

In the automotive industry, the ramping up of electric vehicle production at French sites is improving the foreign trade balance

Over the past 20 years, the number of passenger cars assembled in France has slumped by more than half. Passenger car production has hovered around the symbolic one million mark since 2020, compared with an annual average of 1.7 million between 2015 and 2019. Although production volumes have remained relatively stable since 2020, there have been structural changes in production. In particular, the proportion of vehicles fitted with fully or partially electric powertrains has risen significantly. In 2021, 40% of vehicles produced had electric powertrains, but by 2025, this figure had risen to over 50%. In addition, electrification has gradually spread to other segments: although confined to city cars in 2021, it now includes family models. However, the sharp rise in electric vehicle production in France since 2021 has not been sufficient to meet domestic demand. In 2025, the number of new electric private passenger cars registered in France was 1.5 times higher than the number produced. This difference between “production” and “consumption” is offset by imports, mainly from Germany and, to a lesser extent, from China. However, electric passenger cars produced in France are not intended solely for the French market. Six out of every ten electric cars assembled in France are exported, mainly to Europe and in particular to the United Kingdom. Furthermore, 2025 saw a promising turnaround: after deteriorating significantly in 2023–2024, the trade balance for electric vehicles has picked up markedly, driven by the ramp-up in production of several models assembled at sites across France.

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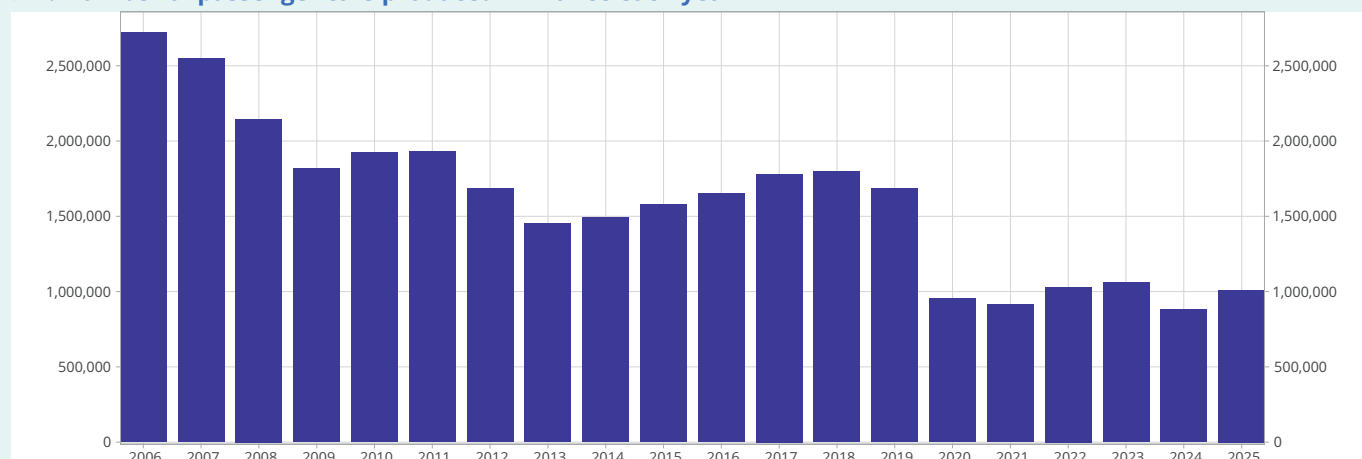
At the start of the 20th century, the American car market was divided equally between steam, petrol and electric vehicles. Electric vehicles were quiet, clean and appealed to city dwellers, while petrol and diesel models were more popular in rural areas (► [Matulka R., 2014](#)). Ford's introduction of assembly line production in 1908, followed by the electric starter in 1912, cemented the dominance of the petrol engine. A century later, the electric powertrain is once again emerging as a key factor in achieving the decarbonisation targets set out in France's 2020 National Low-Carbon Strategy.

