ranges below 440km per charge will see subsidy reductions of up to ₩81k (~€54€) per 10km difference</p>

4

Global and regional markets analysis

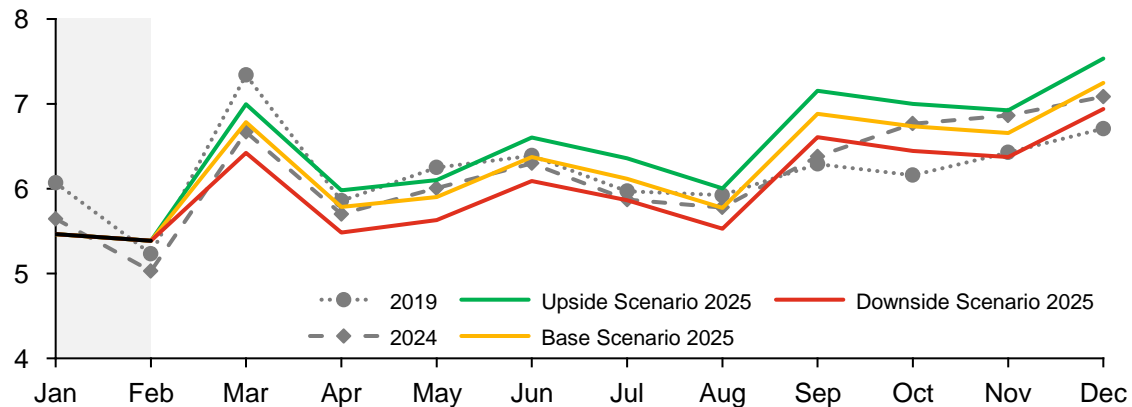


4 Sales: Global

After a weak January, February recovered with YTD sales in positive territory

Passenger car sales

(in million)



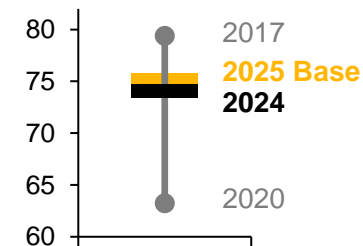
	Year	Sales (in million)	YoY growth	Q1 YoY growth
Past	2019	74.6		
	2024	74.1	+2%	+5%
PwC Scenarios	2025 – Upside	77.5	+5%	+3%
	2025 – Base	75.1	+1%	+2%
	2025 – Downside	72.2	-3%	-0%

Key insights

Global passenger car sales jumped by 7% YoY in February to a total of 5.4 million units, recording the highest February volume since 2018. This result was **kickstarted by the largest single market, China**, which recorded a **YoY increase of 42%** (due in part to the timing of the Chinese New Year), covering for the **slowing of Europe* and the USA** with -4% and -2% YoY, respectively. **2025 is poised to become a disruptive year** for the global automotive market. **Policy shifts and punitive tariffs** following the US elections, **regulatory pressures** from EU CO₂ targets, **new product mix** of ICEs and BEVs from OEMs will all play their part and **will be gradually played out**. All things considered, the **PwC Base Scenario** forecasts a 2% YoY increase for the running quarter and a **mild 1% YoY growth for the full year**.

10-year benchmark

(in million, 2015-2025)



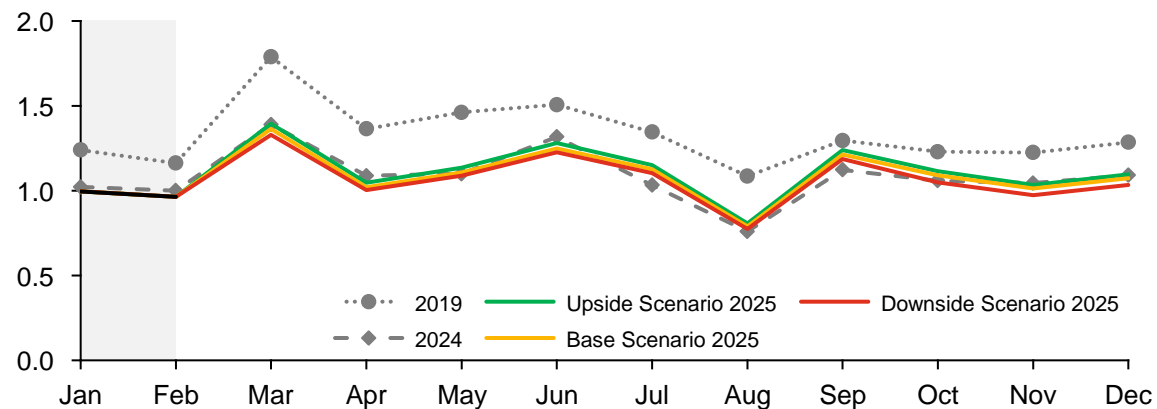
For 2025, the **PwC Base Scenario forecasts 3.4 million more sales** than 2024. The **gap to the 10-year high in 2017** is expected to **increase slightly by 5% to 4.3 million units**.

