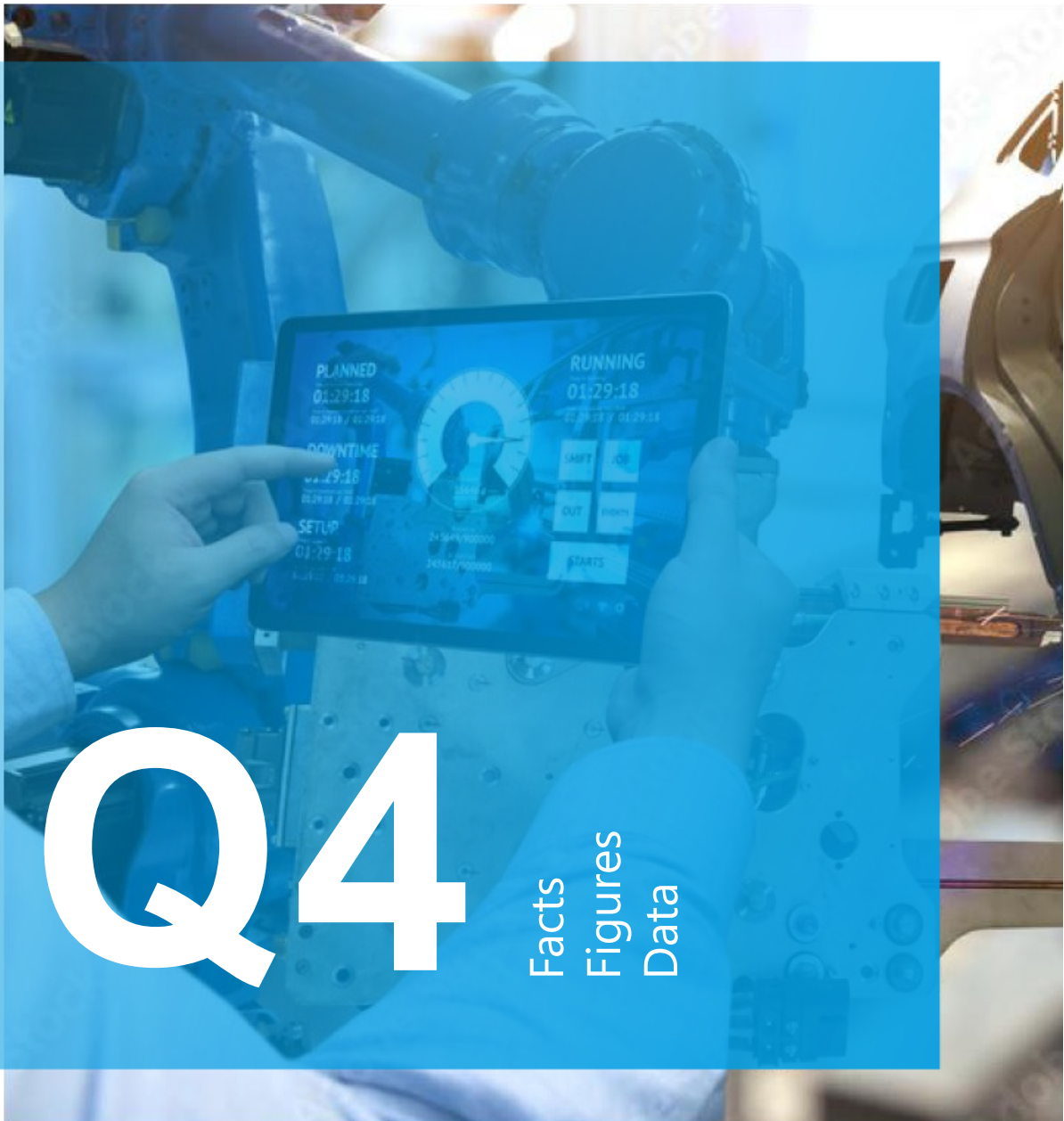


# Newsletter

## Automotive Industry



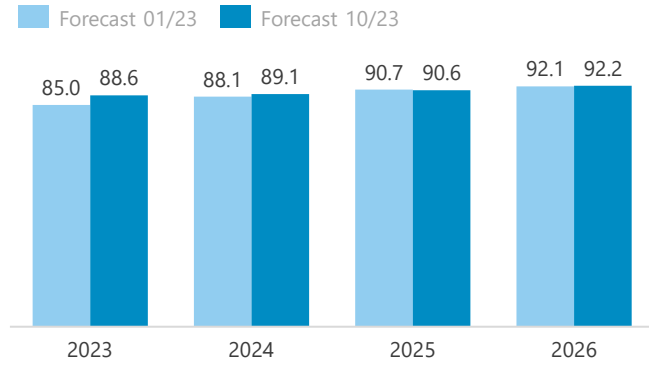
# Q4

Facts  
Figures  
Data

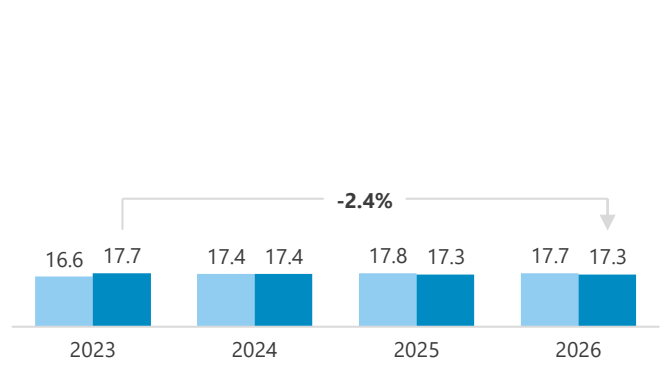
Development of automotive production worldwide

Production figures in Europe for 2023 are 6.6% higher than expected at the beginning of the year; declining volumes from 2024; Asian market will continue to grow in the coming years

