

The global EV market: where to from here?

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& Africa**



Asia Pacific

Global EV sales by region

2011-2017e, thousand units

YoY
growth

+69%

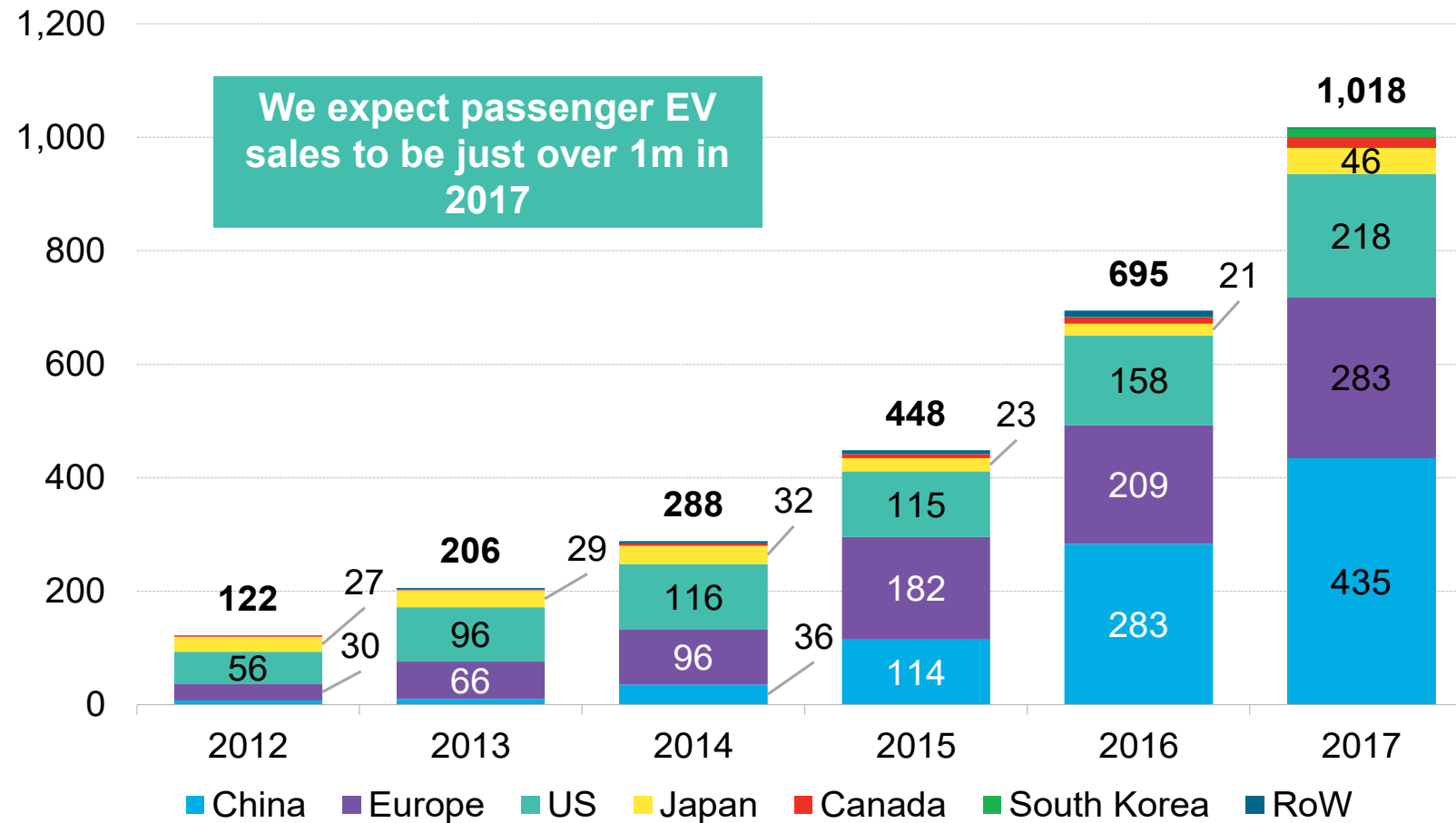
+40%

+56%

+55%

+47%

Thousand units



Note: Includes highway-capable PHEV and BEV passenger vehicles only; RoW is "Rest of World"