4 Sales: Europe*

New CO₂ emission targets drive BEV sales amidst broader market challenges

Passenger car sales

(in million)



	Year	Sales (in million)	YoY growth	Q1 YoY growth
Past	2019	16.0		
	2024	13.0	+1%	+5%
PwC Scenarios	2025 – Upside	13.3	+2%	-2%
	2025 – Base	13.0	-0%	-3%
	2025 – Downside	12.7	-2%	-4%

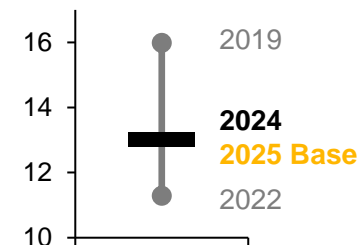
Key insights

February sales dropped by 4% YoY to 964,000 units, continuing the YoY decline trend from past month. This result is primarily due to the **declining sales of ICEs**, whose sales fell 23% YoY to 386,000 units. **BEVs and hybrids reached double-digit YoY growth rates** with 26% and 18%, respectively amid **relaxed CO₂ fleet emission targets in the talks**. The market in the **EU5 countries have developed similarly** as YoY sales growths **have fallen** except for Spain: **UK -1%, Spain +11%, Italy -6%, France -1% and Germany -6%**. Nevertheless, all EU5 countries, except for France, **are recording growth** in BEV and hybrid sales.

The PwC Base Scenario expects a further decline of 3% YoY for the first quarter of 2025 while projecting an **unchanged volume for the full year**.

10-year benchmark

(in million, 2015-2025)



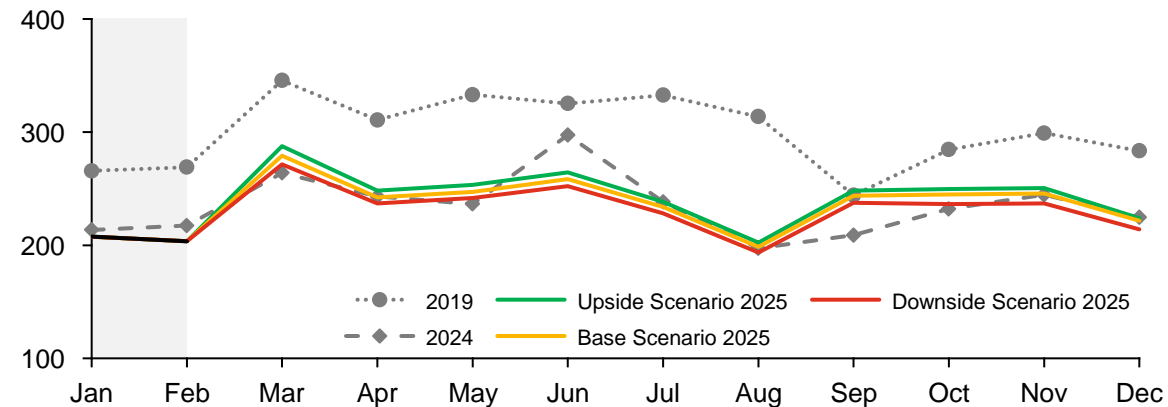
The PwC Base Scenario predicts a **slight decline in sales for 2025**. Compared to the previous year, **22,000 less vehicles** will be sold. This extends the gap to the **10-year peak in 2019**, which was **19% higher**.

