

Automotive Outlook

Navigating Uncertainty in a Time of Industry Transformation

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Automotive Consulting Services

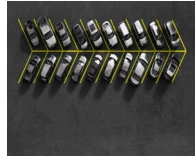
April 25, 2023



Agenda



Macroeconomic Outlook



Sales & Production Forecast



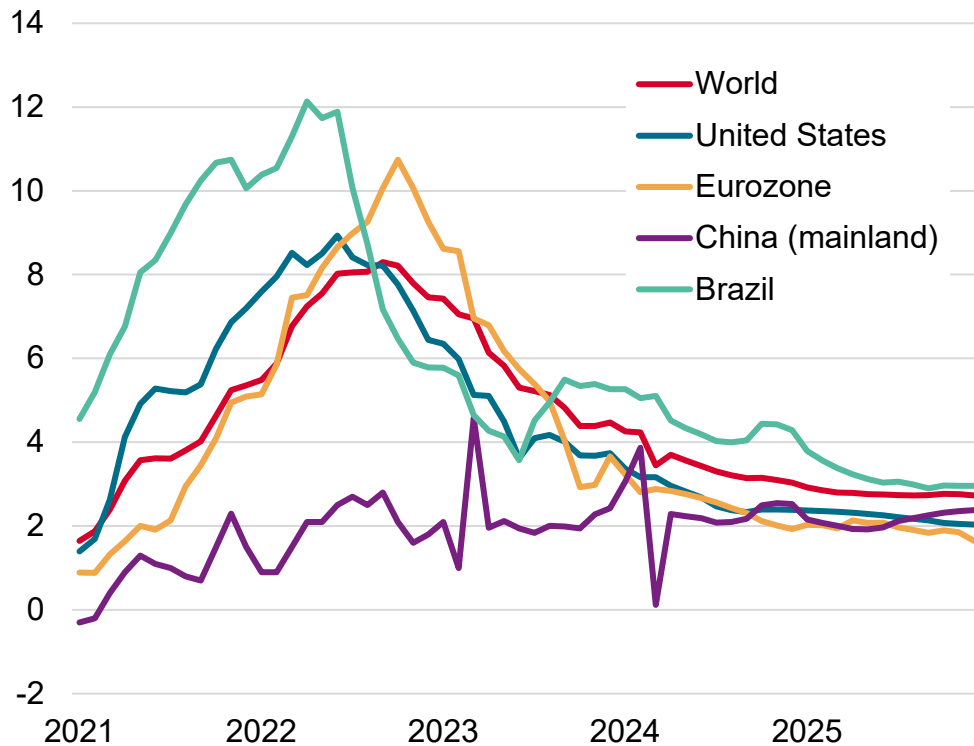
Light Vehicle Electrification Trends

Macroeconomic Outlook



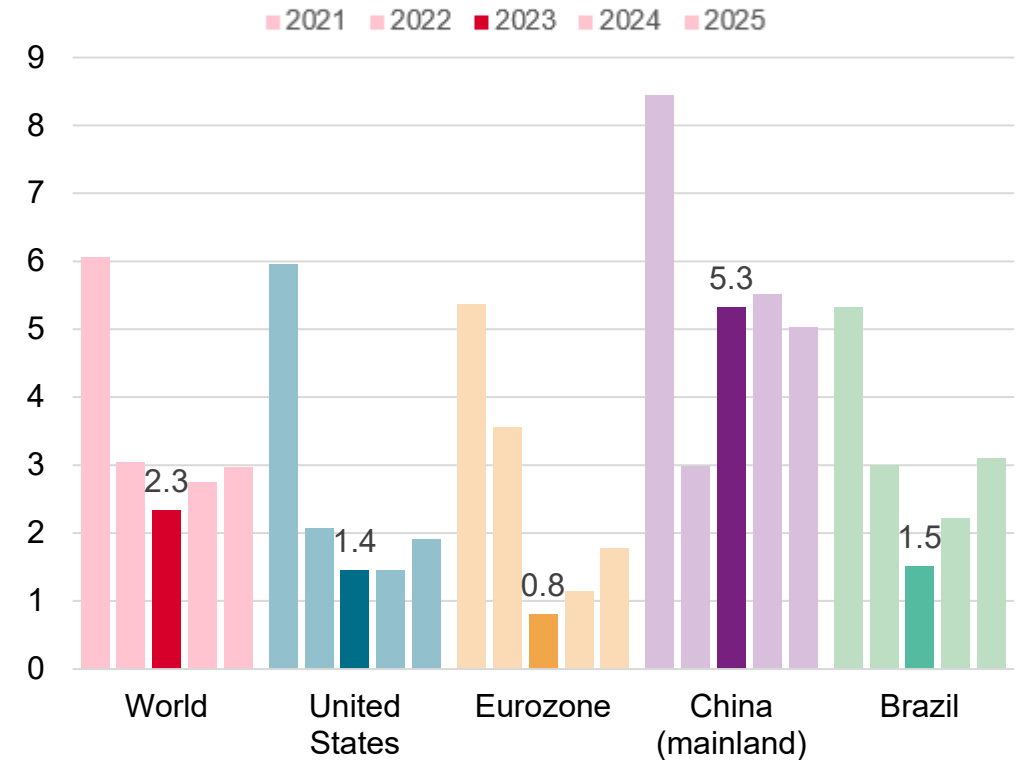
The global context | The global economic outlook brightens as inflation eases

Consumer Price Index (annual % change)