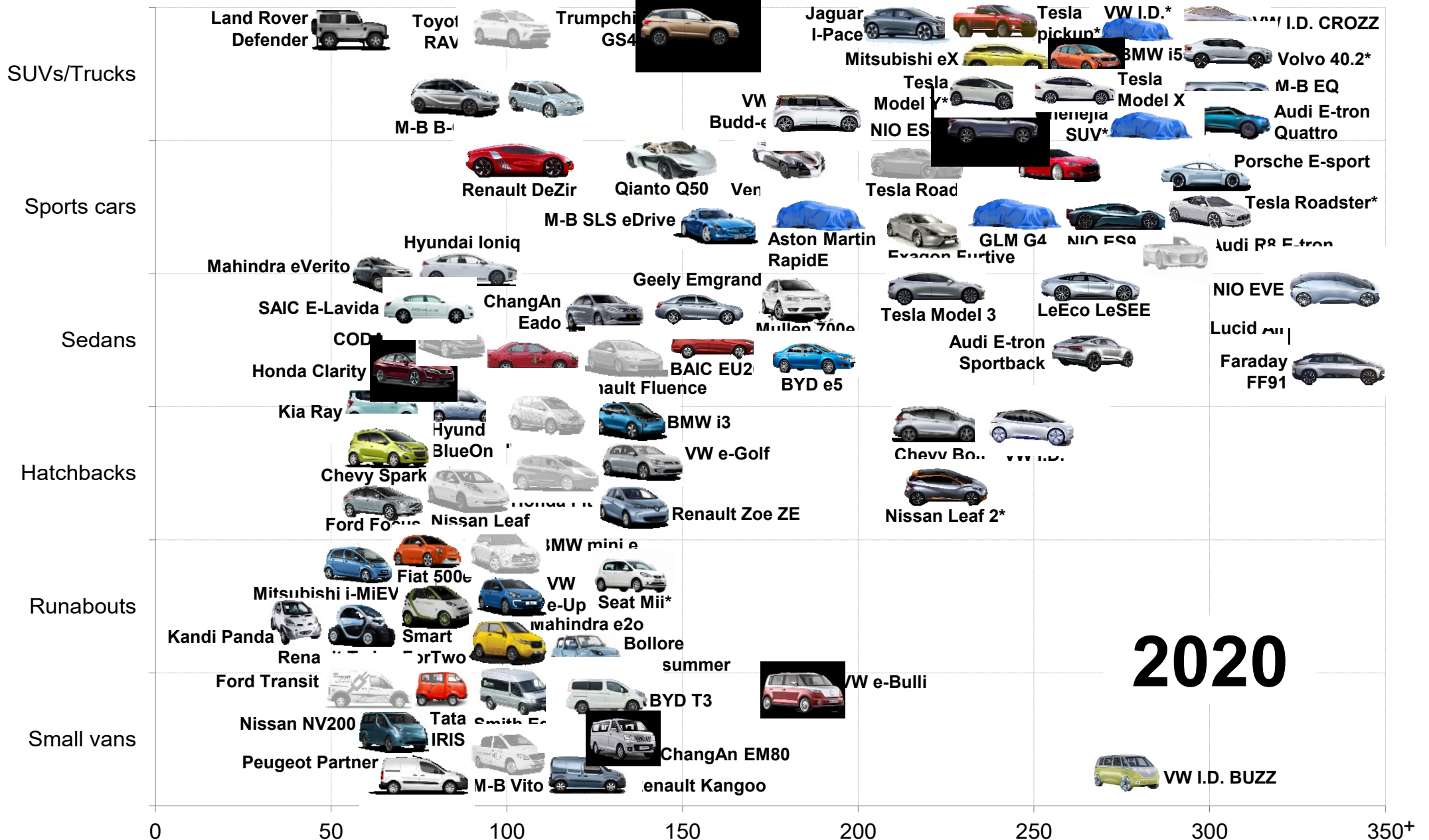
Countries where EVs were above 1% of total passenger vehicle sales