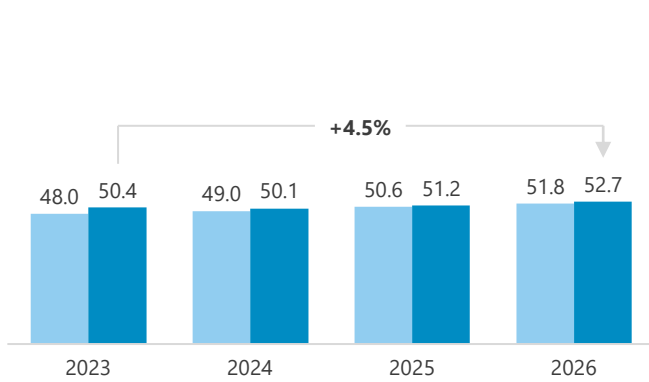
Automotive production worldwide<sup>1</sup>



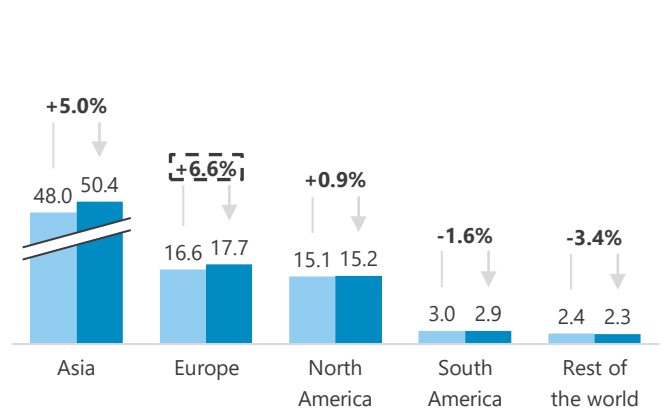
Automotive production Europe<sup>1</sup>



Automotive production Asia<sup>1</sup>



Development 2023 by region<sup>1</sup>



Explanation

- > Compared to the forecast at the beginning of the year, the global production volume forecast for 2023 was increased by 3.6 million units; the forecast for 2024 rose by around 1.0 million units, while 2025 and 2026 remain at a stable level compared to the forecast at the beginning of the year; overall, an increase of around 3.6 million units is expected in 2026 compared to 2023
- > For Europe, the forecast for the years 2023 to 2026 assumes a slight decline in production volumes
- > In Asia, on the other hand, growth of 4.5% is expected over the next three years
- > In the current year, especially European (+6.6%) and Asian (+5.0%) production volumes increased compared to the forecast, while expectations in South America and the rest of the world declined

Prices up, volumes down








The OEMs' premiumisation strategies pose numerous challenges for the supplier industry

The trend is towards premium

But what does this trend mean for the supplier industry?

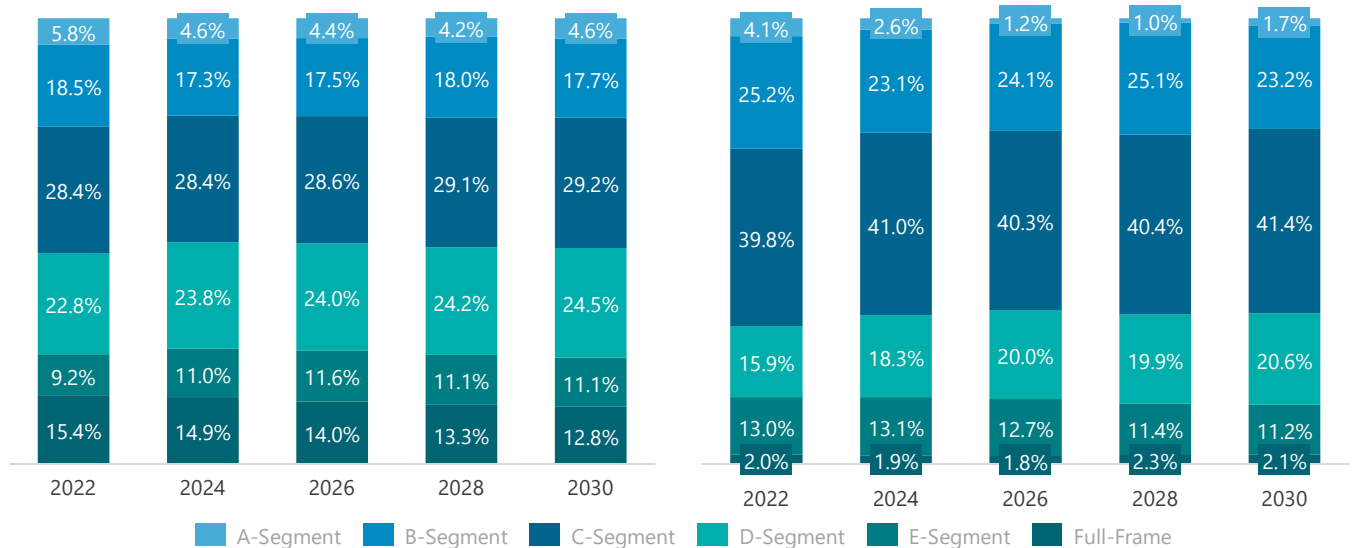
-  Adjustments in strategic partnerships
-  Innovation-driven market
-  Focus on high-tech components
-  Lower sales volumes

Potential fields of action for the supplier industry

 Investments in technological innovations	 Flexibility in production
 Increasing pressure on the quantity structure	 Location issue
 Analysing existing business relationships	 Strategic alliances and M&A
 Optimisation of the liabilities side and cost of capital	 Review of existing distribution agreements

