

The EU's Electric Vehicle Industry

Squeezed by China and the United States

- Europe's electric vehicle industry is being squeezed by China's state-backed EV promotion policies and the rising protectionism in the United States at a time when Brussels is seeking to phase out new petrol and diesel cars to meet its climate neutrality goals.
- These geopolitical tensions are forcing EU policymakers and carmakers to evaluate options to mitigate or reduce their exposure to these pressures.

The EU's automotive industry, a key driver of the continent's economy, including its growing EV sector, is facing mounting pressure from two geopolitical forces: aggressive, state-backed competition from China and rising protectionism from the United States.

The EU's battery electric vehicle (BEV) market share grew from 1.9% in 2019 to 13.6% in 2024.¹ Although Europe has traditionally been a challenging market for foreign carmakers, the number of Chinese-manufactured BEVs registered in the EU surged from 0.4% to 19.5% during this period.²

In 2022, the EU imported 314,000 Chinese BEVs—63% of its car imports from China—while exporting 17,000 to China. By contrast, 112,000 EU BEVs were shipped to the United States in 2024, representing 15% of the bloc's car exports. Imports of U.S.-made BEVs were nearly 19,000, or 11% of total U.S. car imports.

The Chinese model of state-backed competition

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Beijing invests heavily in its EV industry, providing an estimated \$230 billion in rebates, sales tax exemptions, infrastructure subsidies, and research and development support between 2009 and 2023.³ In 2024 alone, the Chinese conglomerate BYD received \$527 million.⁴ This robust support allows Chinese EV makers to undercut EU prices.

The government champions the national industry, which fosters domestic competition and leads to improved EV quality and lower prices.⁵ Chinese EVs sold domestically are two to three times cheaper than those sold abroad.⁶ BYD's Seagull model, for instance, launched at \$7,765 — a price EU EV carmakers cannot match.

Chinese firms dominate the battery supply chain as well. They control a significant portion of the global processing of essential raw materials, such as

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lithium and cobalt, and the manufacturing of finished battery cells. This gives Beijing significant leverage and leaves European firms dependent on their top competitor for the most critical EV component.

As part of the government's Made in China 2025 strategy, China has been pursuing a domestic industrial policy to manufacture more high-value goods like EVs. The country has more than 200 EV manufacturers that produce more cars than what is needed to meet domestic demand, resulting in a surge of exports to find foreign buyers.⁷ Chinese exports to the EU rose from 1% in 2019 to more than 50% in 2023.⁸ More than half of Spain's BEV imports are from China.⁹ In Germany and France, Chinese BEVs represent 16% of the market.¹⁰ At the European level, BYD surpassed Tesla in sales for the first time in April.¹¹ BYD has also announced plans to release low-cost compact cars in Europe, which will further accelerate its growth in the region. This is notable because the transition from petrol to EVs in small cars has taken longer due to tight profit margins and the challenge of making cheaper versions, given the high price of batteries.¹²

Chinese firms are also expanding their influence and presence in Europe. In 2024, Hungary, Italy, and Poland signed agreements with China that emphasized their support for Chinese investments in the EV sector, and the French government said that Chinese automakers like BYD were welcome in the country.¹³

Chinese firms are acquiring European car companies and making significant EV-related investments in the region. Zhejiang Geely Holding Group, a Chinese car conglomerate, acquired Swedish carmaker Volvo Car Group in 2010. It also holds a majority stake in Polestar, another Swedish car manufacturer. BAIC Group, a Chinese company, became the largest stakeholder in German carmaker Mercedes-Benz Group in 2022. Hungary, the first EU country to receive significant Chinese EV-related FDI, is hosting two EV plants and two EV battery plants.¹⁴ Chinese battery maker CATL and Dutch carmaker Stellantis announced a \$4.3 billion investment in Spain in December 2024.¹⁵ The Chinese company Chery and the Spanish company Ebro are also establishing operations at the former Nissan plant, located in the Barcelona Free Trade Zone, to manufacture vehicles. In January, the press reported that Volkswagen, a German carmaker, was in talks with Chinese companies about leasing or selling its underperforming factories.¹⁶

Taken together, these developments show that China is either hollowing out or slowly overtaking the European car industry.¹⁷

U.S. tariffs and subsidies

In March, President Trump announced a 25% tariff on all vehicle imports, including EVs from the EU, to protect U.S. carmakers. On 12 July, he said he would increase tariffs on all EU goods to 30% if the two sides do not reach a deal by 1 August. He also threatened to raise tariffs even higher if the EU retaliates. Funcas plans to assess the implications of the announcement in the months ahead. These tariffs make European cars less competitive and threaten to disrupt the deeply integrated transatlantic supply chain. The U.S. tariffs will

be particularly difficult for Germany, which accounts for over 70% of the EU's car exports to the United States.¹⁸

President Biden pursued a different approach to support U.S. carmakers. The Inflation Reduction Act (IRA), adopted in 2022, enhances domestic EV supply chains with subsidies and tax breaks for North American-made EVs and batteries. This law made European cars less competitive and created a powerful incentive for European firms to shift investments and production to qualify for the benefits. The IRA's EV incentives, however, are under threat as Trump has announced his opposition to them, and both houses of the U.S. Congress have included provisions in companion legislation to phase them out rapidly. Congressional Republicans are under pressure to adopt the legislation quickly, as it is a legislative priority for Trump's second term.