Year	Country
2014	
2015	
2016	
1Q 2017	

Source: Bloomberg New Energy Finance

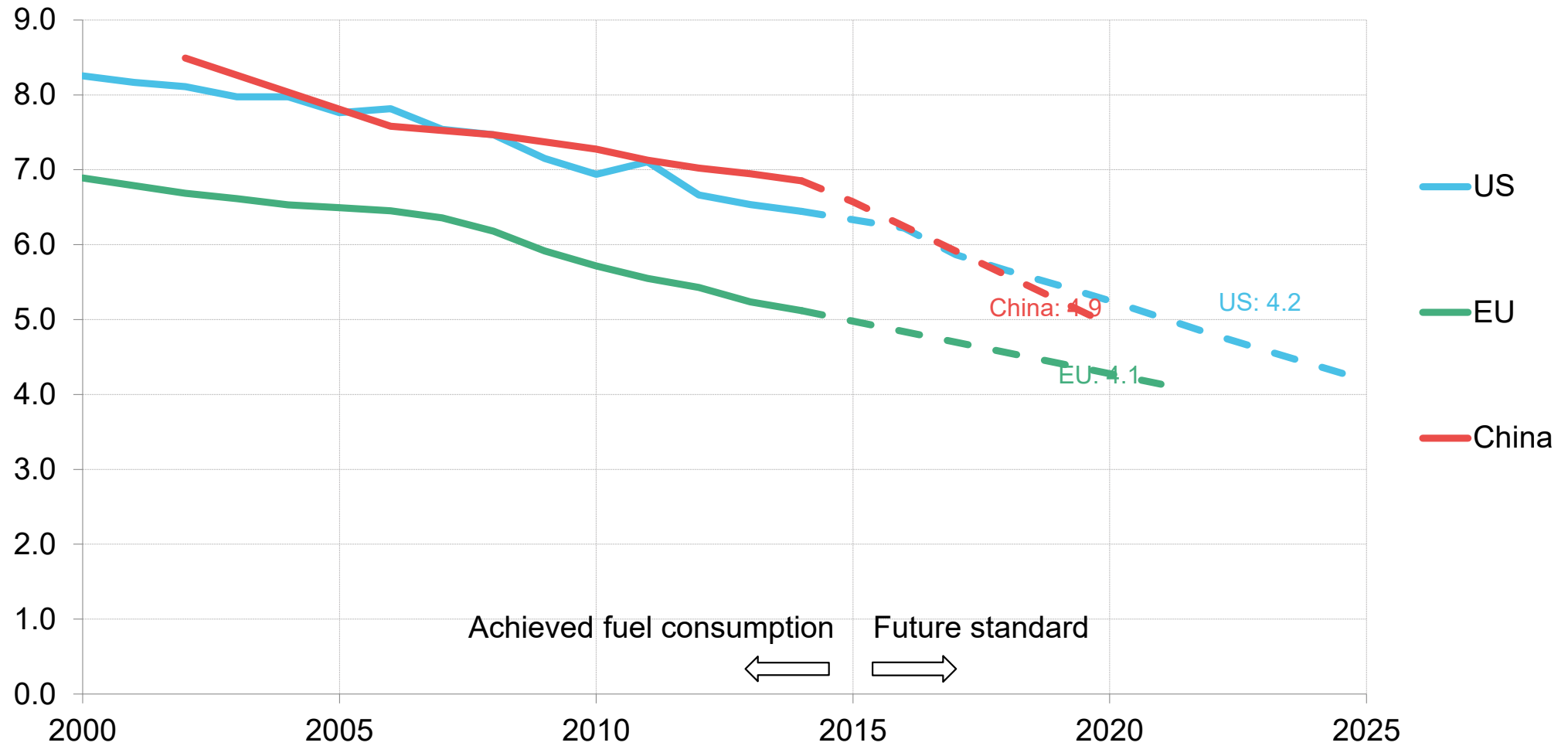
BEV model availability, 2008-20



Source: Bloomberg New Energy Finance, Images various. Notes: Not exhaustive. (*) Range is speculated.

