2026 Report

The EVolution is here

What drives and what holds back (used) EV adoption



The EVolution is here

OLX Group sits at the heart of the used-car market.

With our brands Autotrader, Autovit, La Centrale, OTOMOTO, and Standvirtual, we're a major player in the second-hand car markets in South Africa, Romania, France, Poland and Portugal.

Accelerating the electric vehicle (EV) transition is an important part of our ESG strategy. Motors verticals are an important part of our business, and we recognize that the automotive industry comes with its climate impact. More EVs on the road at the expense of vehicles with an internal combustion engine (ICE vehicles), means a lower impact since - over their lifetime - EVs are more climate friendly than ICE vehicles (chapter 1).

Therefore, we're trying to find the answer to the question: what can OLX do to help accelerate the EV transition? First, we look into the factors influencing the EV market, as well as consumers' EV purchasing motivations. Then, we discuss how OLX can influence these.

We investigated:



The current state of the market for both new and used EVs **(chapter 2)**



The evolution of charging infrastructure **(chapter 3)**



Consumer readiness and perceptions around EVs **(chapter 4)**



The regulatory environment around promoting EVs **(chapter 5)**

Chapter 6 discusses what OLX already does and what other opportunities there are for accelerating the EV transition.

Our research focuses on France, Poland, Portugal, Romania and South Africa, countries in which OLX Vertical brands are active. For comparison, we included Norway – a frontrunner country in terms of EV penetration, and China – frontrunner country in terms of absolute EV numbers. When country-level data was unavailable, EU or European data was used.

The whitepaper gives an overall view of the state of the EV market. Country-level reports can be found in **chapter 7.**

Dictionary
EV = all types of electric vehicles, including battery electric vehicles (BEV), and plugin hybrids (PHEV). Non-plugin hybrids and mild hybrids are not included.
ICE-vehicles = internal combustion engine, including petrol, diesel and LPG.



Executive summary: The EVolution is here

EV adoption across OLX's five markets (France, Poland, Portugal, Romania, South Africa) is growing but uneven. In Portugal more than one in three new cars sold in 2025 was an EV, and BEVs alone took 23.2% of registrations. France follows at 26–29% EV sales, with only a quarter of new registrations still pure petrol or diesel. Poland (11–14%) and Romania (6–12%, depending on source) lag. Romanian sales fell after the 2023 cuts to the Rabla Plus subsidy. South Africa remains 97% petrol and diesel, with a national charging network of only 917 public chargers.

Consumer interest is high even in the markets where uptake is low. In Romania 59% would switch in the future and in South Africa 58%, but only 35% in Poland.

Price is the most-cited barrier to EV adoption: the used market is in a position to solve this. A BEV loses more value in three years than the average car: it keeps 37% of its value, against 49%. That is a disadvantage for first owners, but it lowers the cost for second and third owners, whose annual cost of ownership is already 12–27% below a comparable petrol car. Range and battery health anxiety are also top concerns, but they mostly live in the minds of prospective buyers. Actual EV owners don't experience them as barriers anymore. Poland is the exception when it comes to charging: 50% of Polish EV owners report poor fast-charger coverage. Actual data are also reassuring: batteries fail at a rate of 0.1% and lose only about 2.3% of capacity per year.

The main barrier for used-EV buyers is not cost but uncertainty about battery health. Transparency and information can solve this. For example mandatory state of health reports on listings. The used EV market is small but will grow as lease cars from 2022–2023 come off contract. EVs account for 3.3% of used transactions in France and 1.1% of OTOMOTO listings in Poland. Portugal is the outlier: 18.38% of Standvirtual listings in Q1 2026 were electrified. On AutoTrader in South Africa, used NEV sales grew 73%, but from a base of only 5,727 cars.

Policy strength varies:

- **France has the most complete package.**
- **Poland's NaszEauto budget was exhausted in early 2026.**
- **Romania has targets but few instruments to meet them.**
- **South Africa's policy is almost entirely focused on supply and production.**

OLX has four main levers:

Price: make the lower cost of owning a used EV visible, through total-cost-of-ownership tools and communication.

Battery health: make state-of-health reports standard in listings ahead of the EU battery passport in February 2027. OTOMOTO and La Centrale are already working on this, and Standvirtual offers battery checks through VerifiCar.

Supply: increase the supply of used EVs through dealer tooling, partnerships with (Chinese) OEMs and electrifying OLX's own fleet.