4 Sales: Germany

Strongly growing EV market cannot compensate for the declining ICE market

Passenger car sales

(in thousand)



	Year	Sales (in million)	YoY growth	Q1 YoY growth
Past	2019	3.6		
	2024	2.8	-1%	+4%
PwC Scenarios	2025 – Upside	2.9	+2%	+1%
	2025 – Base	2.8	+0%	-1%
	2025 – Downside	2.8	-2%	-2%

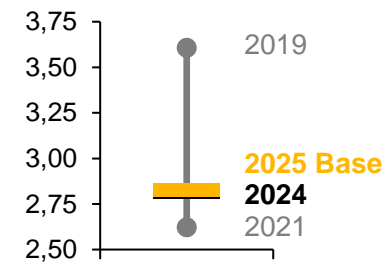
Key insights

February passenger car sales declined by 6% over the same period of last year. **ICE sales**, that made a market share of 44%, **declined by 26% YoY** and played a **significant role in the overall result**. In contrast to that, **BEVs and PHEVs** were both able to **jump by over 30%** during the same period (31% to 36,000 and 34% to 20,000 units, respectively). Between EVs*, **mild and full hybrids maintained the highest market share** of 29% and grew by 6% YoY. YTD numbers paint a similar picture: **sales fell by 5% YoY**, while EV* sales increased by 21% YoY.

Due to **current political efforts towards a new BEV incentive program**, the **PwC Base Scenario forecasts a marginal 1% decline for Q1** and a similar performance as 2024 for the full year.

10-year benchmark

(in million, 2015-2025)



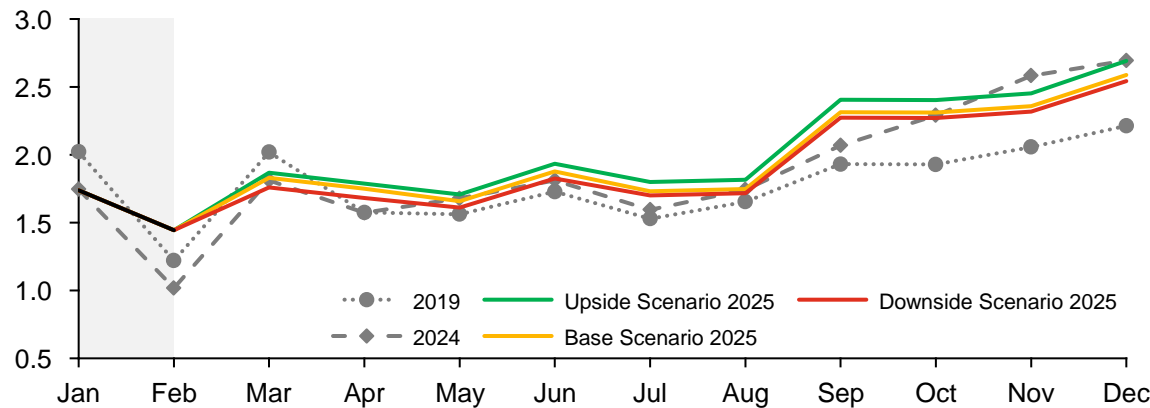
The **PwC Base Scenario** predicts a marginal **growth of less than 1% YoY**, or **+9,000 units for 2025**. Compared to the 10-year high in 2019, the **gap is expected to remain at 22%**.

4 Sales: China

China records strong growth compared to February of the previous year

Passenger car sales

(in million)



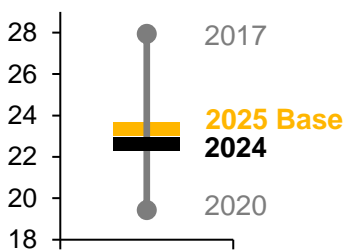
Key insights

Compared to February last year, **domestic passenger car sales in China rose significantly** (due in part to the timing of the Chinese New Year); domestic sales **increased by 42%** while export sales **increased by 18%**. The YTD view shows similar trends as **domestic sales and exports in total are 500,000 units higher** than last year. This equals to a **15% increase for the domestic** and **12% increase for the export sales**. This development is mainly favored by the **strong growth of NEV sales**, which increased by **more than 93%** in February YoY.