Source: S&P Global Market Intelligence, April 2023

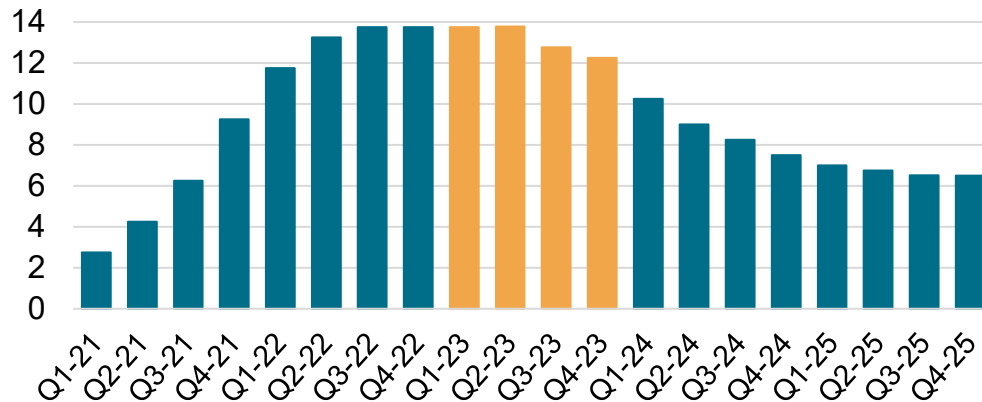
Real GDP (annual % change)



Focus on Brazil | What expect for Brazilian economy in 2023?

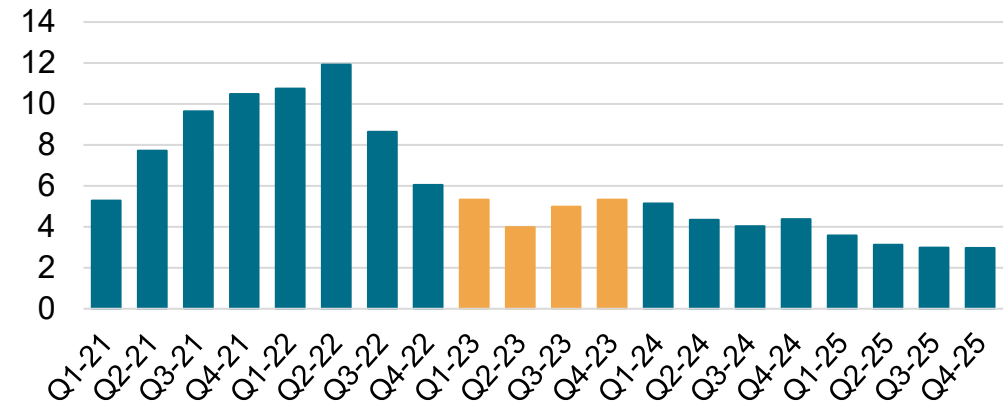
Interest Rate

(Policy interest rate, quarter-end)



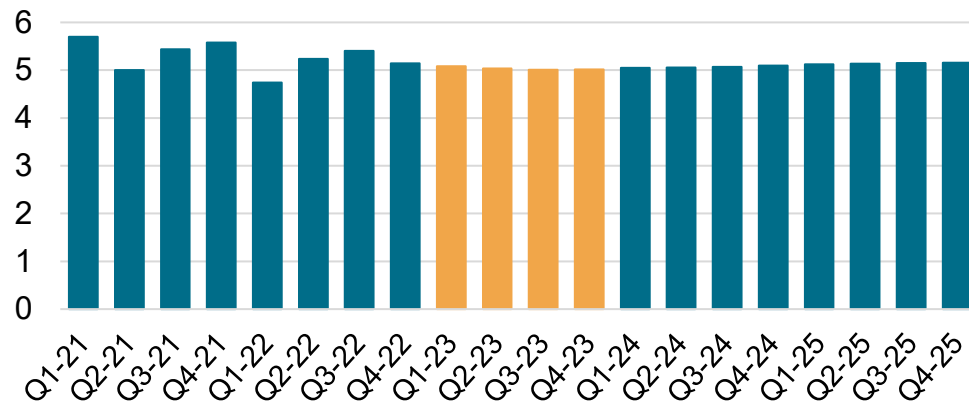
Consumer Price Index

(Annual % change)



Exchange Rate

(BRL/USD, quarter-end)