Charging: reduce charging friction with cross-provider charging cards and location data that identify charging gaps.

01.

The environmental and human rights impact of EVs

There is a lot of misinformation around the environmental impact of EVs, causing potential buyers to doubt the environmental friendliness of EVs over ICE vehicles [1].

Let's dive into the true environmental impact of cars.

EVs offer lower usage emissions than ICE vehicles

- **In their use, EVs are more climate-friendly than ICE vehicles**
- **EVs produce zero tailpipe emissions, and even when factoring in electricity generation, have significantly lower overall (well-to-wheel) emissions per kilometre driven**
- **Due to a lack of tailpipe emissions, EVs don't contribute to urban air pollution and related harm to human health.**

One consumer assumption is that EVs are worse for the climate than ICE vehicles due to power plant emissions [2] . But this is an unsound assumption.

It's customary to divide fuel emissions into 'well-to-tank' emissions and 'tank-to-wheel' emissions. The former are emissions in the supply chain, associated with producing the energy carrier. The latter are emissions associated with fuel combustion, also called tailpipe emissions.

Producing the energy carriers of both EVs - electricity - and ICE vehicles - fossil fuels - has an environmental footprint. The well-to-tank emissions. For a medium-sized petrol car this is 46 grams of CO2 per kilometre [3].

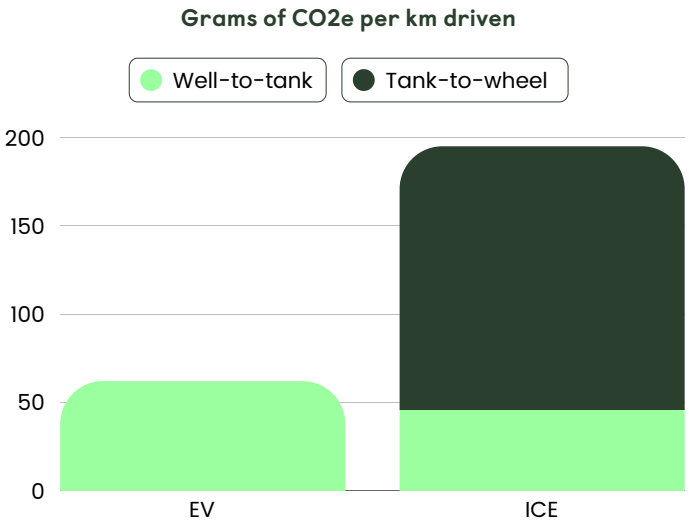
For an EV charging on the average grid mix in The Netherlands, it's 62 grams of CO2 per kilometre. For an EV charging on renewables (either from the grid or from personal solar panels) this is 0 grams of CO2 per kilometre. Thus, well-to-tank emissions of EVs are slightly higher than of ICE vehicles.

But, much more importantly, EVs do not generate any tank-to-wheel emissions, whereas for a medium-sized petrol car, these are 149 grams of CO2 per kilometre.

All in all, the emissions per kilometre driven range from 0 to 62 grams of CO2 per kilometre on average for an EV and are on average 195 grams of CO2 per kilometre for a medium-sized petrol car.

What's more, because EVs don't have any tailpipe emissions, they contribute to urban air pollution to a much lower extent than ICE vehicles. Urban air quality improves significantly if large fractions of inhabitants switch to EVs. Even if the electricity they drive on is not fully renewable: grey electricity is often generated outside of urban areas. This helps to prevent illness and (premature) death[4].

What's also good to understand, is that the energy density of electricity and the conversion efficiency of batteries is much higher than with fossil fuels and their combustion. This means that if the world increasingly goes electric, we need way less energy for transport than we currently do.



1. U.S. Environmental Protection Agency (EPA), "Electric Vehicle Myths"
2. U.S. Environmental Protection Agency (EPA), "Electric Vehicle Myths"
3. CO2-emissiefactoren.nl
4. Yang, Q., Yuan, Q., Yuan, Q., Shen, H., Wang, Y., Jiao, H., Zhang, L. & Gao, M. (2026). "Reduced urban air pollution and mortality from the transition to new energy vehicles in China." Nature Health 1, 865–875. DOI: 10.1038/s44360-026-00120-2. Published 13 May 2026.