Before and after the health crisis

For the past 20 years, the production of passenger cars in France has been in sharp decline (► [Insee, 2025](#)). Between 2006 and 2025, the number of passenger cars assembled

in France slumped by more than half (► [Figure 1](#)). Although there was an initial dip between 2008 and 2009 at the height of the financial crisis (► [Méot T., 2009](#)), the sharpest fall in production occurred during the health crisis. Between 2019 and 2020, the number of passenger cars produced fell by 43%, dropping from 1,683,000 to 952,000 in 2020. This decline over the last two decades is largely due to French production sites losing market share (► [Rignols E., 2015](#)). The rebound in production after the health crisis has remained modest, partly because vehicle sales in Europe remain significantly lower than in 2019, and partly because French plants have lost more market share (► [Iasoni and al., 2024](#)). However, the decline in passenger car manufacturing, as measured by the [Industrial Production Index \(IPI\)](#), is less pronounced than the decline in vehicle numbers, as the index takes into account the continuous improvement in vehicle quality over the period.

► 1. Number of passenger cars produced in France each year



Last point: 2025.

How to read it: 1,011,000 passenger cars were produced in France in 2025.

Source: monthly industry survey, INSEE.

Since 2005, despite a clear downward trend, there were a few short-lived upturns in production between 2009 and 2011, thanks to the boost in demand generated by the scrappage allowance scheme. Between 2014 and 2018, amid a macroeconomic recovery, passenger car production increased. The boom in the SUV segment over this period also paved the way for French manufacturers to successfully refresh their model ranges. The decline from 2020 onwards has been dramatic and has never really recovered.

Between 2021 and 2025, the number of vehicles assembled rose: 1,011,000 passenger cars rolled off the production lines in France in 2025, compared with 914,000 in 2021, an increase of 10.7%. With an average of 12 production sites in operation, the number of passenger car plants remained relatively stable over the period, with only one closure taking place in 2024.

This relatively modest increase in the number of vehicles produced nevertheless masks significant fluctuations. For example, after an increase between 2021 and 2023, the number of vehicles produced fell by 16.7% in 2024, before returning in 2025 to a level similar to that of 2023. Several factors explain this temporary slowdown in 2024: a slump in demand, rising production costs and supply chain issues at some plants.

However, production trends between 2021 and 2025 mask a major shift in the structure of French production. While the number of internal combustion engine (petrol and diesel) vehicles produced fell by 11.8% between 2021 and 2025, from 532,000 to 469,000 vehicles, the number of electric and hybrid vehicles (plug-in and non-plug-in) produced rose sharply (by 74.0% and 27.3% respectively).

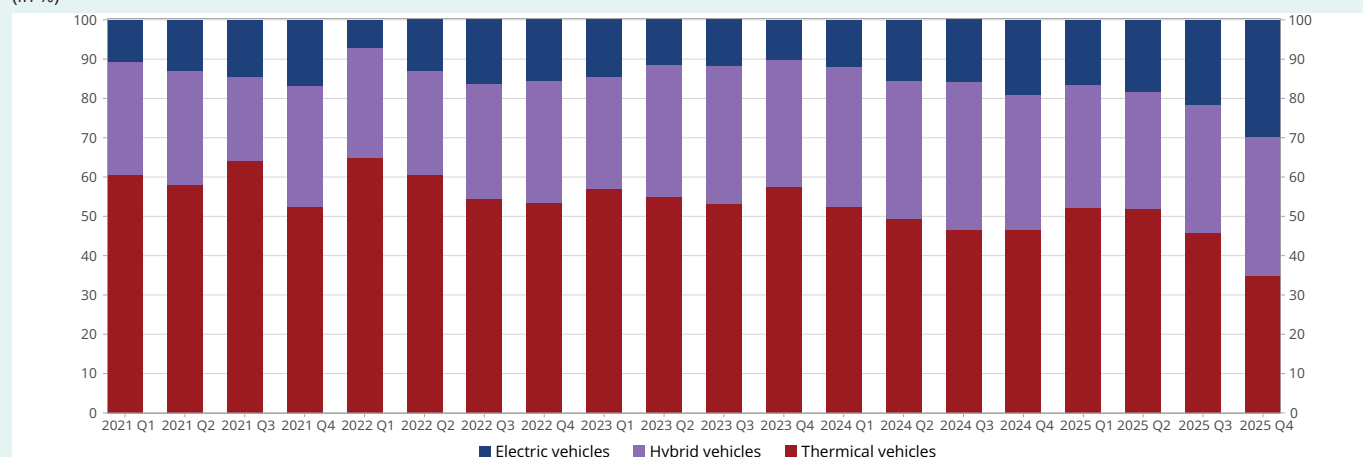
Adapting production capacity to regulatory changes