Development of production volume globally<sup>1</sup>

Development of production volume in Europe<sup>1</sup>

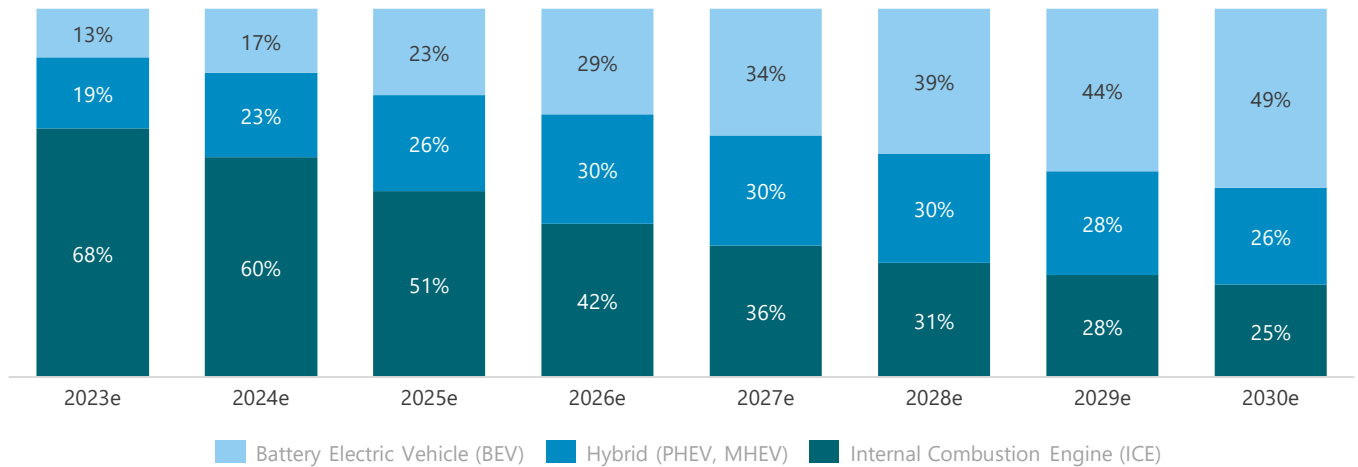


Source: IHS Markit Light Vehicle Engine Forecast: Engine Production (as of 10/2023) 1) Passenger cars  
 © RSM Ebner Stolz Management Consultants

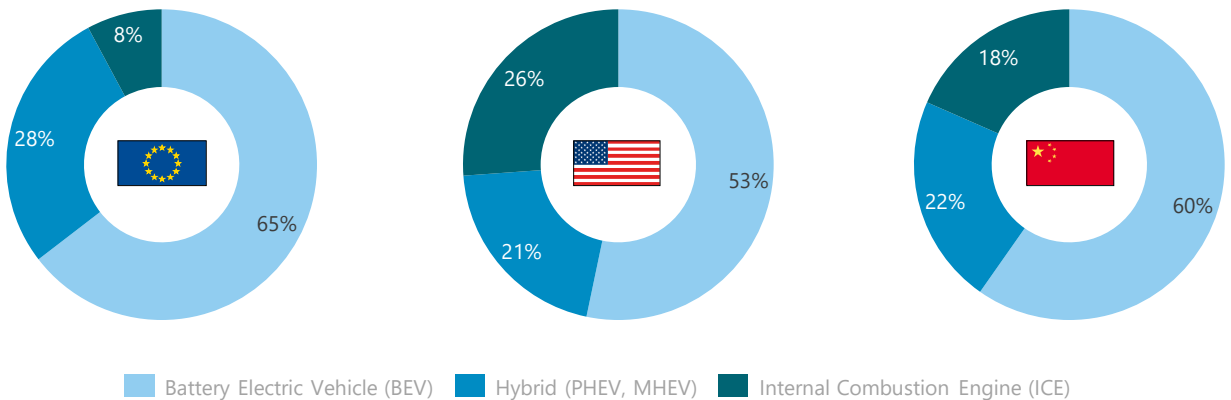
Prices up, volumes down

Regulatory drivers, manufacturers' increased focus and the sharp drop in battery prices are accelerating the predicted development of electric vehicles

FC global production distribution BEV vs. hybrid vs. ICE<sup>1</sup> [%]



FC key markets production 2030 BEV vs. hybrid vs. ICE<sup>1</sup> [%]