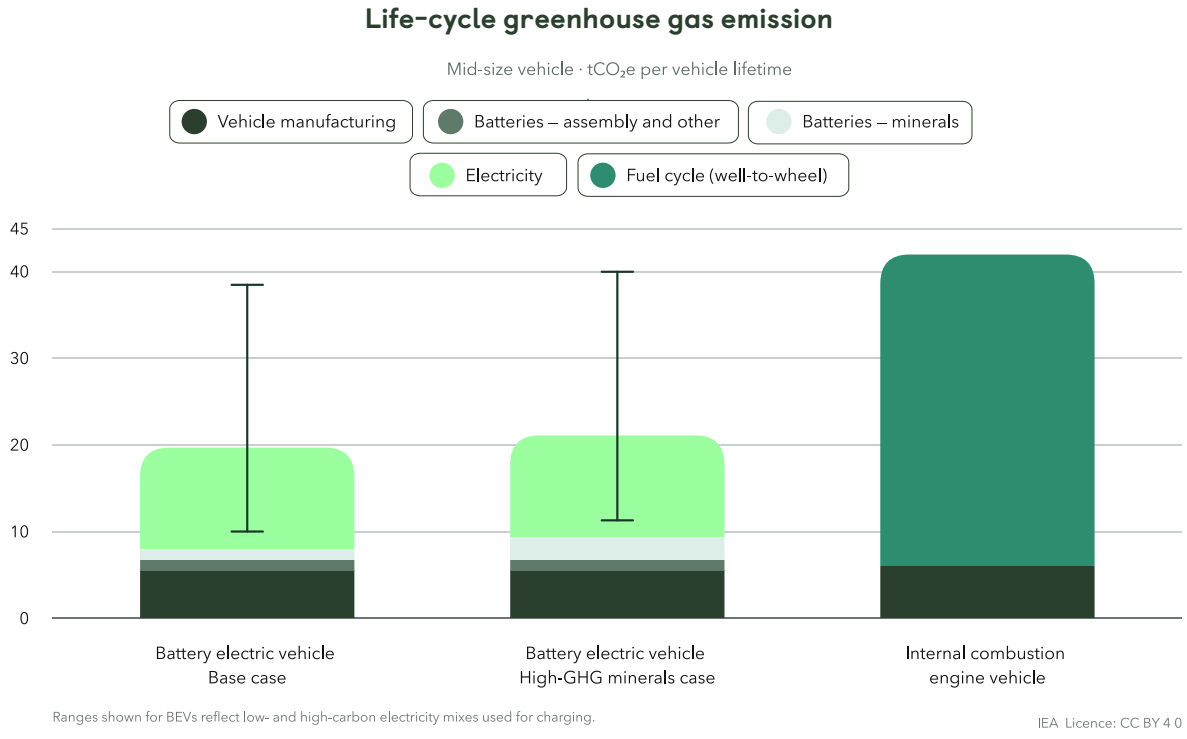
EV production has a higher upfront footprint than ICE vehicles, but this is offset by superior lifetime efficiency

- **Battery production is energy intensive, leading to a higher initial production impact compared to ICE vehicles**
- **EVs compensate for this through superior operational efficiency, resulting in significantly lower total CO2 emissions over their lifespan**

Another misconception is that the production of EVs and recycling batteries at their end-of-life is so polluting, that this offsets the emissions savings from driving it. Studies have shown that the production of a typical EV can indeed be more polluting, due to the energy needed to produce the battery. However, over the lifetime of the car, total emissions associated with production, charging or fuelling, and driving, are still much lower for EVs than for ICE cars[5].

The graph below shows the average lifetime emissions of EVs compared to ICE vehicles, assuming 200,000 lifetime kilometres. Two scenarios are shown. One where sourcing the minerals for batteries has a high impact and one base case[5].

Comparative lifecycle emissions of a mid-sized BEV and ICE vehicle.



Battery mineral extraction poses significant human rights and environmental challenges, and so does fossil fuel extraction

- **Extracting minerals such as lithium, nickel and cobalt for EV batteries is related to issues including worker's health issues, forced evictions, child labour, water pollution, water table lowering, deforestation, soil erosion.**
- **Extracting fossil fuels for ICE cars is related to similar issues.**
- **New EU due diligence requirements for agents bringing batteries on the EU market address these social and environmental risks.**

EVs add to the rising demand for minerals, such as lithium, nickel and cobalt. Extracting them comes at a high cost to people and planet[7]. Associated human

5. U.S. Environmental Protection Agency (EPA), "Electric Vehicle Myths"
6. International Energy Agency (IEA), "Comparative life-cycle greenhouse gas emissions of a mid-size BEV and ICE vehicle"
7. Amnesty International, "What are critical minerals and why do they matter for human rights?"

rights issues include pollution harming worker's health, forced evictions of communities living near mining sites, dangerous working conditions, and child labour.