Fuel economy regulations for US, China and Europe

L/100 km

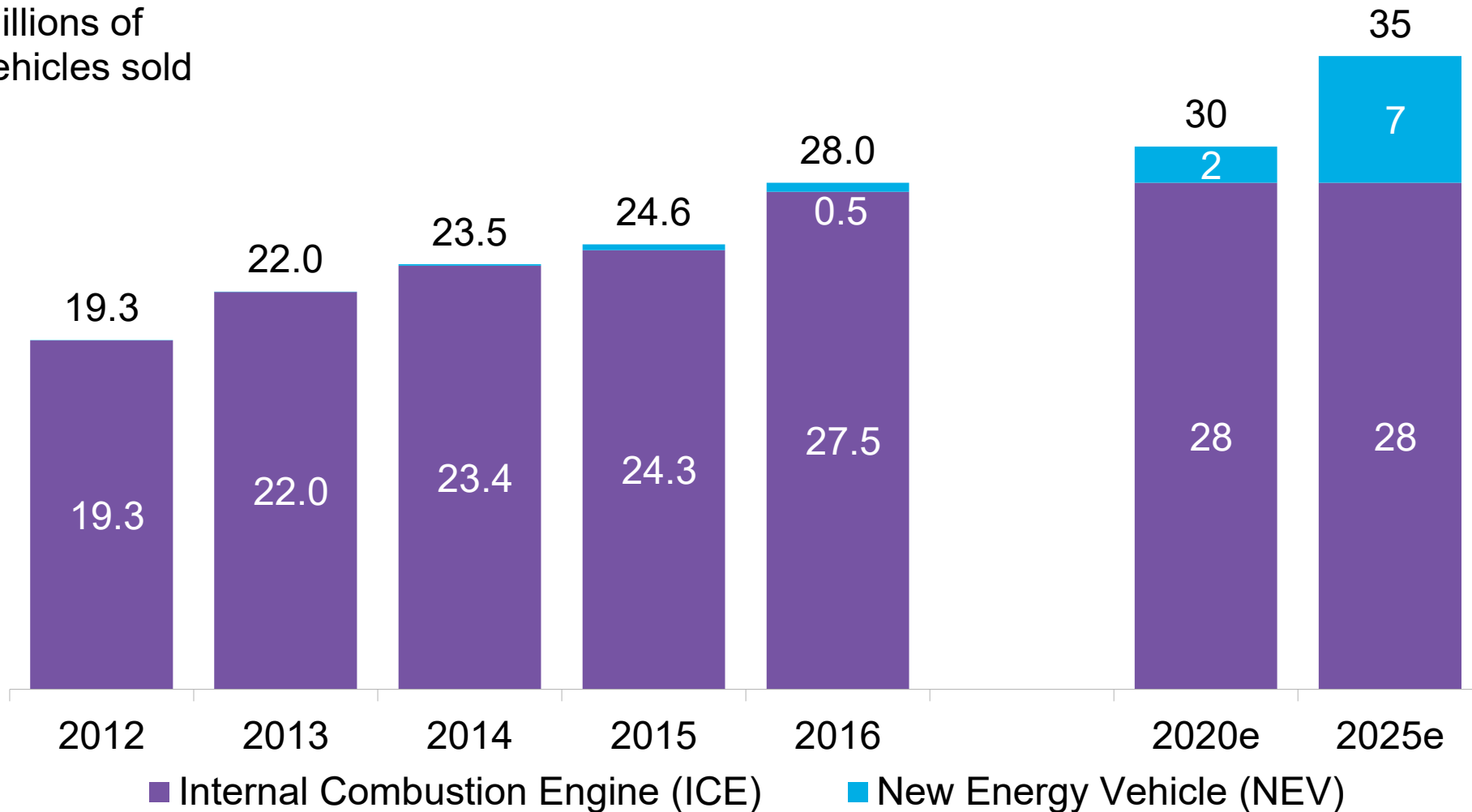


Note: The fuel economy targets have been normalised to the CAFE testing procedure. US targets are for passenger cars only.