Explanation

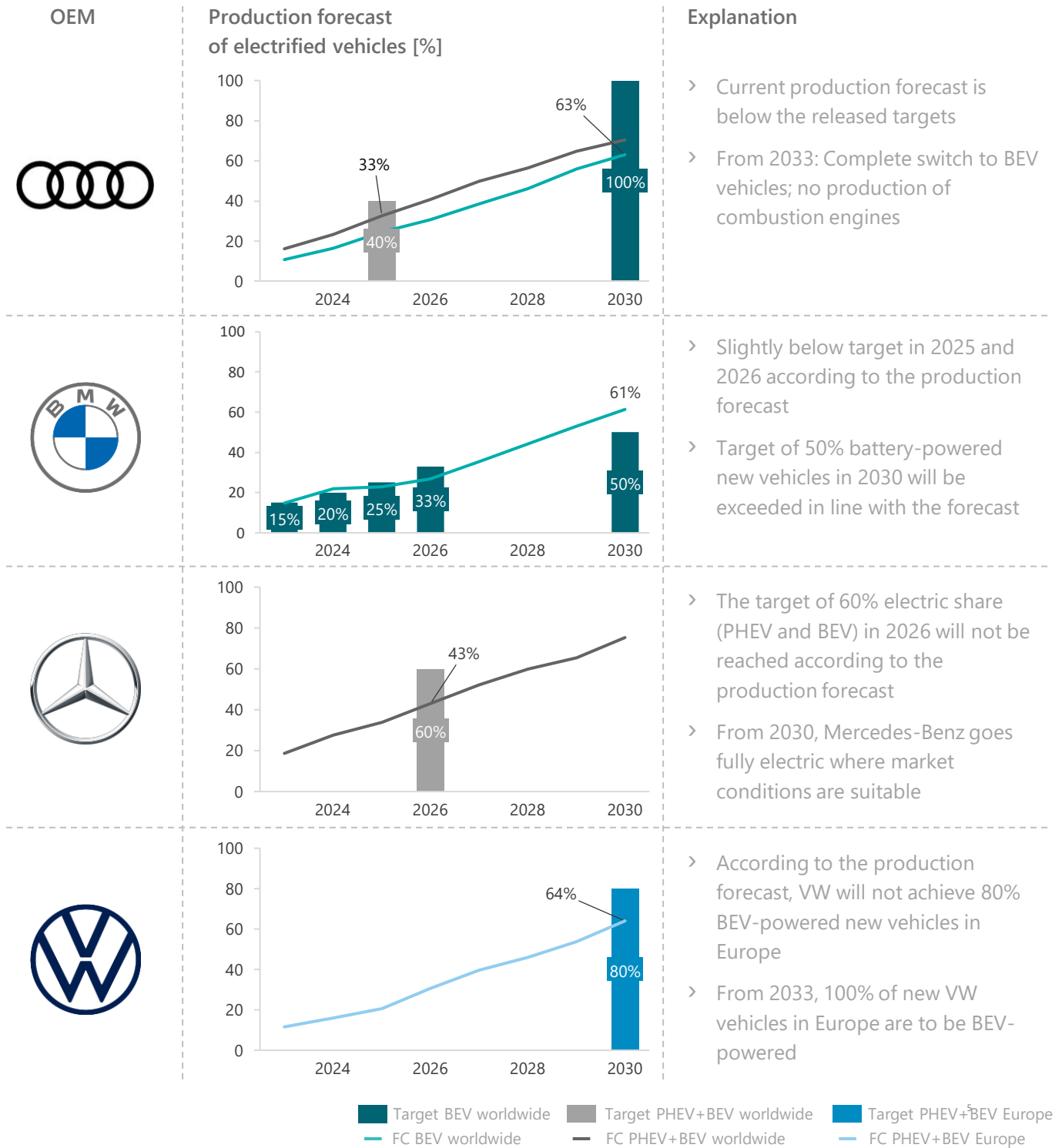
- > The share of BEVs and hybrids is expected to increase significantly by the end of 2030 and reach a production share of 75%; a sharp decline in ICE drives is expected in Europe and China in particular
- > Due to the increasing pace of change, suppliers require sufficient (financial) R&D capacities, a fast product development and essential certifications
- > to ensure their relevance for OEMs in the future as well
- > Long-term forecasts assume that the production of PHEVs will increasingly shift from Europe to the Asian/Chinese region

Source: IHS Markit Light Vehicle Engine Forecast: Engine Production (as of 10/2023); 1) ICE: Internal Combustion Engine, MHEV: Mild Hybrid Electric Vehicle, PHEV: Plug-In Hybrid Electric Vehicle, BEV: Battery Electric Vehicle Figures include (commercial) vehicles up to 6.0 tonnes vehicle weight

Analysis of sales targets for electric vehicles | German OEMs

Except Mercedes-Benz, the German OEMs do not seem to achieve their targets for new BEV and PHEV vehicles based on current production forecasts

Comparison of sales targets of German OEMs to production forecast [in % of total volume]

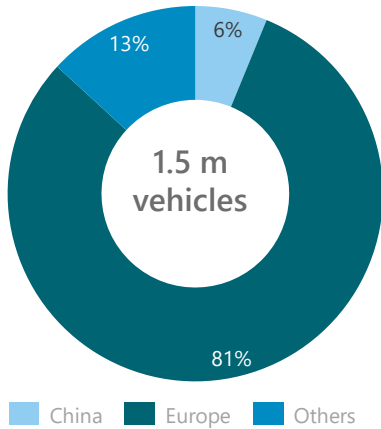


Source: IHS Markit Light Vehicle Engine Forecast: Engine Production (as of 11/2023); BMW Group, Audi, Mercedes, VW

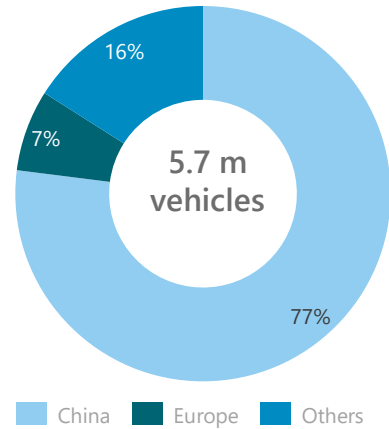
Growth in Asia: production volume of electric vehicles by region

Domestic brands are establishing themselves as the largest producers of electric vehicles in Europe and China; in 2023, 3.8 times as many electric vehicles will be produced in China as in Europe

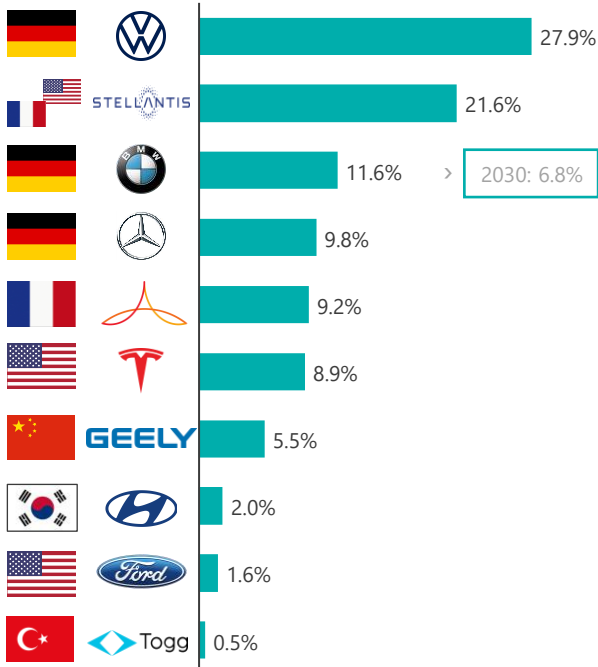
Europe: Production volume of electric vehicles 2023