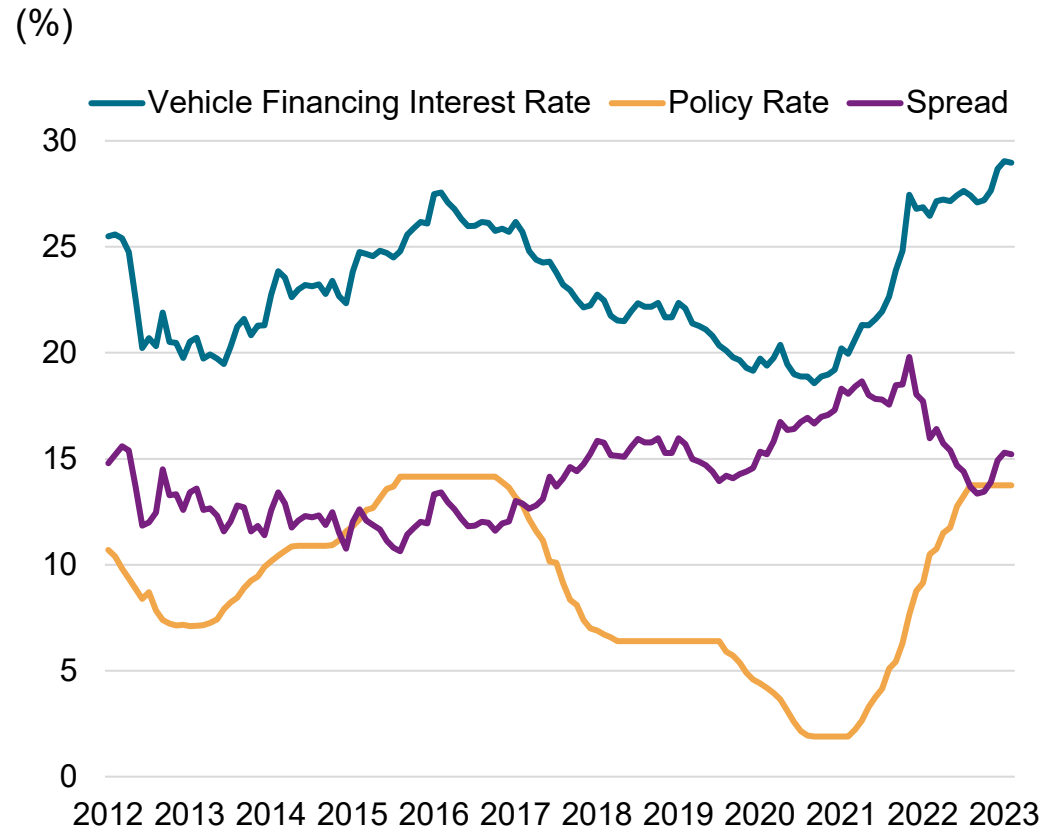
Downside Risks

- Political gridlock, delaying the approval of much-needed reforms
- Government fails to pass meaningful legislation to reform the tax system, forcing it to raise taxes and cut infrastructure outlays significantly
- New corruption scandals, which deteriorates business sentiment and brings down investment, resulting in large capital outflows. A sharp depreciation of the currency follows, in turn exacerbating inflationary expectations

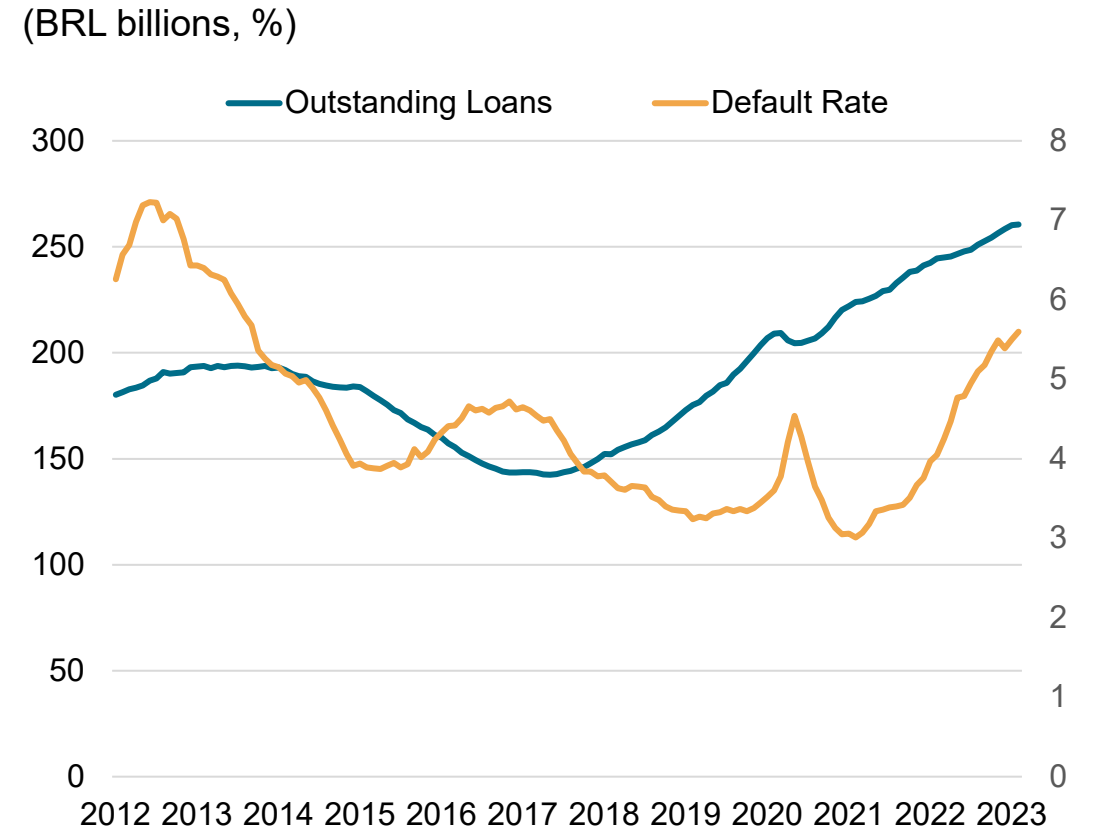
Source: S&P Global Market Intelligence, April 2023

Focus on Brazil | Vehicle financing conditions still constraining the automotive market