On 8 June 2022, a turning point came when the European Parliament adopted the Green Deal, which included a ban on the sale of CO₂-emitting vehicles from 2035 and set a target of a 55% reduction in greenhouse gas emissions by 2030. However, in view of the challenges posed by this transition, the European Commission scaled back the requirements set out in the Green Deal in December 2025. European manufacturers now have a target of reducing CO₂ exhaust emissions by 90%, down from the previous 100%.

In France, the 2019 Framework Law on Mobility (referred to as "LOM") and the 2021 Climate and Resilience Law also set targets for making public-sector and company vehicle fleets more environmentally friendly. General government must ensure that 50% of their vehicles are low-emission vehicles (emitting less than 50g of CO₂ per km) by 2022, rising to 70% by 2028. Companies with more than 100 vehicles, meanwhile, must meet a minimum quota for low-emission vehicles when renewing their fleets, with a phased implementation schedule running until 2030. The regulations were updated on 1st March 2025 with the introduction of an annual incentive tax (TAI) designed to encourage private companies with a fleet of more than 100 light vehicles to purchase low-emission vehicles. Furthermore, public incentive and penalty schemes were strengthened in Q1 2025, maintaining constant pressure on manufacturers to transition to electric and hybrid models (► Collet R., 2025).

Driven by these new laws and growing consumer demand for electric vehicles, the French manufacturing sector has had to adapt. In 2025, 54% of passenger cars manufactured

► 2. Changes in the share of each type of powertrain in passenger car production in France (in %)



Last point: Q4 2025.

How to read it: 29.7% of passenger cars manufactured in France in Q4 2025 were electric.

Source: monthly industry survey, INSEE.

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in France were equipped, either fully or partially, with an electric motor, compared with 42% in 2021. This shift towards electric production continued to accelerate throughout 2025, peaking at 65% in Q4 (► [Figure 2](#)).

Production of electric vehicles is growing at a faster rate than that of hybrid vehicles. While electric vehicles accounted for 13.6% of passenger car production in 2021, this figure rose to 21.4% in 2025. The share of hybrid vehicles (both plug-in and non-plug-in) rose from 28.0% to 32.2% over the same period.

An expanding range

The electrification of vehicle fleets goes hand in hand with a refresh of the range of vehicles available to meet consumers' needs. Some of the main barriers to buying an electric vehicle include high purchase costs, insufficient charging infrastructure and "range anxiety" linked to limited battery capacity (► [Mesquita A. and al., 2025](#); ► [Hladik G., 2024](#)).

These constraints initially drove the electrification of "compact city cars" (a category encompassing city cars and saloons), which in 2021 accounted for four in every five electric vehicles rolling off French production lines (► [Figure 3](#)). The arrival on the market of "family" models (a category encompassing SUVs and people carriers), designed for a new type of customer seeking more space, has sparked a second wave of growth in electric vehicles. These models offer greater range and also benefit from an expanding network of charging points (► [Danikowski J., 2025](#)).

Unlike "compact city cars", which are primarily designed around electric powertrains, "family" vehicles are mostly variants of existing internal combustion engine models.