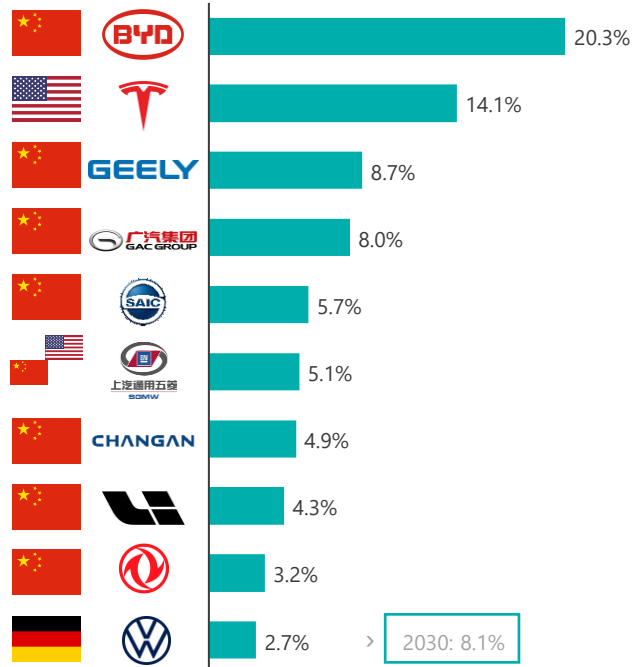
China: Production volume of electric vehicles 2023



Top 10 OEMs market shares:



Top 10 OEMs market shares:



Explanation

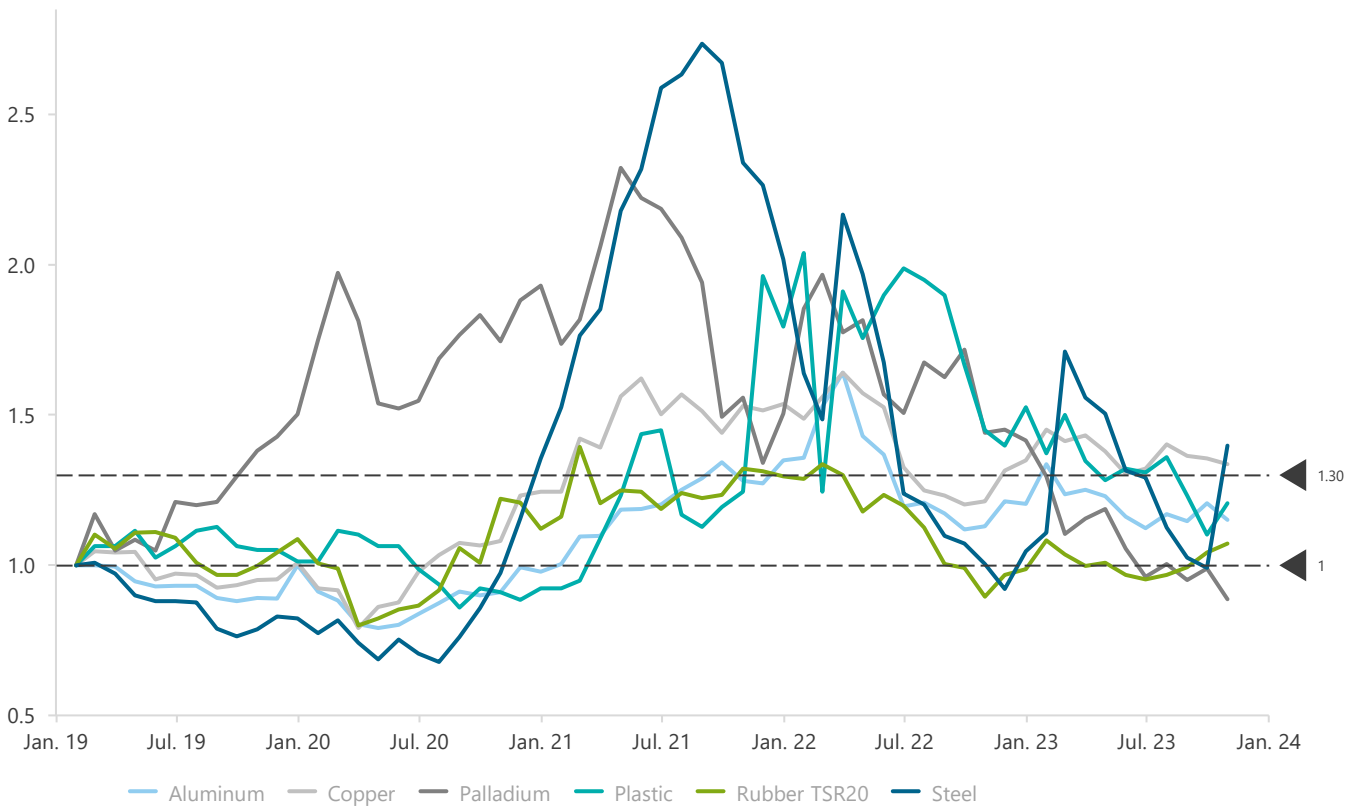
- > Volkswagen is the largest electric vehicle manufacturer in Europe in 2023 with 28% of total production volume
- > German and European brands with a share of around 49% and 81% of electric vehicles produced
- > Chinese brands have established themselves as the largest producer in the domestic market with 77% of electric vehicles produced in China
- > German brands only have a total production share of around 4.8%

Raw material prices (selection)

Price reduction of automotive-relevant raw materials compared to peaks; the pre-Covid level was only reached in exceptional cases; possible positive price increase adjustment effect for suppliers