Source: EPA, NHTSA, EU, ICCT

China's vehicle sales according to the recent 2025 plan

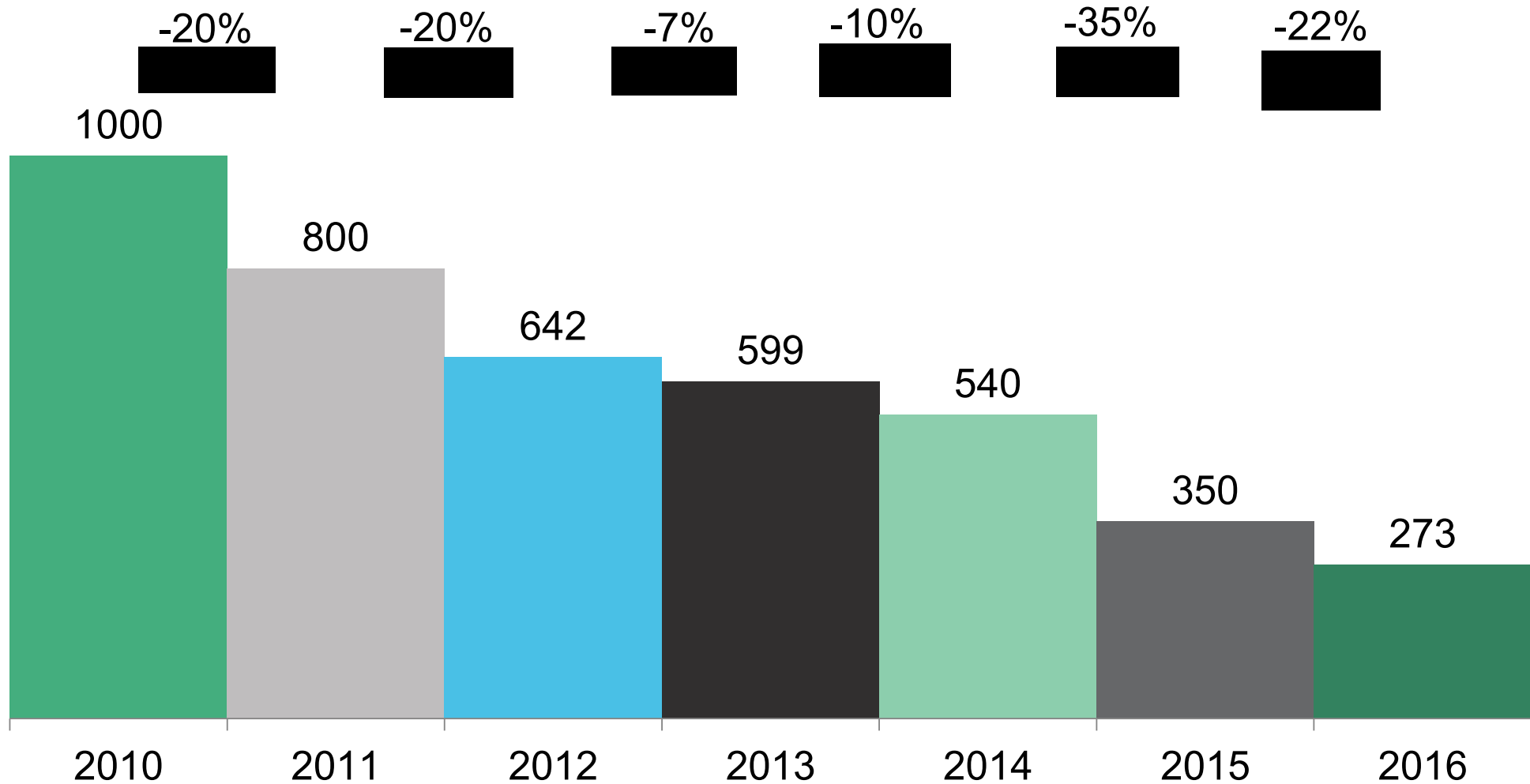
Millions of vehicles sold