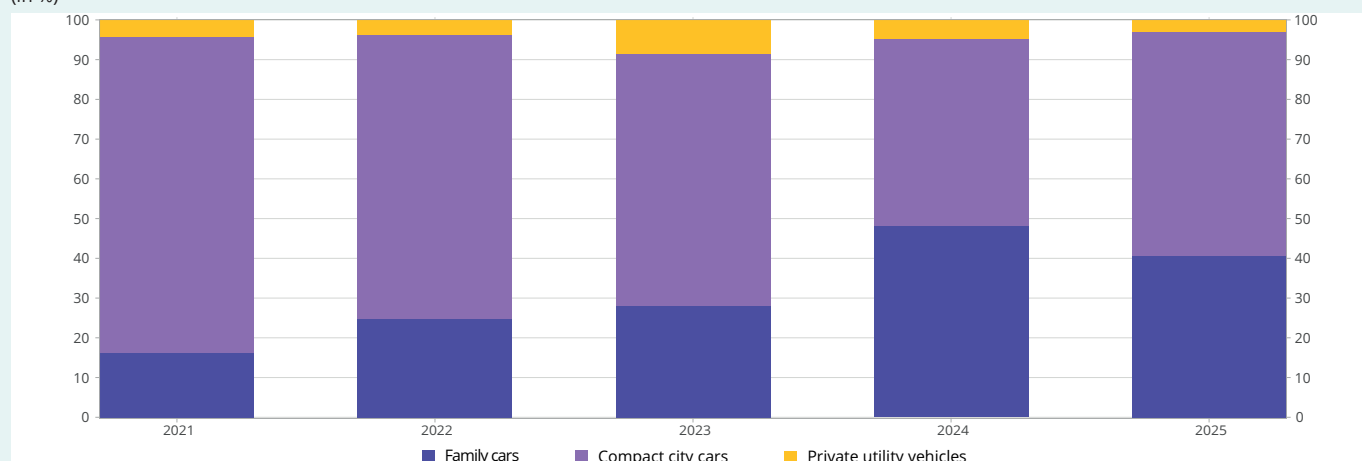
There has been a sharp rise in the number of these electric "family" cars, from 16% of all electric vehicles in 2021 to nearly 50% by 2024. However, the trend reversed towards the end of 2024 with the launch of new electric "city compact" models, leading to a revival in the production of this type of vehicle in France. The share of electric "light commercial" vehicles has remained relatively stable over the period, at less than 10% of electric passenger vehicles produced in French plants.

This diversification of electric vehicles has boosted their positive contribution to car production, as measured by the IPI. To compile the index, INSEE takes the number of vehicles assembled for each model and each engine type, and then weights these figures by the value of the model-engine combinations. As a result, the IPI for passenger car manufacturing rose by 12.1% between 2021 and 2025, slightly more than the number of cars assembled: the increase in electric vehicles (contribution of +12.6 points) and hybrid vehicles (+4.2 points) more than offset the decrease in internal combustion engine vehicles (contribution of -4.7 points). All in all, the electric vehicle production index rose by 91.4% between 2021 and 2025, while the number of electric vehicles assembled increased by 74.0% over the same period. The difference between these two trends is largely attributable to the growing share of family cars among electric vehicles assembled in France over the period.

A comparable share of electric vehicles produced and sold in France

In 2025, more than 330,000 new electric passenger cars were registered in France. This equates to 19.9% of all passenger cars registered that year. In four years,

► 3. Changes in the share of each body type in electric passenger car production in France (in %)



Last point: 2025.

How to read it: in 2025, electric passenger cars classified as "family cars" accounted for 41% of electric passenger cars produced in France.

Source: monthly industry survey, INSEE.

registrations of new electric passenger cars have therefore doubled, given that in 2021 they accounted for less than 10% of the passenger car market.

Electric vehicle production is therefore comparable to new electric vehicle registrations (21% of vehicles produced compared with 20% of new registrations, ► **Figure 4**). In Q4 2025, the rate of electric vehicle production exceeded the rate of registrations, with 29.7% of vehicles produced being electric, compared with 24.3% of new registrations for electric passenger cars.

We have to go back to 2021 to find a similar difference; that year was characterised by high production levels of electric city cars, some of which were earmarked for export, but production of these models ceased in 2023. The launch of new models at French plants in the years that followed therefore breathed new life into electric vehicle assembly in France.

Despite this increase in production, France is still a net importer of electric vehicles. In 2025, the number of new electric passenger cars registered was 1.5 times higher than the number produced (216,000 electric passenger cars produced compared with 331,000 registered). The shortfall continues to be largely met by imports of vehicles assembled at production plants outside France.

However, the gap is closing fast. While the difference between electric vehicle imports and exports stood at a deficit of around 20,000 vehicles per quarter during the 2021–2022 period, it rose to around 50,000 per quarter during the 2023–2024 period, before narrowing significantly in 2025. As a result, France's coverage ratio for electric vehicles reached 53% in 2025, compared with 33% a year earlier (► **Figure 5**).