Vehicle Financing Interest Rate vs. Policy Rate



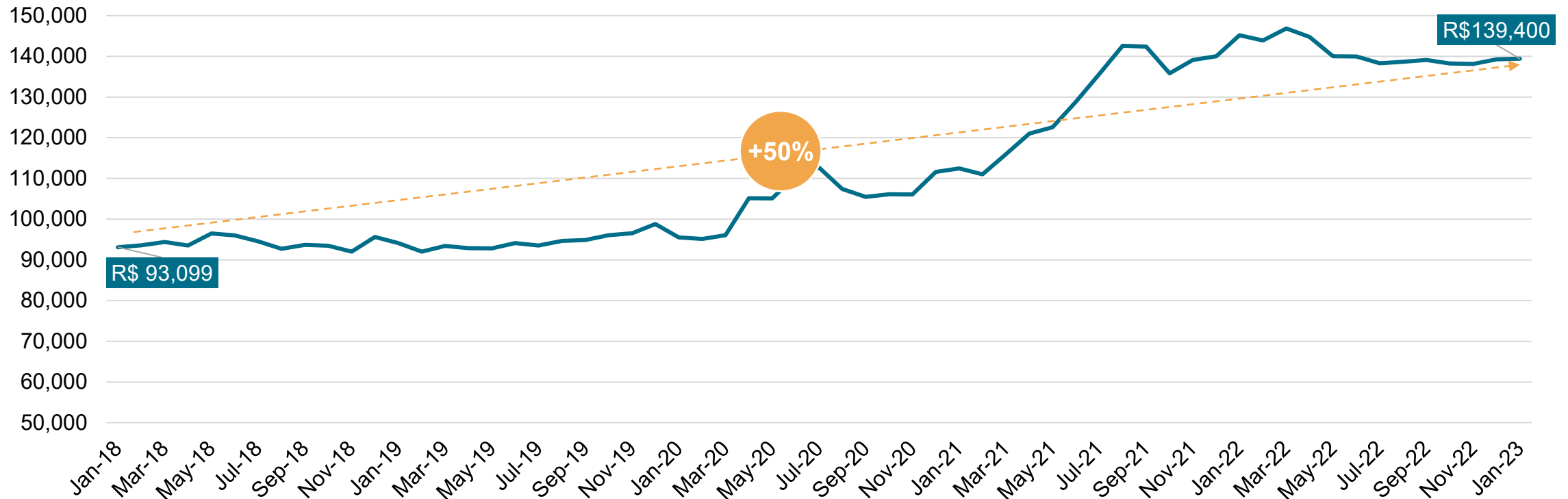
Outstanding Loans vs. Default Rate



Source: Central Bank of Brazil, March 2023

Focus on Brazil | Price hikes period seems over; In 2023, vehicle prices are expected to follow inflation growth

S&P Global Light Vehicle Prices Index (BRL)



Source: S&P Global Mobility, January 2023

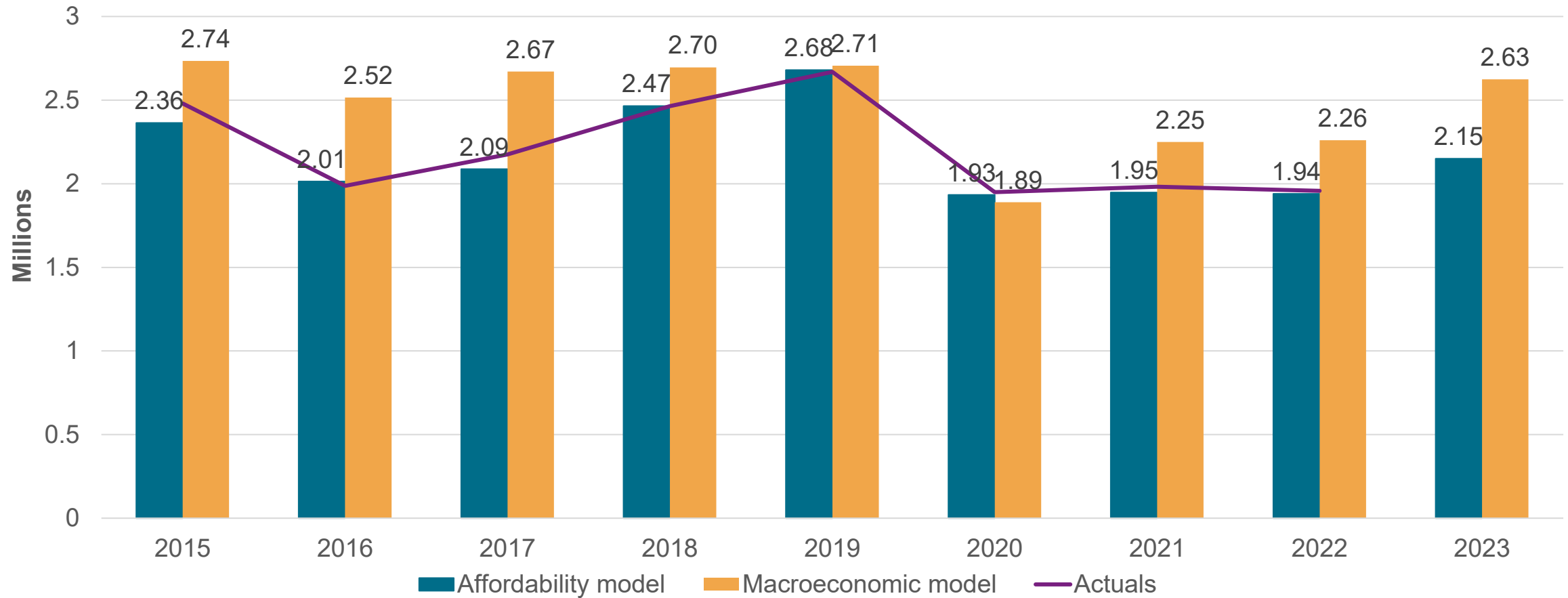
Note: Price index is a price average, weighted by volume and inflated to July 2022, which means that all fluctuations are beyond inflation

Sales & Production Forecasts



Light Vehicle Sales | Macroeconomic indicators signs stronger market - affordability has been constraining the market