More and more car brands recognize these human rights issues, and extend their efforts on reducing human rights risks in their battery supply chains.
The European Union adopted and updated the battery directive in 2023. The new rules introduce a due diligence obligation on battery manufacturers.

They must comply with requirements addressing social and environmental risks around sourcing, processing and trading of raw materials and secondary materials. These rules apply to all economic operators placing batteries on the EU market, excepting small and medium-sized companies[8].

Mining these minerals also has an impact on local environments, causing water pollution, ground water table lowering, deforestation and habitat destruction, and soil erosion[9].

On the other hand, the supply chain of electricity is simpler and less impactful for people and the planet than the supply chain of fossil fuels. Fossil fuels generally need to be transported over large distances, in contrast to electricity. Also, what the political instability in the Middle East and other oil-producing regions has shown us is that fossil fuels, unrest and war, and volatility go hand in hand, which is much less the case for (renewable) electricity.

ICE vehicles have batteries as well, but these are way smaller than the batteries in EVs. And of course, the extraction of fossil fuels to power ICE vehicles comes with significant human rights and environmental issues as well, including political instability, displacement, intimidation and violence, corruption, water pollution, deforestation, land destruction, disturbance of land and marine ecosystems, and - as discussed - air emissions.

That being said, it's difficult to compare human rights impacts and environmental impact of EVs to ICE vehicles: instead, we refrain from claiming that one human rights or environmental impact is worse than the other, and denounce them altogether.

EV batteries are hard to recycle, but old batteries are increasingly given a second life

- **While recycling EV batteries was historically difficult, old batteries are now being repurposed for renewable energy storage, extending their useful life by 5 to 10 years.**
- **Dismantling and shredding can now recover over 90% of critical minerals, with new regulations expected to increase recycling.**

Batteries of electric vehicles are notoriously hard to recycle. However, the growing demand for the critical minerals they contain, lead to new and innovative ways of reusing them.

When EV batteries are disposed of in landfills, which continues to happen on a large scale, damaging metals leak into the environment. These can cause underground fires, releasing even more pollutants into the atmosphere.

Fortunately, old EV batteries are increasingly stacked together and given a second life as back-up energy storage at solar and wind farms, supplying the grid in low-wind or low-sunshine conditions. They can be used as home solar batteries as well. This extends the life of the battery packs by roughly 5 to 10 years, after which they reach their end-of-life.

After that, EV batteries can be dismantled and shredded into a metal-rich powder called black mass, from which materials are recovered and reused into new batteries. Recovery rates of cobalt, nickel and copper already exceed 90% in good plants. Lithium has historically been more difficult, but technology is improving.

New EU regulation surrounding a battery passport will be introduced in February 2027, with mandatory recycling and recovered content targets.

8. European Parliament, "New EU rules for more sustainable and ethical batteries"
9. Ali, M., Ismael, M., Reed, M. & Elkarmoty, M. (2025). "Overview on the mining environmental impact of electric vehicles batteries production." Mining Revue 31(2), 105–114. DOI: 10.2478/minrv-2025-0023. Published 18 June 2025.

02.

The market for new and used vehicles

Electric vehicle sales are rising as markets shift away from ICE vehicles

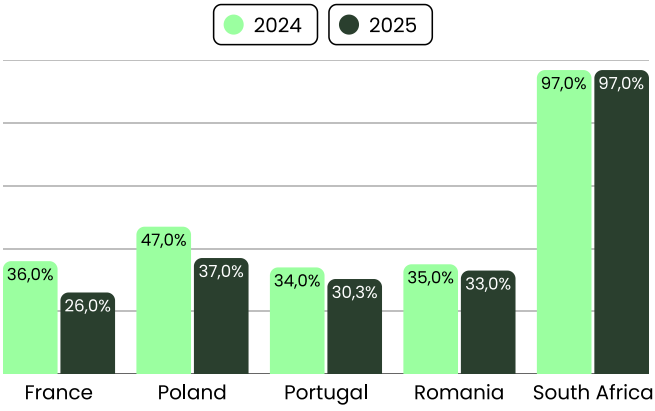
- **EV sales shares reached nearly 27% in 2025 in Europe**
- **Adoption rates are uneven: while markets like Portugal see high BEV adoption, countries like South Africa remain heavily fossil focussed**

EV adoption is growing, at the expense of petrol and diesel vehicles. In Europe, electric car sales increased by more than 30% in 2025, reversing the stagnation that could be seen since 2022. EV sales share reached just under 27%[10]. Electric cars represent about 5% of the European car fleet now.