Monthly development of automotive-relevant raw materials (Jan 19 to Oct 23)

Index (Jan 19 = 1.0)



Explanation

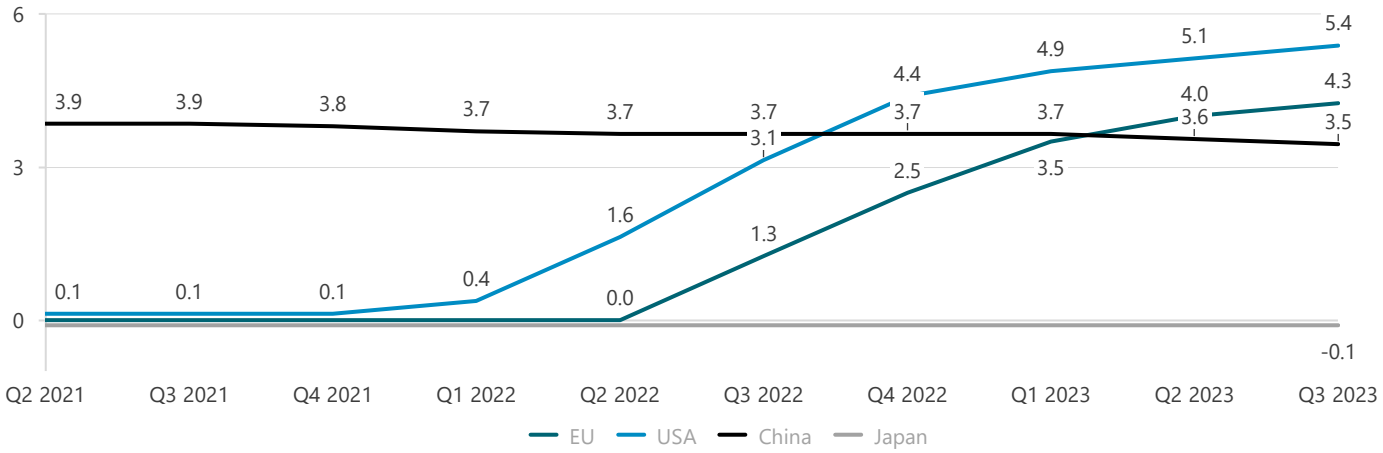
- › The time of strong raw material price increases are over for now; the majority of automotive-relevant raw materials are still above the pre-Covid level; significant reduction compared to the peak levels
- › In addition to falling prices, there is another possible positive effect for suppliers:

  - Due to the falling price levels, many raw material prices are currently lower than based on their contractual material price adjustments / escalator clauses
- As a result, automotive suppliers can pass on a higher price to their customers than they currently pay on the market - as long as the trend does not end and customers do not take actions

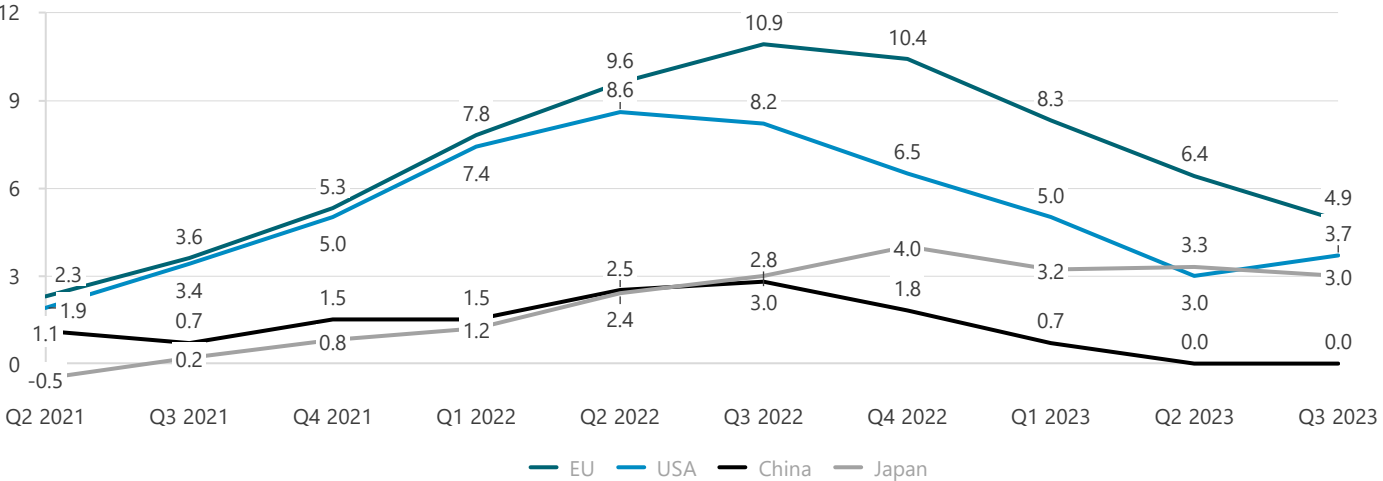
Development of interest rates and inflation

Inflation rates have recently fallen, partly due to the increase in interest rates in Europe and the USA; rise in interest rates with an impact on the costs of vehicle financing

Development of interest rates in selected regions [%]



Development of inflation in selected regions [%]