Imports mainly from Germany and China, with exports remaining within Europe

Despite a trade deficit, French plants produce a large proportion of their electric vehicles for export to other countries (► **Figure 6**).

Of the 21% that electric passenger cars account for in total production, 37% were sold on the French market. As a result, by 2025, French production accounted for a quarter of domestic registrations of electric passenger cars. However, the bulk of production – 63% – was sold abroad.

The vast majority of electric vehicles manufactured in France remain on the European continent: only one in fifty leaves Europe. The main export market is the United Kingdom, with nearly a quarter of all electric vehicle exports going there (► **Figure 7**).

Imported vehicles also come mainly from mainland Europe (► **Figure 8**). In fact, more than two-thirds of the electric vehicles imported into France in 2025 came from a European country. The largest source was Germany, which alone accounts for a third of the electric passenger cars imported into France in 2025 (► **Figure 9**). German brands, together with the gigafactory that opened in Germany in 2022, designed to supply electric vehicles across the European continent, have positioned the country as a major player in the production and supply of electric vehicles.

Outside Europe, China accounted for more than one in five electric passenger cars imported into France in 2025. This is partly due to the manufacturing practices of certain Western manufacturers, with imported vehicles' country of origin not always reflecting the manufacturer's

► **4. Comparison of the share of electric passenger cars in new vehicle production and registrations**
(in %)



Last point: 2025.

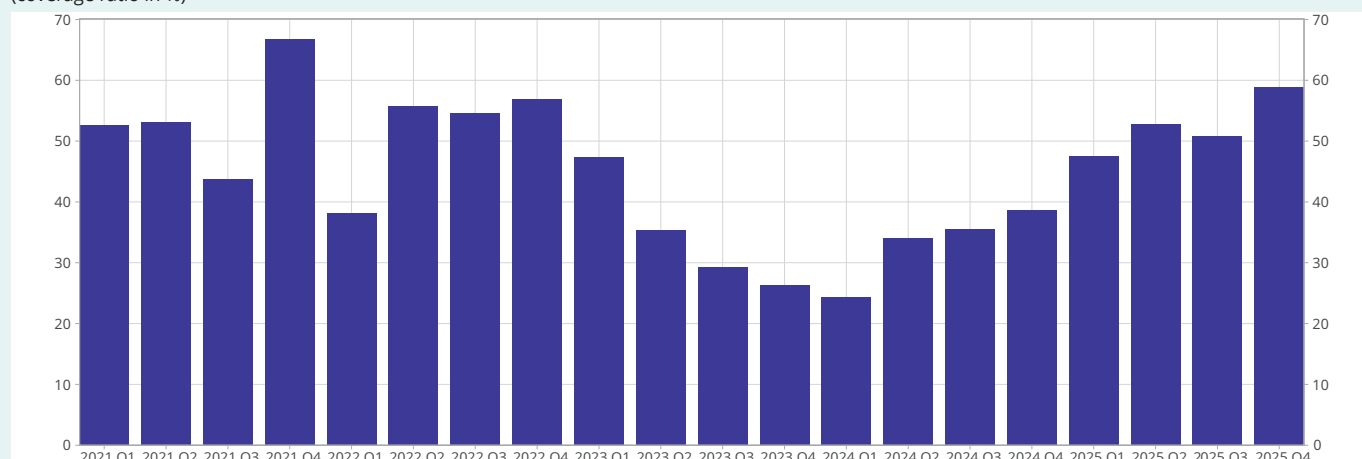
How to read it: in 2025, 20% of registered passenger cars were electric, compared with 21% of passenger cars produced.

Source: SDES and monthly industry survey, INSEE.

