

EV Growth Accelerating in Emerging Markets



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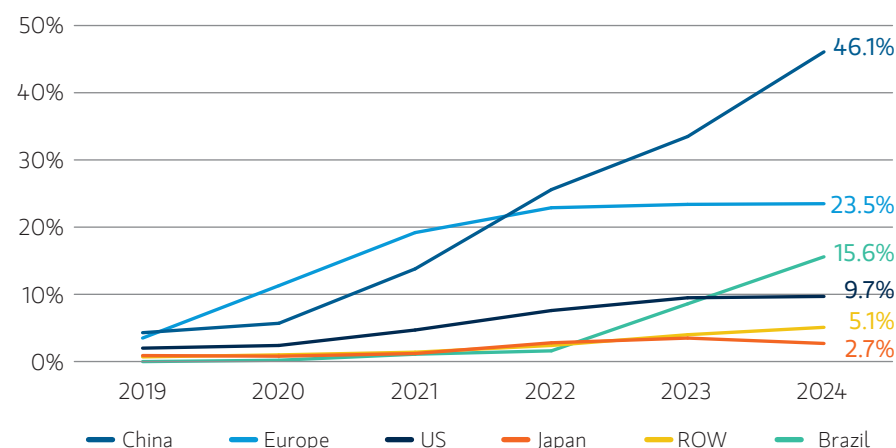
The race for electric vehicle (EV) leadership is shifting gears. In a world increasingly shaped by protectionism and tariffs, the short-term outlook for EVs may seem uncertain. Yet, much like the hum of an electric motor, the EV transition is quietly accelerating in emerging markets (EMs). Driven by policy support, innovation and affordability, EV models from EM manufacturers are offering an increasingly attractive value proposition to consumers, particularly to those in other EMs.

Although Tesla popularized the modern EV, emerging market automakers—especially in China—are leading the next wave of adoption by focusing on lowering costs. In 2024, China's sales penetration of battery EVs (BEV) and plug-in hybrid (PHEV) models rose to 46% of new car sales, far ahead of Europe (24%) and the U.S. (under 10%) - (Display 1).

DISPLAY 1

China Powering Ahead in Electric Car Race

Battery EV and plug-in penetration of new car sales (%)



Source: BNEF. Data as of December 2024.

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The U.S. is beset by high prices, patchy infrastructure and limited incentives. With the average EV price hovering around \$55,000, the U.S. EV market is far removed from the sub-\$30,000 sweet spot typically considered “the largest and most competitive segment.”¹ EV innovation had already begun to slow before the current trade war was launched by the Trump administration. Today, it remains mired in policy uncertainty while EMs quietly surge ahead.

China Is Leading the Charge

In China, it is a different story. While government incentives and industrial policy were important in kickstarting the sector in its early days, momentum is now driven by economic factors. Domestic automakers account for 90% of EV sales, underscoring the growing competitiveness of local brands. Leading original equipment manufacturers are offering vehicles that combine innovations such as fast charging, sophisticated user experience and self-driving capability with mass market affordability. New EVs are on average 17% cheaper than internal combustion engine (ICE) models.² Lower fuel and maintenance costs have made EVs a practical option for Chinese consumers.

With 85% of global battery manufacturing capacity, China has established formidable cost advantages. Innovation, economies of scale and declining lithium prices have pushed battery costs, which make up 30-40% of an EV's unit

cost, below \$100/kilowatt hour—the threshold for EV-ICE cost parity without additional subsidies.

PHEVs are gaining ground as well, especially in areas with limited charging infrastructure. The combined BEV and PHEV adoption is contributing to projections that new EV market penetration will reach 80% in China by the decade's end.³ The rapid growth of EVs is also seen as a major contributor to slowing oil consumption in China, with the country's top oil refiner forecasting demand to peak by 2027.⁴

Going Global

In 2023, China surpassed Japan to become the world's largest vehicle exporter, shipping over 5 million passenger cars.⁵ Much of this growth came from EMs where EV sales, excluding China, have grown at an 84% compound annual growth rate over the past 5 years. In ASEAN markets, EV penetration stands at 6%, of which Chinese brands hold a 50% share. Thailand is the largest market in Southeast Asia, where EV sales tripled from 2022 to 2023, with Chinese models controlling around 80%. The same pattern of dominance holds for the Middle East and LATAM regions, accounting for 60% of the EV market in Israel and 75% in Brazil.⁶ Anecdotal evidence from these regions suggests growing consumer acceptance and comfort with Chinese EVs.

EV Dreams to Dominance

Chinese giant BYD (Build Your Dreams) leads globally with 23% EV market

share, offering an affordable and diverse product lineup of BEVs and PHEVs. BYD's competitive edge comes from its ability to combine innovation with low costs, driven by vertical integration—manufacturing 65% of required direct materials in-house—and breakthrough technologies. Earlier this year, the company unveiled new charging technology, reportedly 4x faster than Tesla's Supercharger.⁷ BYD, which produced 4.1 million units last year, is expanding production at a pace and cost unmatched by peers (Display 2).