Explanation

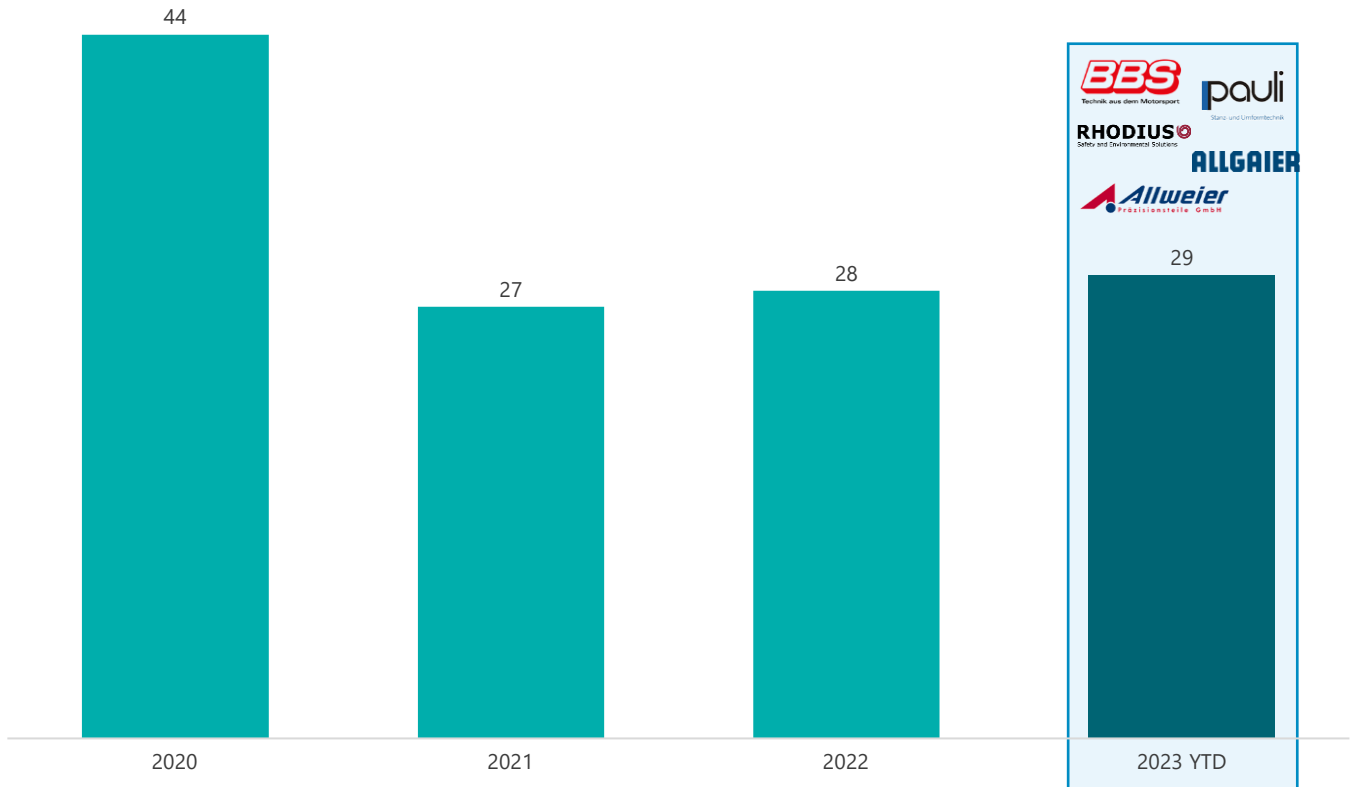
- > The rise in interest rates is affecting the terms of car loans, which have become up to 64% more expensive at their peak; the loss of purchasing power due to inflation is also impacting demand
- > Since around 27% of used cars and 47% of new cars in Germany are financed by credit/leasing, it is expected that more expensive financing will lead to lower demand and result in lower sales by OEMs
- > The rise in interest rates increases the cost of refinancing and new loans; interest expenses are already rising for variable-rate liabilities; proper interest rate hedging and matching maturities are now paying off
- > Required investments by the German automotive industry to master the transformation of the sector could be delayed or reduced as a result



## Insolvencies in the supply chain

The ongoing challenges for suppliers will continue in 2023; a further increase in insolvencies remains to be seen

### Insolvency filings by automotive companies and suppliers<sup>1</sup> 2020-2023 YTD<sup>2</sup>



## Explanation

- › After a peak of insolvency filings in the course of the coronavirus pandemic in 2020, the number of insolvencies remained at a higher level in subsequent years
- › Price increases during the war in Ukraine, the shortage of specialists and problems such as high inflation and increasing refinancing costs due to rising interest rates will continue to put pressure on medium-sized automotive suppliers
- › Although the insolvency figures for 2023 do not indicate a surge of insolvencies, there is a risk that insolvencies among German automotive suppliers will continue to rise or remain at a high level due to the ongoing challenges

## "Havana effect"

Consumer uncertainty due to increasing regulation leads to longer lives for existing cars; the "Havana effect" creates winners and losers



### The "Havana effect"

- › The "Havana effect" describes the ever-increasing use of cars; it is named after the Cuban capital, where American cars have been used for decades due to restrictive economic policies
- › The longer holding period for cars has various effects on the automotive industry, including used car prices, new registrations and the automotive aftermarket
- › In Germany, statistics point to an increasing "Havana effect"

### Reasons for the longer use of cars

- › The EU's ban on combustion engines as of 2035, combined with widespread uncertainty regarding the future of the powertrain and a relatively unproven solution for electric vehicles, has led many car owners to hold on to "working" models
- › Two thirds of Germans reject an end to the combustion engine; convinced combustion engine drivers will keep their ageing models
- › Availability problems of new cars due to supply chain failures led to a "reorientation" of consumers