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► 5. Ratio of exports to imports of electric passenger cars

(coverage ratio in %)



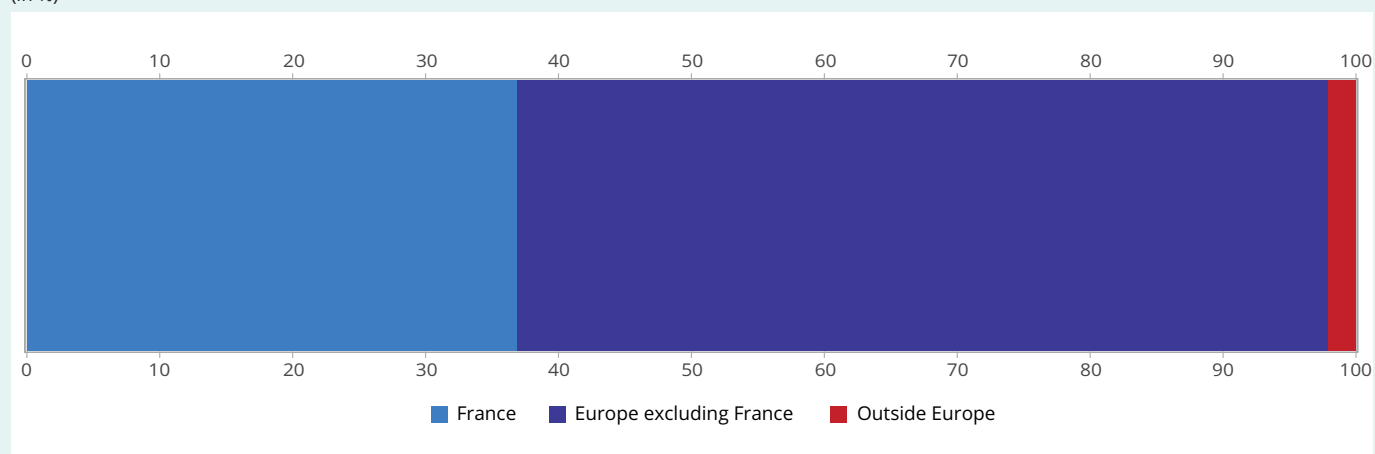
Last point: Q4 2025.

How to read it: in Q4 2025, electric passenger car exports represented 59% of imports by number of units.

Source: DGDDI - DSECE.

► 6. Destination of electric passenger cars manufactured in France in 2025

(in %)



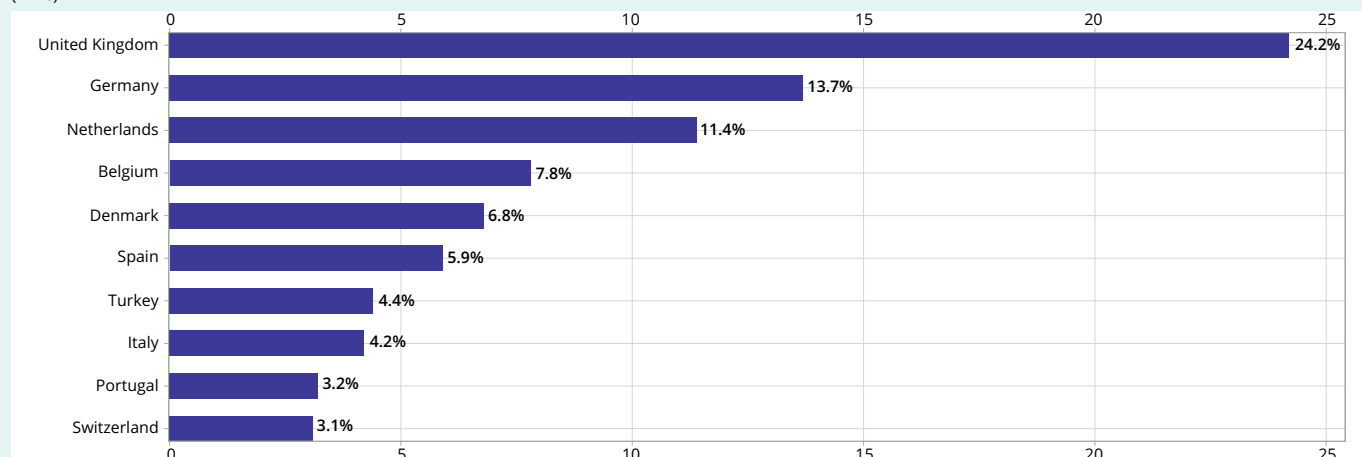
Period: 2025.

How to read it: in 2025, 37% of electric passenger cars manufactured in France were sold on the French market.

Source: monthly industry survey, INSEE.

► 7. Breakdown of electric passenger car exports by the top 10 destination countries in 2025

(in %)



Period: 2025.