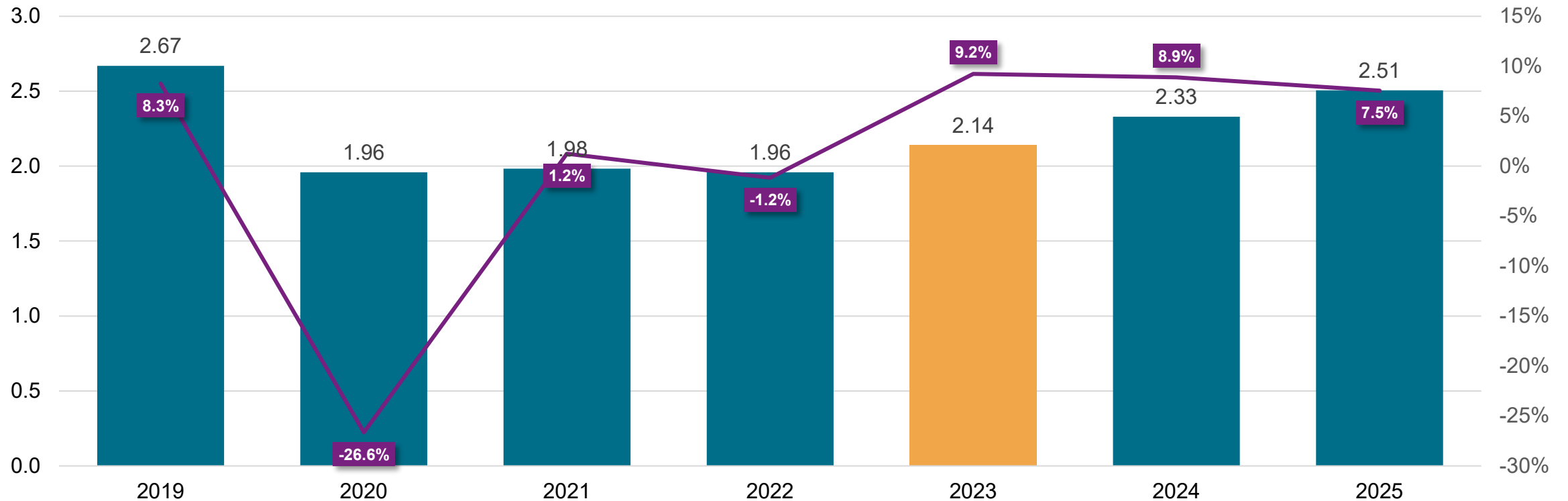
Short-term model versus long-term model versus actual sales



Source: S&P Global Mobility, April 2023

Light Vehicle Sales | Recovery in progress, but macroeconomic uncertainty, supply chain hangover and affordability pressures sales momentum

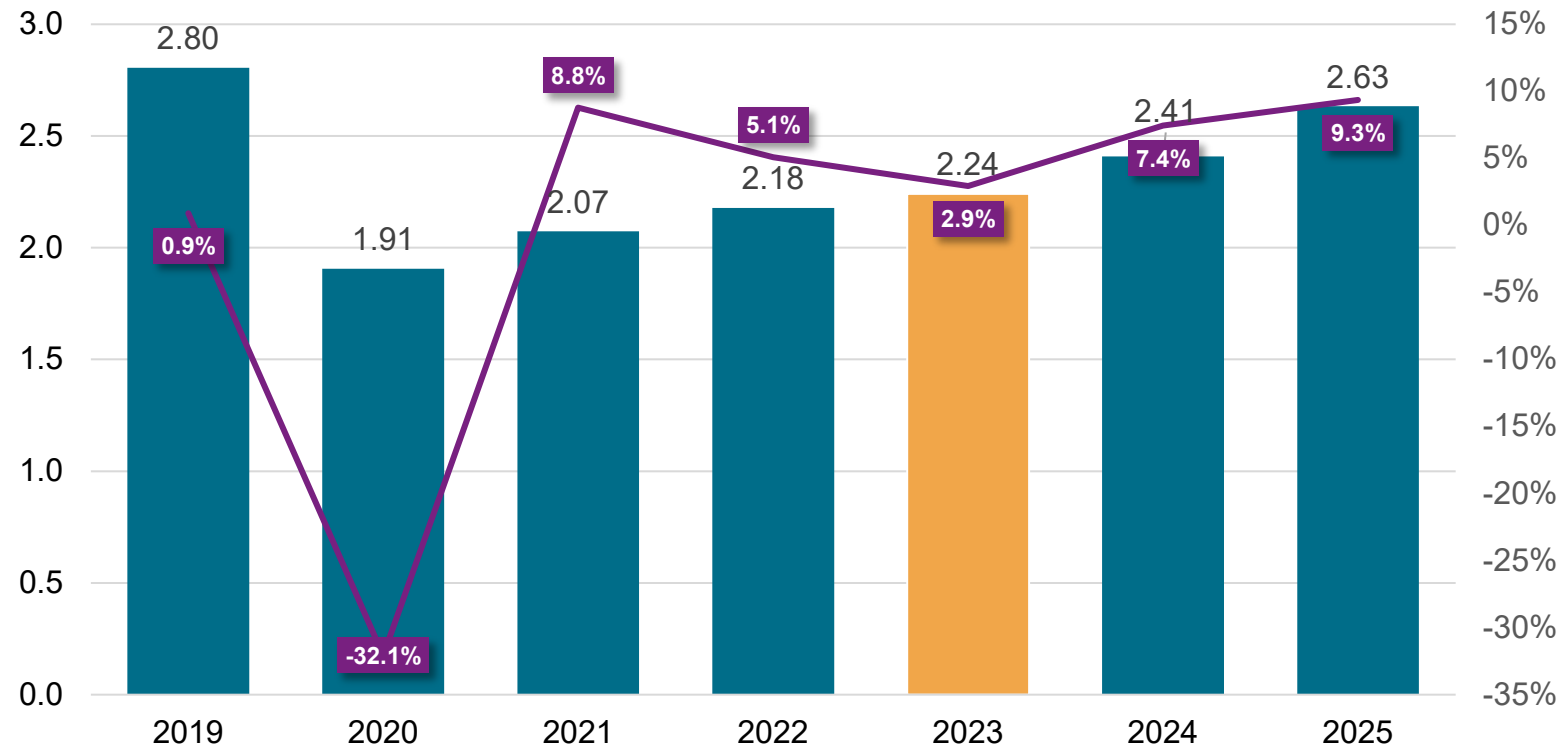
Light Vehicle Sales Forecast (millions, annual % change)