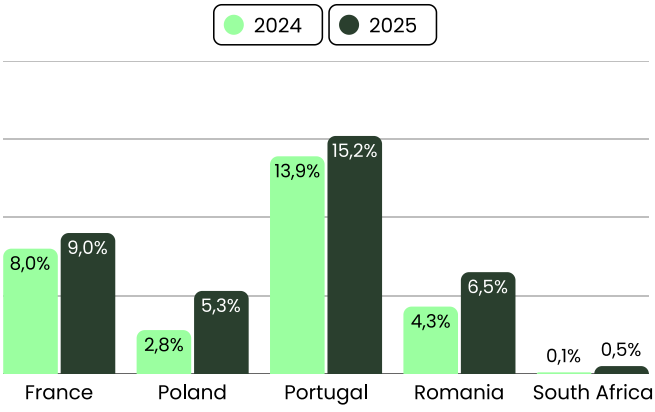
In France, only a quarter of new registrations were petrol or diesel vehicles in 2025, with hybrids and BEVs good for 74%. South Africa sits on the other end of the spectrum, with 97% of new registrations still being petrol and diesel vehicles.

If we compare 2025 registrations to 2024, the image is clear: in all geographies but South Africa, the number of petrol and diesel vehicles dropped significantly. From 47% to 37% in Poland, from 36% to 26% in France and from 35% to 33% in Romania. In France, Poland and Romania, most new car registrations are hybrids (plugins, general hybrids and mild hybrids), whereas in Portugal, battery electrics are dominant, with 23.2% of all new registrations.