How to read it: in 2025, 24% of electric passenger car exports went to the United Kingdom.

Source: DGDDI - DSECE.

home country. The share of electric vehicle imports from China has fallen sharply since 2023, following changes to the purchase bonus scheme, which now takes assembly location into account. This has affected both Chinese brands and brands from other countries. This is because not all vehicles assembled in China are produced by Chinese brands. For example, the *Dacia Spring*, marketed by the Renault Group and assembled in China, has suffered significantly from the loss of the bonus, its sales falling almost sixfold between 2023 and 2024 (from around 30,000 to just over 5,000), with only a slight rebound in 2025 (7,400). Vehicles sold by Tesla (14% of electric vehicles sold in France in 2024) are assembled either in the United States, China or Germany, but only those assembled in Germany are eligible for the environmental bonus. Tesla has therefore focused on channelling the vehicles assembled in Berlin into the French market. Chinese makes that were already present on the French market have also suffered significantly from changes to the bonus: MG (SAIC Motor) sales fell by around 25% in 2024, more than

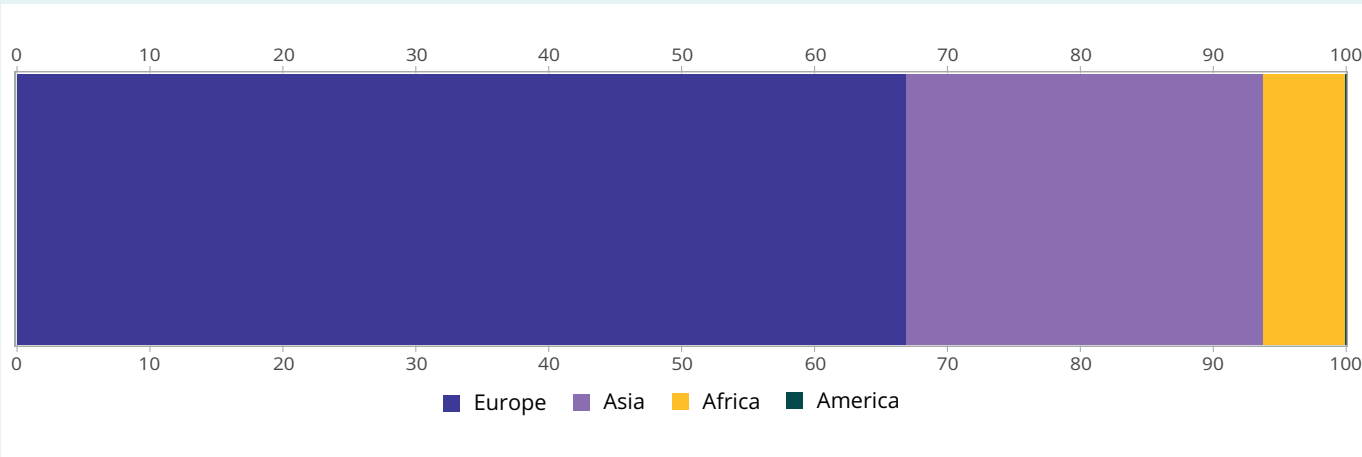
60% of which concerns electric vehicles alone, with the overall decline being limited by the surge in sales of hybrid vehicles (► [Adjerad R. and al., 2025](#)).

French electric vehicles gaining market share

In 2025, registrations of new electric passenger cars rose significantly across Europe: +29.7% compared with 2024. At the same time, new registrations, across all engine types, increased by just 2.4%.