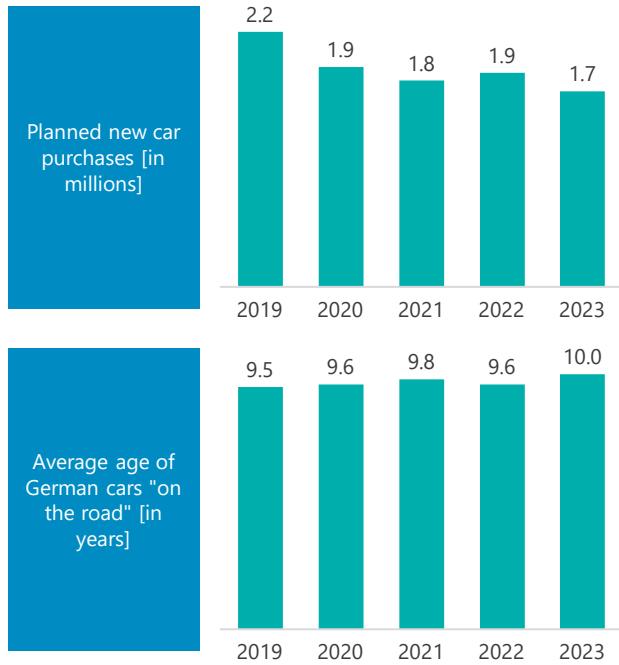


### Consequences for the automotive industry

- › The "Havana effect" mainly benefits industries that are interested in the longer use of cars; this primarily affects the used car markets and the aftermarket or service providers
- › Falling demand for new cars could reduce OEM production volumes in the medium term, which would not only affect OEMs but also suppliers

**"Havana effect"**

Consumer behaviour already reflects the "Havana effect"; suppliers have to expect declining sales of OEMs; on the other hand, the independent aftermarket (IAM) offers potential

**Consumer behaviour in Germany (private individuals)**

- > The average age of cars in Germany is increasing, which implies a longer holding period in line with the "Havana effect"
- > As a result, the number of people planning to buy a new car has fallen to its lowest level for years
- > Contrary to the demand for new cars, used car prices show that interest in used cars has been rising for years
- > As private individuals are increasingly switching from authorized garages to independent garages after the warranty expires, there is a growing demand for the independent aftermarket as cars are used longer
- > The IAM offers higher margin potential for suppliers than direct sales to OEMs

**Implications for suppliers**

- > Automotive suppliers must be prepared for declining orders of OEMs; this must be taken into account, especially for volume-related prices
- > The aftermarket (CAGR: 6%) offers potential as an alternative sales market; particularly in the IAM, which is dominated by wholesalers

"Havana effect"

Aftermarket potentials result in different fields of action for various players; strategic partnerships in the independent aftermarket are becoming increasingly important

Players in the aftermarket

Stakeholder	Recommendations for action
<b>OEMs</b>	In view of ageing vehicles, OEMs need to extend their efforts beyond the sale of cars and utilize the leverage of the high-margin aftermarket for closer customer loyalty; this is an important leverage for the volume segment in particular
<b>Suppliers</b>	Suppliers should prepare for declining orders from OEMs; in the high-margin IAM, suppliers should work towards strengthen their position, for example through strategic partnerships
<b>Wholesalers / Distributors</b>	It is important for existing aftermarket distributors to intensify digital service offerings, such as online platforms and big data analyses, to avoid being displaced by new digital providers (e-tailers)

Explanation

- > Despite the ban on combustion engines, it is estimated that around 750,000,000 cars will still be on the world's roads in 2035; trends such as the "Havana effect" and the popularity of high-maintenance models (for example SUVs) create an attractive long-term market environment for the aftermarket
- > In addition to the core business areas, it is important for suppliers to recognize the opportunities in the aftermarket (OEM aftermarket and IAM in particular) and use them for customer loyalty and long-term revenue streams (repeated business)
- > The attractiveness of the market is drawing many digital providers into the market; existing distributors should therefore ensure to have a comprehensive digital presence

## Expert opinions on the topic of premiumization

## Markus Mühlenbruch and Arndt Kirchhoff on the challenges and strategy of German automotive suppliers in the context of premiumization



How can German automotive suppliers overcome the challenges posed by the premiumisation of OEMs?



Premiumisation is pushing many, especially smaller, medium-sized automotive suppliers to their limits. In order to prevent a further shift out of Germany in this segment, the people involved should focus on the following five key issues: Investment in technological innovations, flexibility in production, increasing pressure on the quantity structure, the location issue and a focus on future-oriented business relationships.

Markus Mühlenbruch, Partner RSM Ebner Stolz Management Consultants



Is the OEMs' premium strategy, which has primarily been adopted by Mercedes in 2022, a result of a necessity or a strategic reorientation?



In my opinion, this is just a current trend that the manufacturers - all of them, not just Mercedes - are naturally producing and selling the high-margin products first due to the shortage of semiconductors. (.....) In this respect, you can understand the strategy. However, I am not convinced that this is a sustainable business model.

Arndt G. Kirchhoff, Kirchhoff Group

## RSM Ebner Stolz Management Consultants

- › As part of RSM Ebner Stolz, we are one of the most relevant German management consultancies with continuously strong growth.
- › Our clients invest in compatible industry experts and situation specialists who achieve significant change and work closely with management on site or remotely.
- › Home bases in Hamburg, Cologne, Frankfurt, Stuttgart and Munich.
- › Our more than 2,100 colleagues in auditing, tax and legal advice are based at a total of 14 locations throughout Germany.
- › Feel free to contact RSM Ebner Stolz Management Consultants. We will answer your individual questions.

### Your contacts



**Markus Mühlenbruch**  
Partner

+49 173 3022391  
markus.muehlenbruch  
@ebnerstolz.de



**Marcus Losch**  
Partner

+49 172 7161985  
marcus.losch@  
ebnerstolz.de



**Marius Mayer**  
Manager

+49 173 7460196  
marius.mayer  
@ebnerstolz.de

- › For a summary of our top-class **automotive event** in Stuttgart on the topic "Premiumization in the Automotive Industry" and related interviews, please click on this [Link](#) or scan the following QR code.



- › To access the full interview with **Arndt G. Kirchhoff** from the Kirchhoff Group and **Markus Mühlenbruch** from RSM Ebner Stolz on the topic "Focus of German car manufacturers on the premium segment and the implications of other current industry trends for the supplier industry", please click on the following [Link](#) or scan the following QR code.