Source: S&P Global Mobility, April 2023

Light Vehicle Production | Semiconductor shortages diminishing and inventory recovery will drive production growth in 2023

Light Vehicle Production Forecast (millions, annual % change)



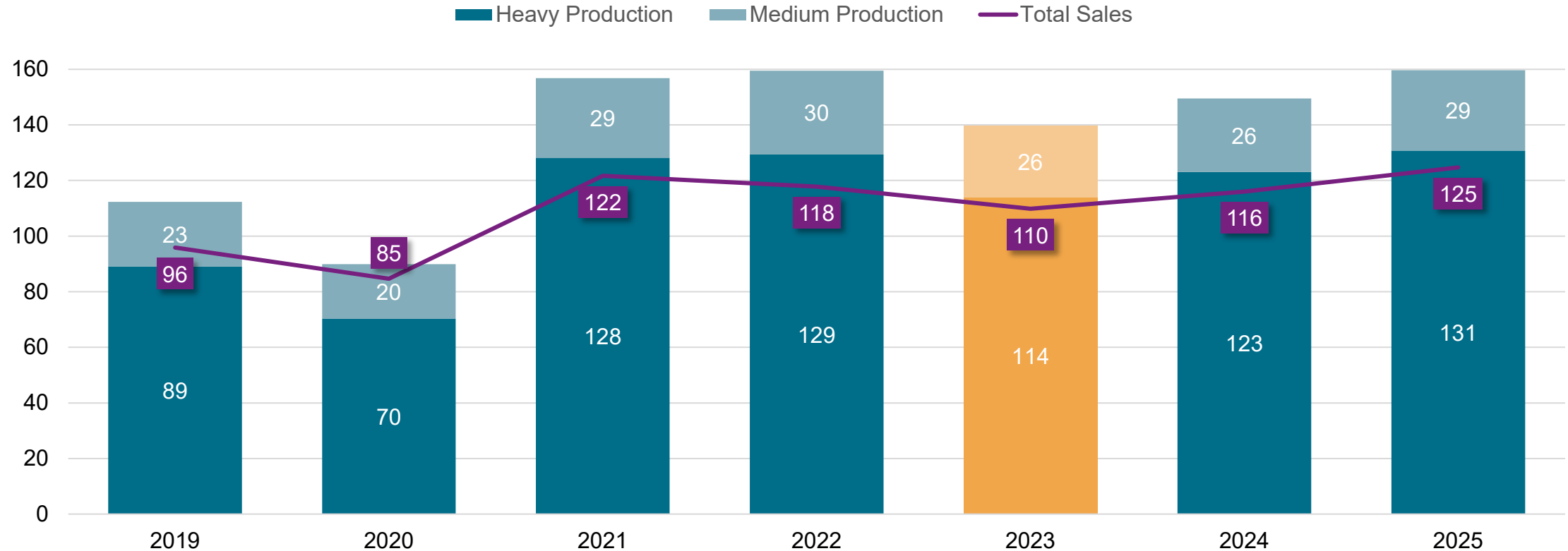
Source: S&P Global Mobility, April 2023

Downside Risks

- Expected demand fails to materialize due to high level of macroeconomic uncertainty
- Heightened tensions have raised the risk of critical semiconductor supply disruption from Taiwan
- Easing of Zero Covid policy in Mainland China increases the possibility of future covid lockdowns, elevating supply chain constraints risks

Trucks Sales & Production | Industry passing through production adjustments due to slower demand

Trucks over 6 metric tons (GVW) Sales & Production Forecast (thousands)