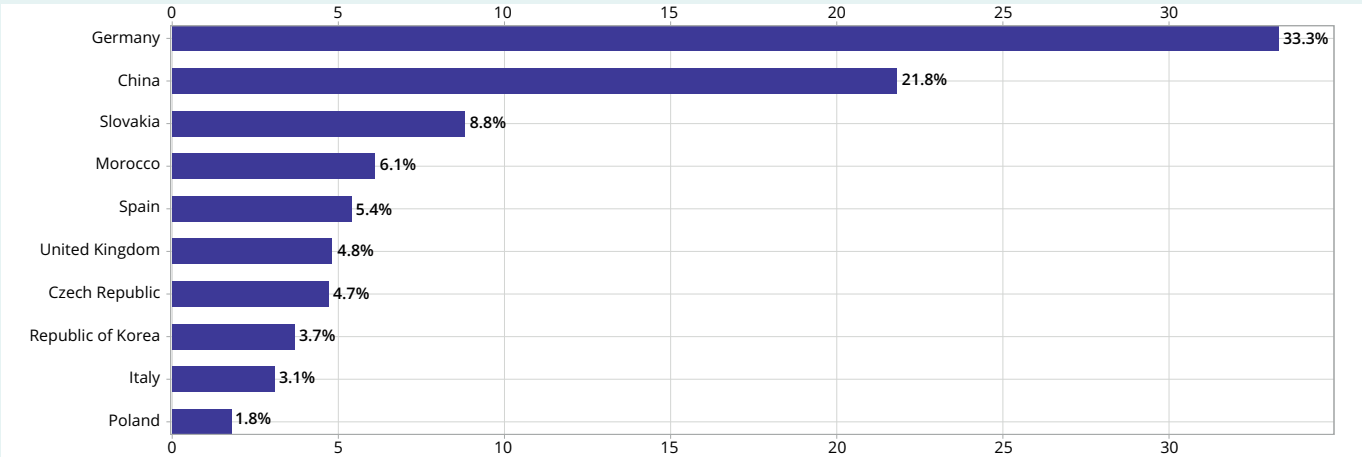
All in all, electric vehicles accounted for 19.5% of new registrations in Europe in 2025, compared with 15.4% a year earlier. The increase in electric passenger car production at French plants has contributed to this growth and even reflects a gain in market share in this segment for French plants: French production accounted for 8.0% of electric vehicles registered in Europe in 2025, compared with 6.4% in 2024, reinforcing the importance of French electric vehicle production at European level. ●

► 8. Origin of electric passenger cars imported into France in 2025 (in %)



Period: 2025.
How to read it: in 2025, 67% of imported electric passenger cars come from a European country.
Source: DGDDI - DSECE.

► 9. Breakdown of electric passenger car imports by the top 10 countries of origin in 2025 (in %)



Period: 2025.
How to read it: in 2025, 33% of imported electric passenger cars come from Germany.
Source: DGDDI - DSECE.

Bibliography

Adjerad R., Niay M. (2025), "In France, in 2024, the change in the ecological bonus and the introduction of customs barriers by the European Union led to a collapse in imports of Chinese electric vehicles, to the benefit of Germany", *Economic outlook* March 2025, INSEE.

Bouvier A., Camille H. (2025), "The weight of the French automotive value chain: 329,000 employees and 1.1% of GDP", *Insee première* n°2083, INSEE, December 2025.

Collet R. (2025), "Le verdissement des véhicules légers professionnels en 2024", SDES, October 2025.

Danikowski J. (2025), "A rapidly expanding electric charging network, with an average of 23 charging points per 100 vehicles in large cities", *Insee première* n°2082, INSEE, November 2025.

Hladik G., Kermanshachi S., Pamidimukkala A., Rosenberger J. (2024), "Barriers and motivators to the adoption of electric vehicles: A global review, Green Energy and Intelligent Transportation", Volume 3, Issue 2, 100153.

Iasoni and al. (2024), "About a quarter of the losses of market share in the Eurozone since the health crisis stem from the energy price shock, but do not appear to be due to energy-intensive products alone", *Economic outlook*, July 2024, INSEE.

Matulka R. (2014), "History of electric car", US Department of Energy (DOE), 15 September 2014.

Méot T. (2009), "L'industrie automobile en France depuis 1950 : des mutations à la chaîne", *Insee Références*, INSEE, June 2009.

Mesquita A., Souza de Abreu V., Poyares C., Santos A. (2025), "Barriers to Electric Vehicle Adoption: A Framework to Accelerate the Transition to Sustainable Mobility", 17 September 2025.

Rignols E. (2015), "Automotive industry: upturn in production in 2014", *Insee focus* n°48, INSEE, 14 December 2015.

Vigne R. (2024), "Voitures électriques : vive expansion dans les échanges de voitures de la France depuis six ans", Département des statistiques et des études du commerce extérieur, September 2024. ●