Source: China Automotive Information Net, Bloomberg New Energy Finance

BNEF 2016 battery pack price survey results, 2010-2016

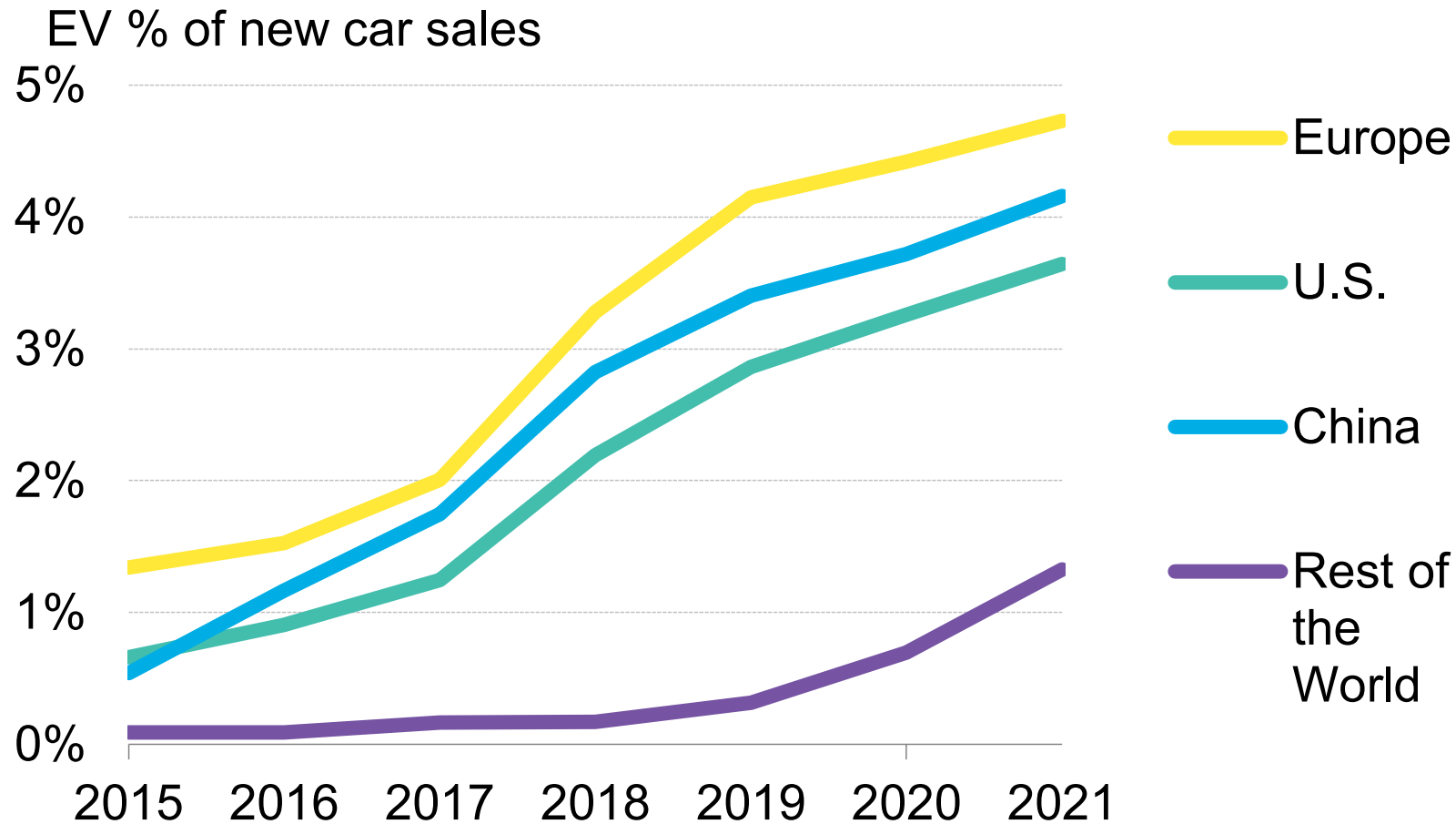
(\$ per kWh)