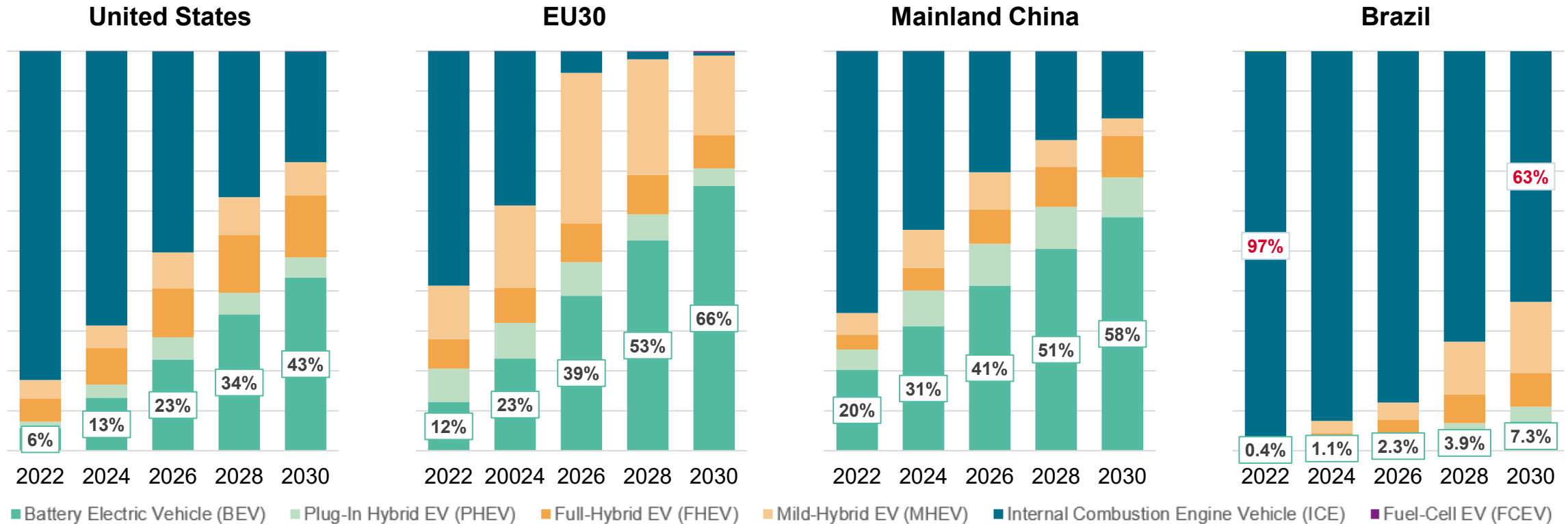
Source: S&P Global Mobility, January 2023

Light Vehicle Electrification Trends



The global context | The transition to zero emission vehicles will not be a straight line and challenges persist

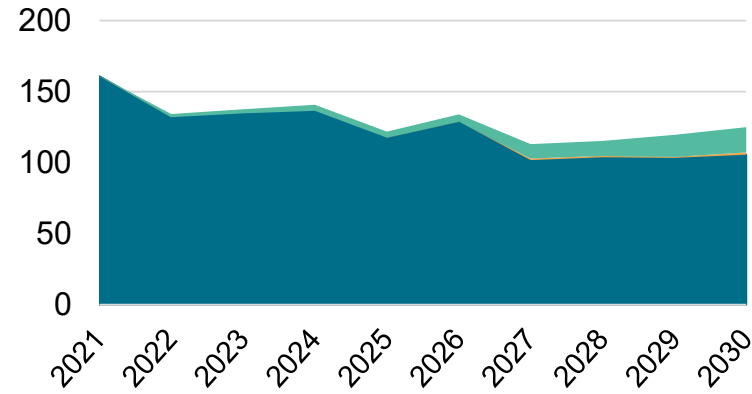
Light Vehicle Sales Based Powertrain Forecast by Major Markets
(percentage)



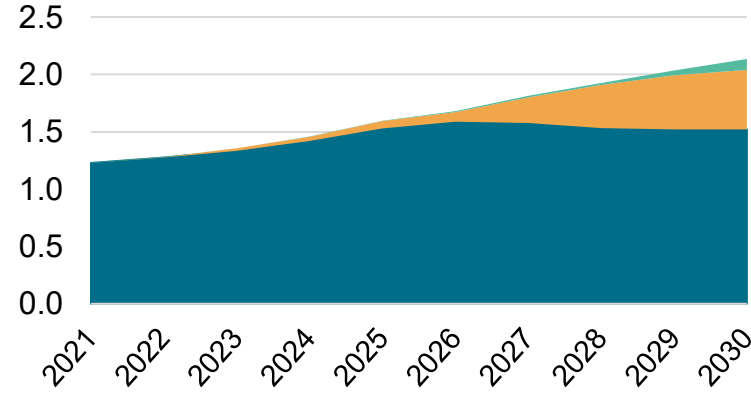
Source: S&P Global Mobility, SBPT March 2023

Focus on Brazil | High-value segments dictating electrification pace

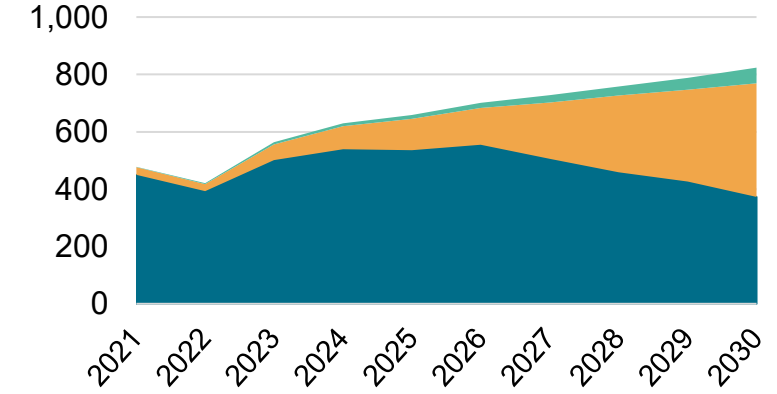
A-Segment
(thousand)



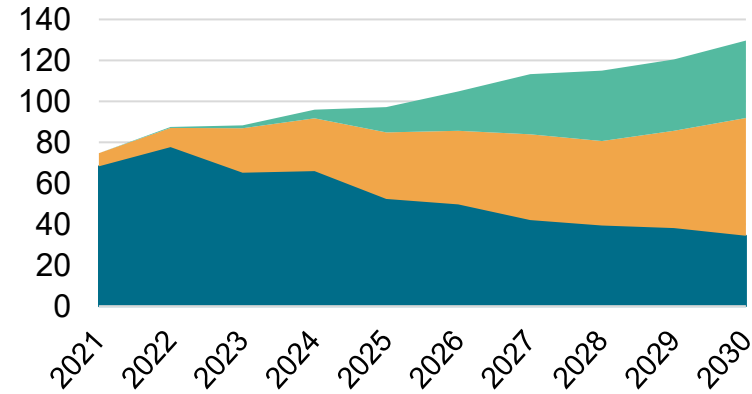
B-Segment
(million)