Sales in China are forecasted to **grow across all scenarios**, even in the Downside Scenario. **The PwC Base Scenario foresees a YoY growth in Q1 of 10% and YoY growth of 3% for 2025.**

10-year benchmark

(in million, 2015-2025)



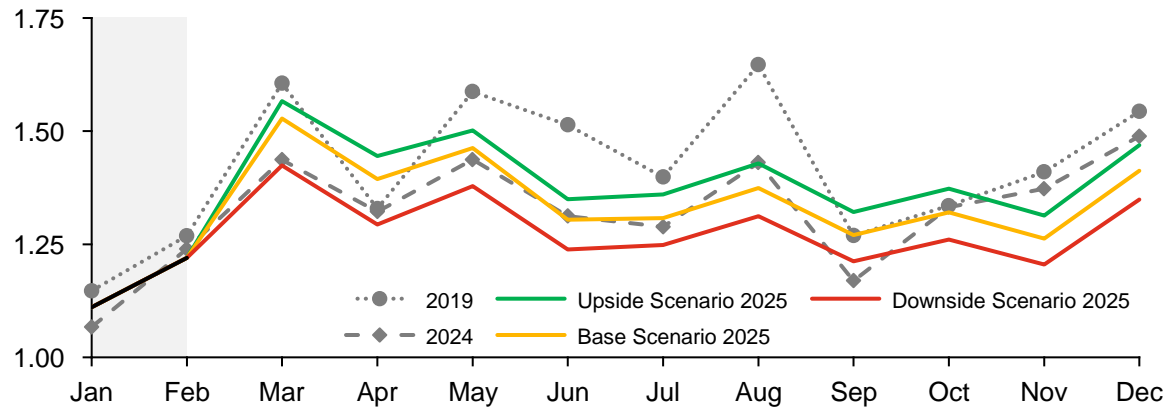
According to the PwC Base Scenario, **over 730,000 more vehicles** will be sold compared to 2024. This will bring the **all-time high from 2017** a big step closer again as the **difference will be less than 20%.**

4 Sales: USA

Light vehicle sales decline slightly amid erratic import tariff announcements

Passenger car* sales

(in million)



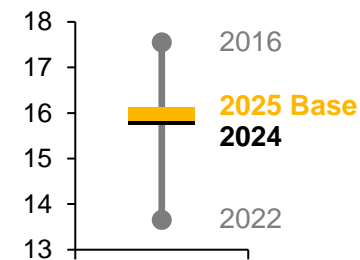
	Year	Sales (in million)	YoY growth	Q1 YoY growth
Past	2019	17.1		
	2024	15.9	+3%	+5%
PwC Scenarios	2025 – Upside	16.5	+4%	+4%
	2025 – Base	16.0	+0%	+3%
	2025 – Downside	15.3	-4%	+0%

Key insights

Light vehicle sales in the US **dropped by 2% YoY** in February, ending a 4-month growth streak. Despite the decline, **1.2 million units were sold** and marked the **second highest February since 2020**. **BEVs and hybrids continued their uphill trajectory** by 17% and 35% YoY, respectively, while **ICE sales saw the third YoY decline** in a row, down by 6% to a still dominating **market share of 79%**. Since the President took office in January, **various tariffs hitting the automotive industry** have been announced. The most recent tariff adds **25% on top of already existing tariffs** starting April 2 and will potentially **disrupt the US automotive market** (see pg. 10). With that in mind, the **PwC Base Scenario forecasts a 3% YoY increase for Q1**, while the **full year result is projected to match 2024's level**.

10-year benchmark

(in million, 2015-2025)



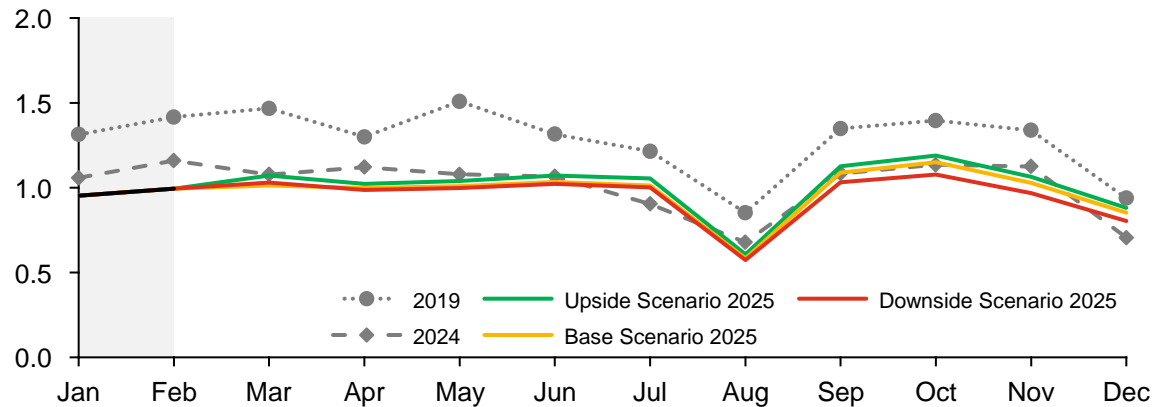
For 2025, the **PwC Base Scenario predicts an increase of 69,000 units over 2024** but still fall behind 2016's **10-year high by 10% or 1.6 million units**.