While BYD controls more than 30% of China's EV market, the company is looking at EM countries for its next stage of growth. BYD nearly doubled its EV exports in 2024 to 417,000 vehicles from a year earlier and plans to boost this by another 90% in 2025.⁸ To achieve this target, BYD has opened plants in Thailand and Uzbekistan with additional capacity coming online in Brazil, Turkey and Hungary, designed to mitigate EU tariff pressures.

Korea's EV Roadmap in the U.S.

However, the one place BYD will not be selling is in the United States. Facing a current tariff rate of 247.5%, Chinese EVs are effectively locked out of the U.S. With Chinese brands sidelined, South Korea's Hyundai Motor Group is driving the affordable innovation segment, especially through Kia, growing market share from almost zero in 2014 to 10% in 2024.⁹ Its competitive advantage lies in flexible production and high levels

¹ *Electric Car Wars: Who Will Win The Battle For The \$30,000 EV?* – Investor's Business Daily – August 9, 2024.

² ASKBNEF: Electric Vehicles and Charging in 2025 webinar.

³ BNEF EV Outlook.

⁴ *China's oil consumption to peak by 2027, says top refiner Sinopec* – Reuters – December 19, 2024.

⁵ China Association of Automobile Manufacturers.

⁶ BNEF.

⁷ *A Revolution Is Coming To EV Charging And Tesla Looks Like Missing Out* – Forbes – March 29, 2025.

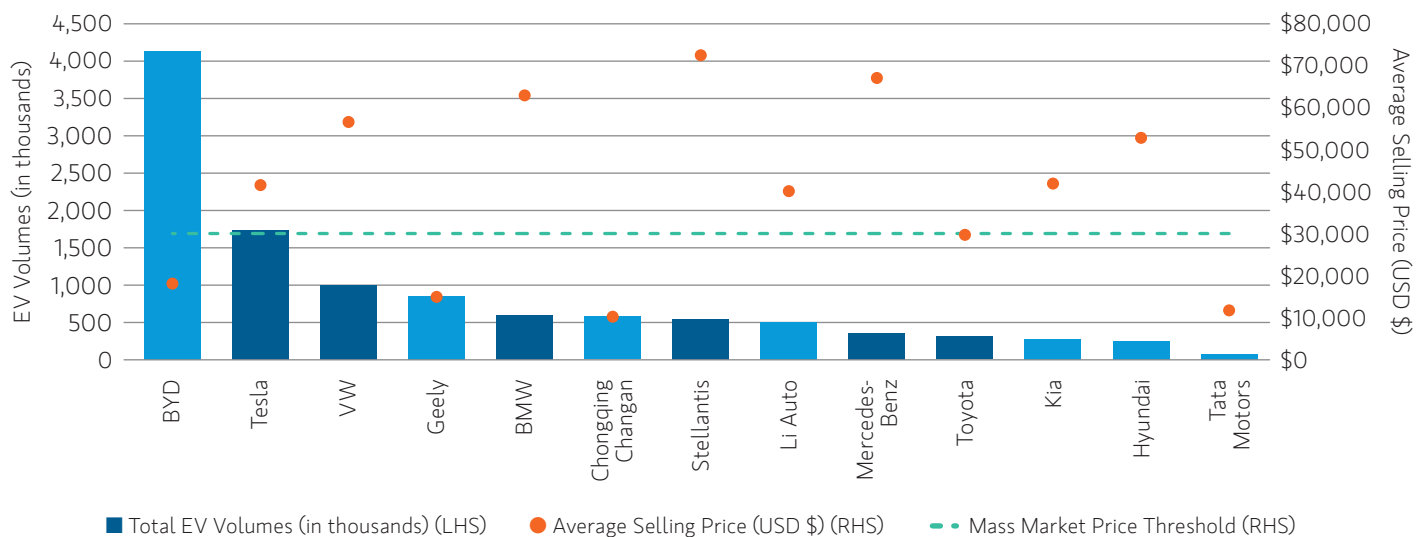
⁸ Company data.

⁹ Company data. BNEF.

DISPLAY 2

Affordability Will Be the Key Differentiator

Companies aim for \$30,000 EVs



Source: Company data, MSIM estimates. Note: Actual selling prices may vary and are influenced by several factors including but not limited to regional differences, dealer pricing, local taxes and fees and government incentives.

of automation. Hyundai invested early in the development of its innovative EV-dedicated platform, eGMP, which enables manufacturing of 10 different models on a single production line.

In 2025, Hyundai plans to grow its presence in both PHEVs and BEVs through sub-\$40,000 models, such as Kia EV3 and EV4, to target the U.S. mass market. It already produces in the U.S. and plans to invest another \$21 billion through 2028 to increase production and hedge itself against tariffs.¹⁰

The Road Ahead

Emerging markets EV manufacturers are driving affordable innovation at scale. EM governments view EVs as a strategic opportunity to attract manufacturing investment, enhance energy security and advance long-term decarbonization goals.

While protectionist policies offer short-term relief, they fail to fix core challenges—higher costs, slower adoption and an uncertain regulatory

landscape. Meanwhile, EMs are forging ahead with their own agency.

Over a century ago, Ford's Model T revolutionized the auto industry by making cars for the masses. Today, Detroit is passing the baton to China, Korea and other EMs who are powering up the reinvention of the affordable modern car.

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¹⁰ Bloomberg. Company data.

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