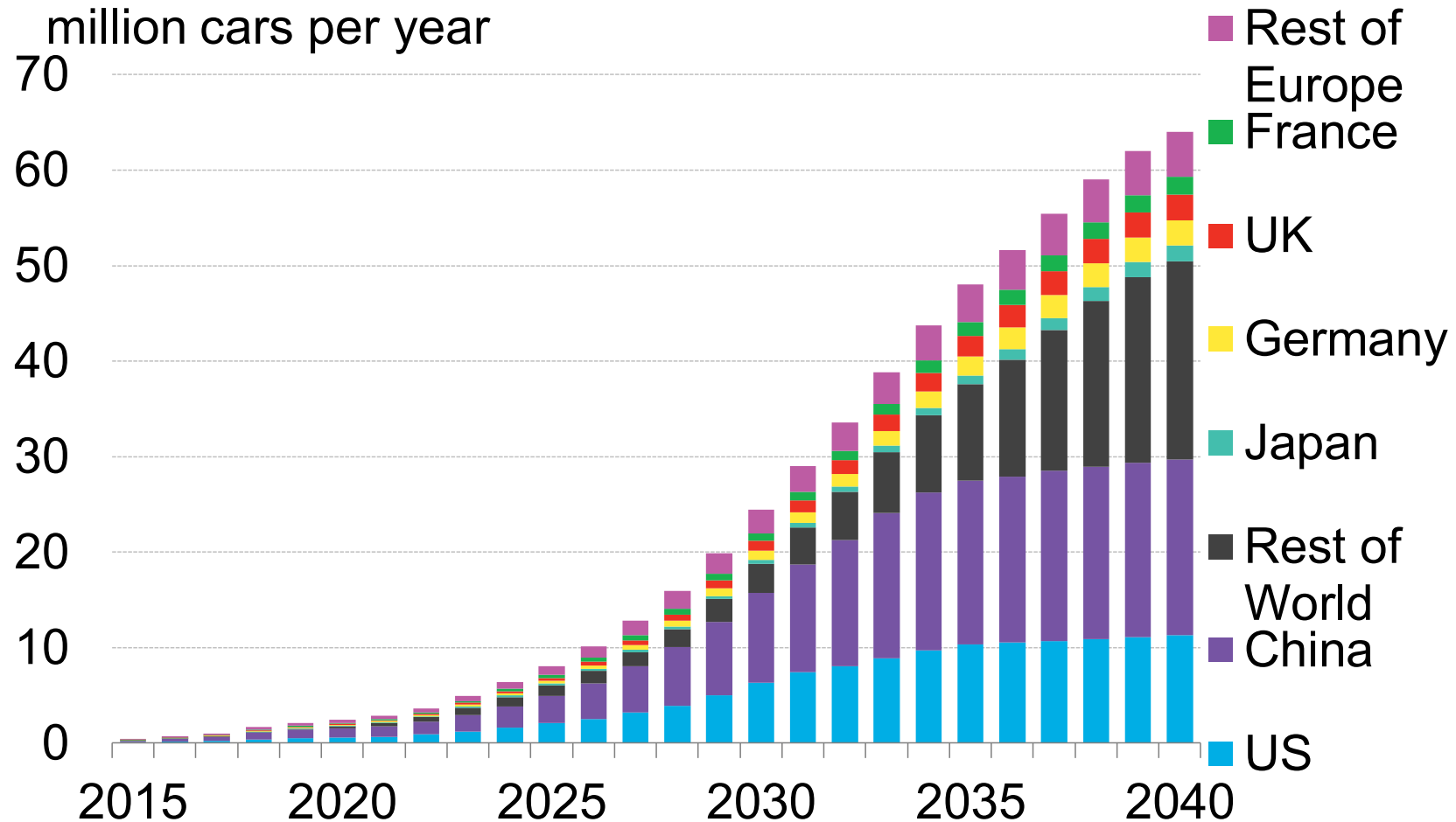
Notes: This includes cells plus pack prices. For years where there were two surveys, the data in this chart is an average for the year.