4 Production: Europe*

2025 is set to be a challenging year, with the outlook dependent on EV sales

Passenger car production

(in million)



	Year	Prod. (in million)	YoY growth	Q1 YoY growth
Past	2019	15.4		
	2024	12.2	-7%	-6%
PwC Scenarios	2025 – Upside	12.1	-1%	-8%
	2025 – Base	11.7	-4%	-10%
	2025 – Downside	11.4	-6%	-10%

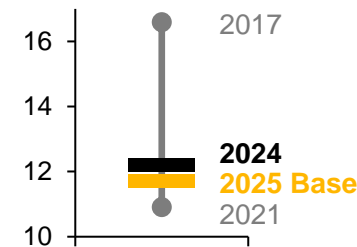
Key insights

No sign of relief was seen in February, as passenger car production in Europe* saw a YoY decline for the 10th consecutive month with -14%. With 994,000 units it also marks the second lowest February output since 2009. Based on the **relaxed regulations regarding the CO₂ fleet emission targets** proposed by the EU, a **trend reversal could occur** in the coming months. Despite this adjustment, the focus is expected to remain on **the production of EVs** to catch up with Chinese OEMs. **February production** volumes across all **EU5 countries declined** significantly over February of past year: **UK -20%, Spain -22%, Italy -54%, France -2%, and Germany -9%**.

The **PwC Base Scenario** forecasts a **10% YoY decline for Q1**, which is expected to result in an overall **decrease of 4% for the full year of 2025**.

10-year benchmark

(in million, 2015-2025)



Compared with the PwC Base Scenario from the previous month, the situation **relieved slightly**. Nevertheless, **474,000 fewer passenger cars** are forecasted to be produced compared to 2024, while the **gap to the 10-year high remains at 42%**.

4 The year 2025 up to February

China jumps big in both sales and production, Europe moves the opposite direction

Region	February 2025 Sales						February 2025 Production					
	Year-to-date	YTD vs. 2024	YTD vs. 2019	Month	Month vs. 2024	Month vs. 2019	Year-to-date	YTD vs. 2024	YTD vs. 2019	Month	Month vs. 2024	Month vs. 2019
Europe*	1,959,000	-3%	-18%	964,000	-4%	-17%	1,947,000	-12%	-29%	994,000	-14%	-30%
France	256,000	-3%	-22%	142,000	-1%	-18%	145,000	-6%	-53%	74,000	-1%	-52%
Germany	411,000	-5%	-23%	203,000	-6%	-24%	659,000	+1%	-16%	329,000	-9%	-22%
Italy	272,000	-6%	-21%	138,000	-6%	-23%	32,000	-59%	-70%	20,000	-54%	-65%
Spain	163,000	+8%	-23%	90,000	+11%	-17%	262,000	-26%	-30%	142,000	-22%	-27%
UK	223,000	-2%	-8%	84,000	-1%	+3%	129,000	-21%	-47%	64,000	-20%	-48%
Rest of Europe*	634,000	-4%	-15%	306,000	-6%	-13%	720,000	-12%	-21%	365,000	-13%	-22%
North America	2,808,000	+1%	-2%	1,460,000	-2%	-2%	1,817,000	-8%	-14%	902,000	-12%	-14%
USA	2,331,000	+1%	-4%	1,220,000	-2%	-4%	1,187,000	-9%	-8%	601,000	-12%	-8%
Canada	240,000	-1%	+5%	122,000	-5%	+1%	186,000	-15%	-37%	91,000	-16%	-35%
Mexico	237,000	+5%	+10%	118,000	+4%	+13%	444,000	-1%	-14%	211,000	-8%	-17%
Asia	4,077,000	+14%	-4%	1,905,000	+33%	+9%	5,259,000	+7%	+6%	2,712,000	+32%	+31%
China	3,182,000	+15%	-2%	1,444,000	+42%	+18%	3,479,000	+6%	+16%	1,792,000	+46%	+64%
Japan	683,000	+17%	-8%	355,000	+19%	-12%	1,207,000	+15%	-14%	623,000	+13%	-16%
South Korea	212,000	-8%	-18%	106,000	-8%	-13%	573,000	-5%	+2%	297,000	+9%	+26%
RoW	2,508,000	-11%	+0%	1,288,000	-5%	+11%	2,815,000	-7%	-8%	1,448,000	-6%	-8%
Turkey	132,000	-10%	+337%	76,000	-8%	+296%	138,000	-12%	-5%	74,000	-16%	-4%
Global	10,850,000	+2%	-4%	5,386,000	+7%	+3%	11,256,000	-2%	-7%	5,766,000	+6%	+1%