The EU's response: A diplomatic tightrope walk

To address the influx of cheap Chinese EVs, Brussels investigated Chinese EV subsidies and subsequently imposed provisional tariffs of up to 45% on these vehicles.¹⁹ Beijing's initial reaction was retaliatory, but both sides have returned to the negotiating table.

Despite the EU-imposed tariffs, Chinese carmakers pivoted to exporting cars that were exempt from the tariffs, like petrol-powered cars and hybrids.²⁰ They are also increasing their investments to relocate production in Europe to avoid the tariffs.

The EU is in negotiations with the United States to secure tariff relief. It had initially planned to respond to Trump's steel and aluminum tariffs by slapping tariffs of up to 50% on €21 billion of U.S. imports in April, but it postponed them to allow time for talks.

The response from EU carmakers to the tariffs has been mixed. Mercedes and BMW initially said they would absorb the costs, while Stellantis temporarily halted some North American production.

A crossroads for EU policymakers and carmakers

In response to the deluge of Chinese EVs, the EU does not have many good options. Firms could restructure their supply chains to reduce their reliance on China, although this is a costly, time-consuming, and probably unrealistic option. Funcas believes Brussels should acknowledge that it will be nearly impossible for European firms to compete with Chinese EVs and should therefore prioritize mitigating the impacts associated with the increased number of Chinese EVs in the EU market. To do so, Brussels and Member States could pursue Chinese greenfield investments in the EV sector that would help create jobs for EU citizens, facilitate the sharing of technological know-how, and limit market distortions and security risks.²¹

The EU could respond to the United States by imposing tariffs, but this tit-for-tat escalation would harm both economies and create uncertainty for the EV sector. Increasing manufacturing in the United States is another option, but it

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may come too late to take advantage of the IRA subsidies and tax breaks before they are phased out.

To pursue relief from the U.S.-China squeeze, European firms would be wise to ask Brussels, Washington, and Beijing to seek a more stable trade environment. They should also diversify into markets like Canada, Mexico, South Korea, and Japan.

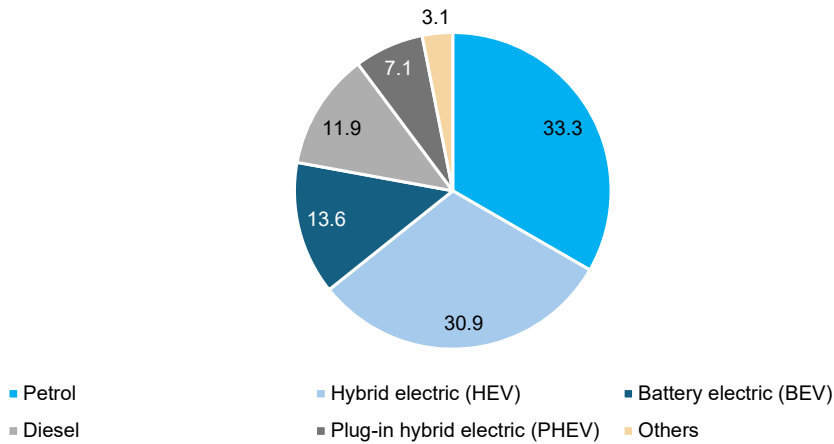
The EU's regulatory scheme regarding EVs is also in flux, which could dampen demand for EVs. The EU voted in 2022 to ban the sale of new internal combustion engines (ICE) vehicles by 2035 as part of its strategy to achieve climate neutrality by 2050. However, since then, Member States and the car industry have been successful in weakening the rules, including watering down emissions regulations.²² They may likely have further success later this year in weakening or reversing the ICE mandate. As well, the effort to reduce ICE, which was challenging from the beginning, is becoming increasingly unrealistic as EV market share is well below goals.

In any event, European Commission President von der Leyen has agreed to review the regulation and is committed to simplifying regulations for European businesses to promote economic growth.

Another challenge for European EVs is the weak network of charging stations throughout the 27-member bloc and the deployment of charging stations is falling well below objectives. There is a significant correlation between the availability of public charging points and the sales of BEVs. Some of the countries with the most expansive charging networks also have some of the largest market shares for BEVs.²³ Brussels and Member States could increase collaboration with the private sector and energy providers to expand charging networks and to reduce EV range anxiety.