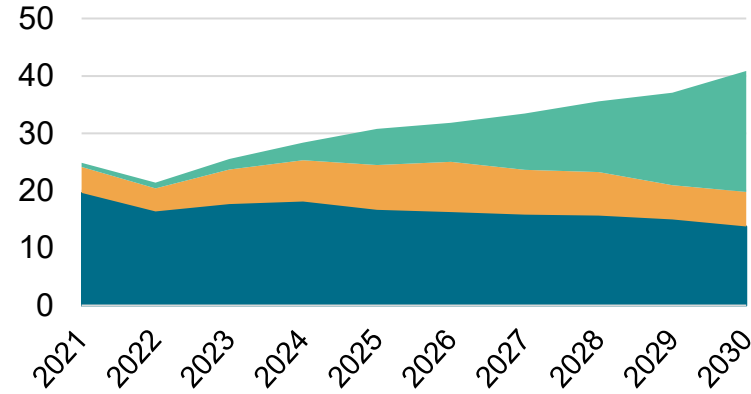
C-Segment
(thousand)



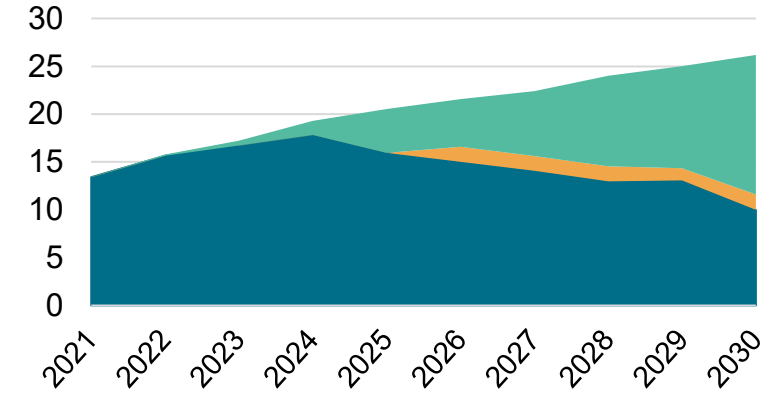
D-Segment
(thousand)



E-Segment
(thousand)



HVAN
(thousand)



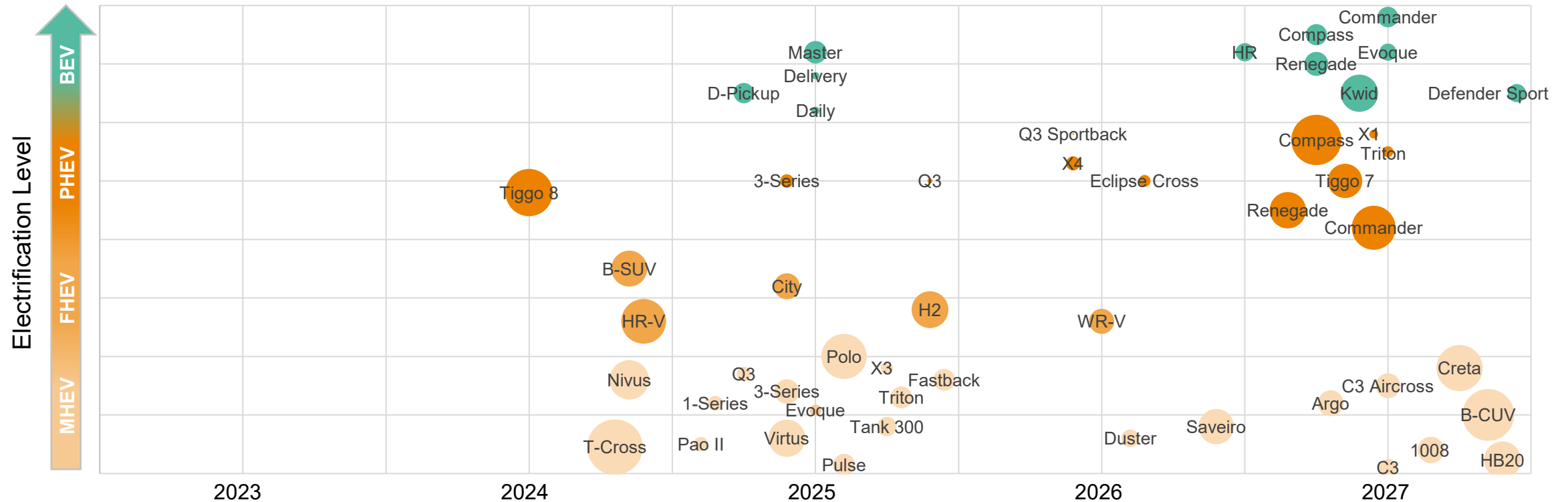
Source: S&P Global Mobility, SBPT March 2023

■ ICE ■ HYB (MHEV / FHEV / PHEV) ■ BEV

Focus on Brazil | Alternative propulsion will start to gain momentum with local production

Light Vehicle Production Cycle Plan by Propulsion System Design

(circle size = sales volume)



Source: S&P Global Mobility, SBPT March 2023

Contact us

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