5

Appendix



5 Scenarios and assumptions

Key drivers of three PwC Autofacts® global scenarios

Analysis	Assumptions for Demand	Assumptions for Production	Total Effects
Upside Scenario	A significant rise in BEV demand is anticipated in Europe due to the implementation of stricter CO ₂ emission targets. In China, the continuation of the scrappage scheme is expected to boost demand for NEVs. Additionally, potential interest rate cuts could reduce the cost of new vehicles for consumers, further stimulating market demand.	An increasing number of new, affordably priced BEV models are being introduced across all major markets. While discussions on localization and production efficiency measures are ongoing, their implementation remains limited, helping to keep production costs down.	Strong Economic growth and stability with global economies experiencing robust growth supporting an increase in vehicle production and sales. Supportive policies towards ICE and BEV production further enhance consumer confidence, stimulating higher demand in the market.
Base Scenario	The economic outlook is generally stable, although concerns about potential recessions persist. In Europe, the demand for BEVs is projected to rise due to stricter CO ₂ emission targets. Moreover, additional discounts on BEVs are expected to further boost consumer interest. In China, the extension and expansion of the scrappage scheme will generate increased demand for new vehicles.	An increasing number of new, affordably priced BEVs are being launched across all major markets. Discussions about tariffs and new government measures are intensifying due to localization and protective strategies. Meanwhile, OEMs are reducing production as order backlogs diminish and inventory levels rise.	Moderate economic growth with global economies continuing to grow at a steady pace, supporting a gradual increase in vehicle production and sales. Governments maintain a balanced approach with policies that encourage vehicle production and sales without major new incentives or restrictions.
Downside Scenario	Although inflation is less of a concern in 2025, it remains above target levels in some regions and is expected to persist for the foreseeable future, leading to increased borrowing costs. While a major trade war is not anticipated in the downside scenario, temporary impacts are expected, resulting in higher vehicle prices and reduced demand. Additionally, the 2025 EU CO ₂ targets may lead to increased prices for vehicles.	If new tariffs are introduced, OEMs may decrease the production of models that are not economically viable and reduce the output of models intended for export to the U.S. Additionally, the 2025 EU CO ₂ targets might lead some OEMs to limit the production of ICEs. The ongoing shortage of affordable new models could drive some consumers to opt for used cars instead.	Global economic conditions deteriorate, largely due to geopolitical tensions, which are undermining consumer confidence and reducing both spending and sales. This challenging environment is compounded by persistent inflation, elevated interest rates, and the looming threat of potential U.S. tariffs.

Glossary OEM report card

Indicator

Global car sales

BEV share of sales

Automotive revenue

Automotive share of total revenue

Automotive EBIT margin

Automotive revenue per car

Automotive gross profit

Automotive gross margin

Definition

Number of passenger cars sold globally by OEM within calendar year

BEV share of total passenger cars sold globally by OEM within calendar year

Revenue generated by the OEMs' automotive business

Share of OEMs' automotive revenue in total revenue

Ratio of EBIT to OEMs' automotive business revenue

Revenue generated per car based on the revenue of the OEMs' automotive business

Profit of an OEMs' automotive business after deducting costs

Ratio of gross profit to OEMs' automotive business revenue

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