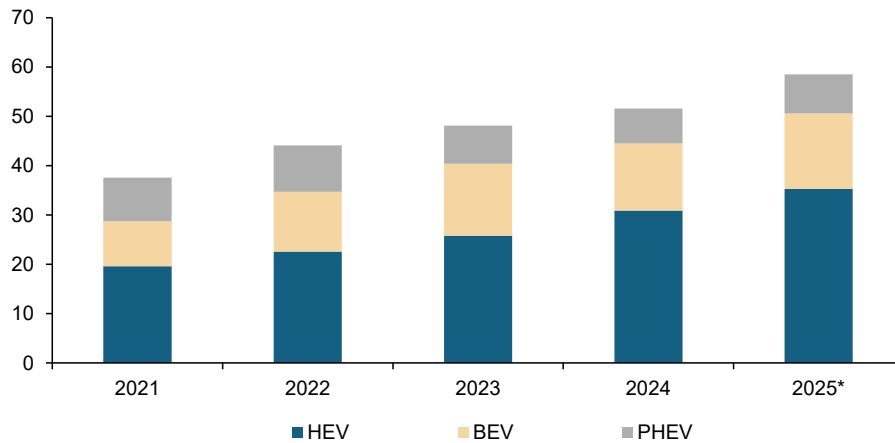
The path forward will determine if the EU remains a global EV leader or becomes collateral damage in the U.S.-China geopolitical competition and the EU's campaign to stimulate economic growth.

EXHIBIT 3.0 – PERCENTAGE SHARE OF NEW EU CAR REGISTRATIONS BY POWER SOURCES IN 2024



Source: European Automobile Manufacturers' Association (ACEA).

EXHIBIT 4.0 – PERCENTAGE SHARE OF EVS REGISTERED ANNUALLY IN EUROPE, 2021-2025*

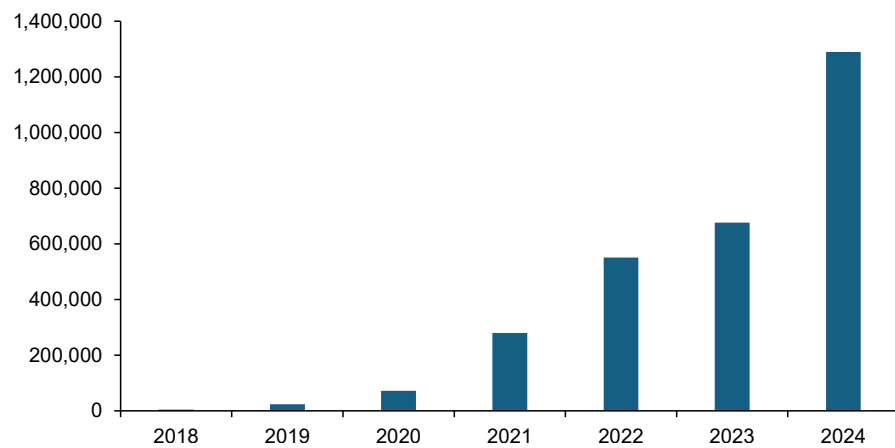


Notes: Europe includes the EU 27, Iceland, Norway, and Switzerland.

*2025 includes data from January to May.

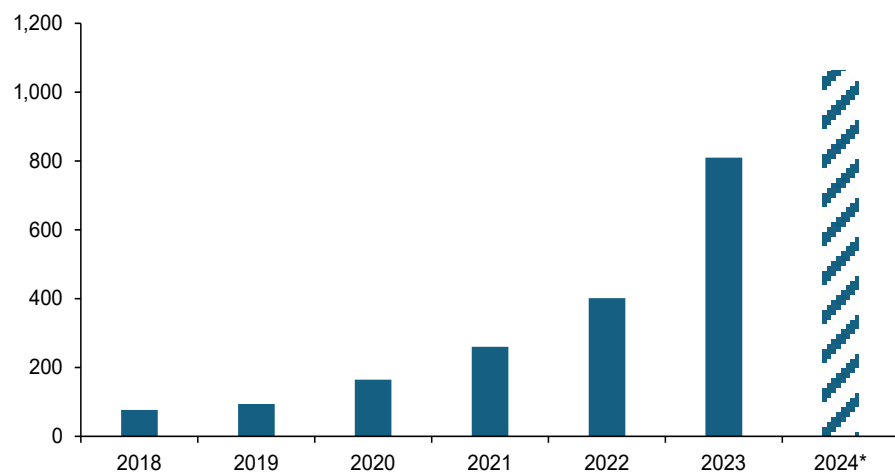
Source: European Automobile Manufacturers' Association.