Source: Bloomberg New Energy Finance

Short term EV sales forecast

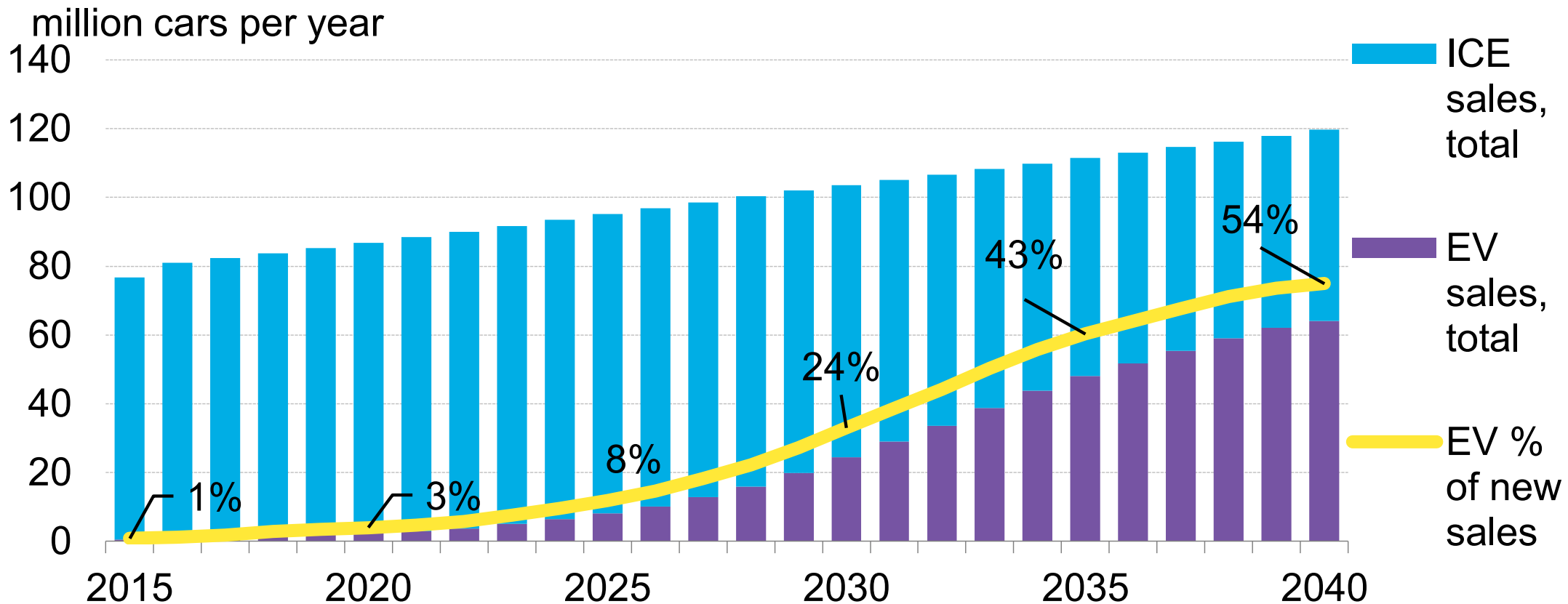


Long term EV sales forecast to 2040



Source: Bloomberg New Energy Finance

Long term EV sales forecast to 2040



Source: Bloomberg New Energy Finance

Main factors that could derail global EV sales growth

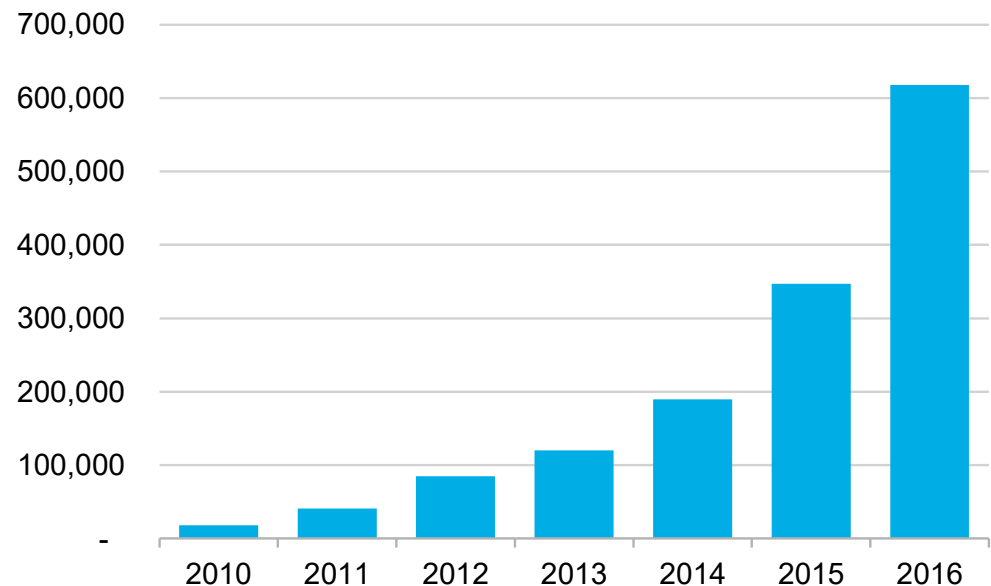
Area	Likelihood	Impact
Big policy changes in the EU, U.S. or China	Medium	High
Slowdown in lithium-ion battery price declines	Low	High
Mass market interest falls flat	Medium	High
Major technology failure	Low	High
Oil prices fall further	High	Low
Shortage of charging infrastructure	Medium	Medium
Trouble at Tesla	N/A	Medium

For EV energy market impacts: think small, not big



CHINA'S LOW SPEED EV MARKET SHANDONG PROVINCE EXAMPLE

- Typically two-seater
- Top speed: 60km/h
- Cost: \$3,000-7,000
- Unsubsidized, unregulated and growing very rapidly
- Template for emerging economies?



India aiming for all-electric car fleet by 2030, petrol and diesel to be tanked

PTI | Updated: Apr 30, 2017, 06.26 PM IST

✉ 🖨️ A- A+



HIGHLIGHTS

- India is looking to have all-electric car fleet by 2030. Idea is to no

Source: Times of India, Shandong Motor Vehicle Industrial Bureau, Bloomberg New Energy Finance, Mitsubishi



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