EXHIBIT 5.0 – CHINESE EV EXPORTS TO THE EU, 2018-2024



Source: China Passenger Car Association (CPCA).

EXHIBIT 6.0 – CHINESE GOVERNMENT SUBSIDIES TO CATL (\$, MILLIONS)



Note: 2024 total is projected based on the January to June 2024 total of \$532 million.
Source: CATL.

Notes

- ¹ <https://www.acea.auto/pc-registrations/new-car-registrations-1-9-in-q1-2025-battery-electric-15-2-market-share/>
- ² <https://www.bde.es/f/webbe/SES/Secciones/Publicaciones/InformesBoletinesRevistas/BoletinEconomico/24/T4/Files/be2404-art03e.pdf>
- ³ [https://www.csis.org/blogs/trustee-china-hand/chinese-ev-dilemma-subsidized-yet-striking#:~:text=According%20to%20the%20annual%20reports%20of%20CATL%2C,in%20\\$208.9%20million%20in%20subsidies%20in%202023](https://www.csis.org/blogs/trustee-china-hand/chinese-ev-dilemma-subsidized-yet-striking#:~:text=According%20to%20the%20annual%20reports%20of%20CATL%2C,in%20$208.9%20million%20in%20subsidies%20in%202023)
- ⁴ <https://www.carscoops.com/2025/05/catl-got-over-500-million-in-state-subsidies-last-year/>
- ⁵ [https://www.csis.org/blogs/trustee-china-hand/chinese-ev-dilemma-subsidized-yet-striking#:~:text=According%20to%20the%20annual%20reports%20of%20CATL%2C,in%20\\$208.9%20million%20in%20subsidies%20in%202023](https://www.csis.org/blogs/trustee-china-hand/chinese-ev-dilemma-subsidized-yet-striking#:~:text=According%20to%20the%20annual%20reports%20of%20CATL%2C,in%20$208.9%20million%20in%20subsidies%20in%202023)
- ⁶ <https://www.coface.com/news-economy-and-insights/electric-vehicles-competition-between-china-and-europe-in-an-age-of-mobility-transition>
- ⁷ <https://edition.cnn.com/2024/04/24/business/china-ev-industry-competition-analysis-intl-hnk/index.html#:~:text=BYD%2C%20for%20example%2C%20is%20now,survive%20the%20fiercely%2Dcompetitive%20environment.>
- ⁸ <https://www.bde.es/f/webbe/SES/Secciones/Publicaciones/InformesBoletinesRevistas/BoletinEconomico/24/T4/Files/be2404-art03e.pdf>
- ⁹ <https://www.nytimes.com/2025/06/18/business/china-byd-cars-europe.html?smid=nytcore-android-share>
- ¹⁰ *Ibid.*
- ¹¹ <https://www.jato.com/resources/media-and-press-releases/byd-outsells-tesla-in-europe-for-the-first-time-as-registrations-surge-in-april>
- ¹² <https://www.ft.com/content/2ff8e7a7-7c96-4314-b201-25542ef299fc?shareType=nongift>
- ¹³ <https://www.piie.com/research/piie-charts/2024/europe-remains-open-chinese-investment-electric-vehicle-sector>
- ¹⁴ <https://www.piie.com/research/piie-charts/2024/europe-remains-open-chinese-investment-electric-vehicle-sector>
- ¹⁵ <https://www.investmentmonitor.ai/news/stellantis-and-chinese-ev-battery-maker-catl-to-invest-4b-in-spain/?cf-view>
- ¹⁶ <https://www.reuters.com/business/autos-transportation/chinese-buyers-interested-unwanted-german-volkswagen-factories-source-says-2025-01-16/>
- ¹⁷ <https://ecfr.eu/publication/electric-shock-the-chinese-threat-to-europes-industrial-heartland/>
- ¹⁸ <https://www.nytimes.com/2025/03/26/business/trump-auto-tariffs-europe.html>
- ¹⁹ <https://www.nytimes.com/2024/10/30/business/european-union-china-electric-vehicle-tariffs.html>
- ²⁰ <https://www.nytimes.com/2025/06/18/business/china-byd-cars-europe.html>
- ²¹ <https://rhg.com/research/terms-and-conditions-apply-regulating-chinese-ev-manufacturing-investment-in-europe/>
- ²² <https://www.politico.eu/article/why-eu-combustion-car-ban-is-in-trouble-greenhouse-gas-climate-change/>
- ²³ <https://www.acea.auto/figure/interactive-map-correlation-between-electric-car-sales-and-charging-point-availability-2023-data/#:~:text=Countries%20like%20Germany%2C%20the%20Netherlands,largest%20market%20shares%20for%20BEVs>