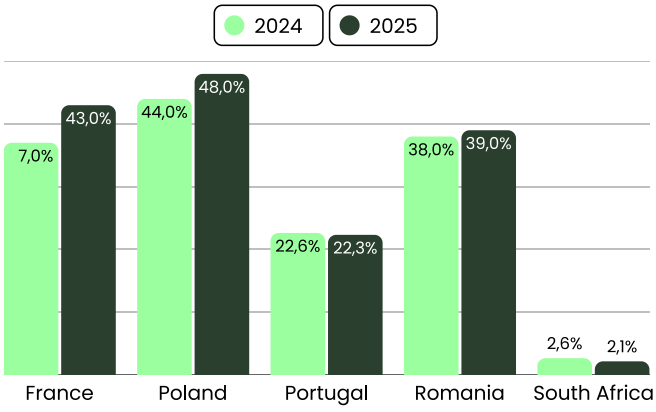
Petrol and diesel



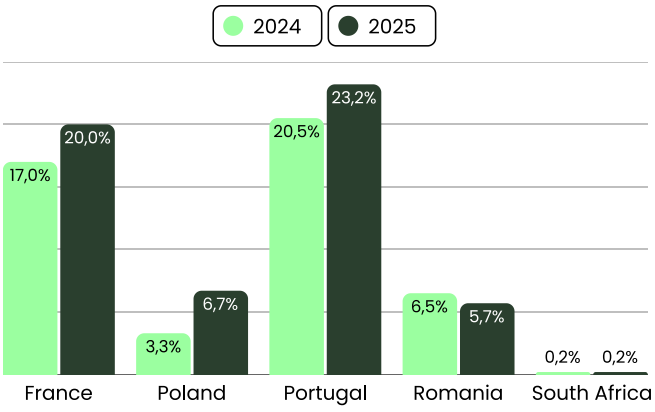
Plugin hybrid



Hybrid and mild hybrid



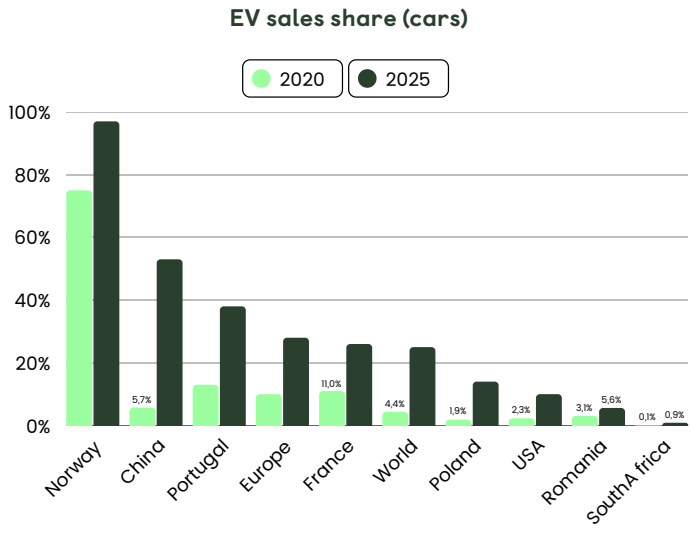
Battery electric

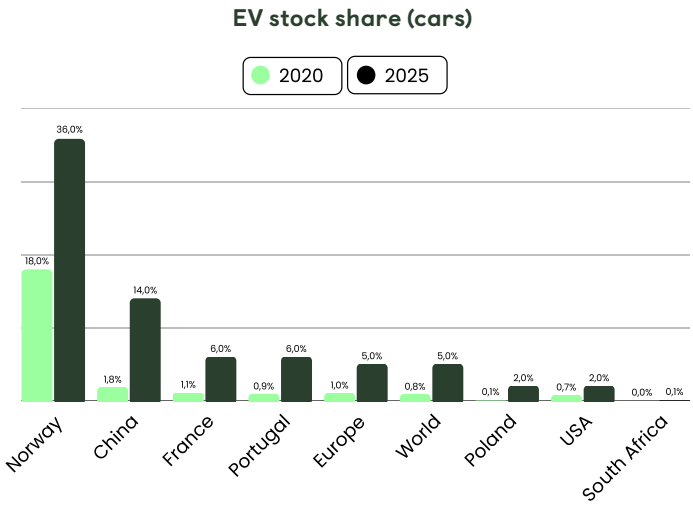


10. International Energy Agency (IEA), "Trends in electric cars"

If we compare 2020 to 2025 and let Norway and China enter the scene, the picture becomes even more dramatic. Norway is the world's frontrunner in terms of EV penetration: 97% of all car sales concerned an EV. Of those, only 2% was plug-in hybrid, the others all battery electrics. Norway's current EV stock covers 36% of all cars on the road. China, frontrunner in terms of absolute numbers of EVs on the road, has an EV cars sales share of 53% (up from 5.7% in 2020, an incredible increase). 14% of cars on the road are electric. This contrasts with the EV sales share of almost 27% in Europe, and a 5% stock share.

Globally, the share of battery electric cars in total electric cars increased to 65% in 2025, reversing the trend of the two years before where extended range electric vehicles (EREVs) were on the rise.





The market for used EVs is nascent but expanding as more and more EVs enter the resale cycle

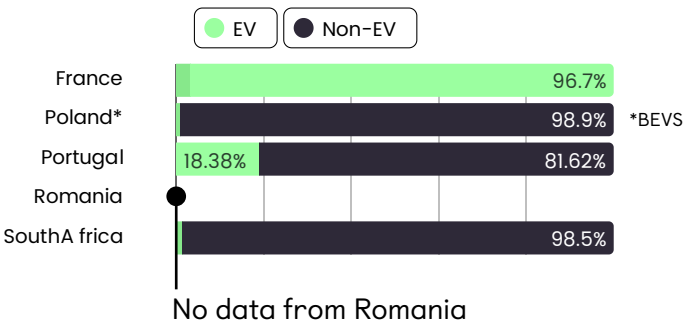
- **The second-hand EV market is currently small in the surveyed countries, as the market for new EVs needs to mature before substantial volumes hit the resale cycle**
- **Growth is expected, as increasing numbers of earlier-generation EVs reach the typical three-year mark of corporate lease, and enter the resale cycle**

Most people don't buy new cars: they buy second-hand. In Europe, around eight in ten people purchase their car second-hand[11]. The second-hand market is an important way to alleviate the biggest hurdle of EV adoption: higher purchasing price (see chapter 4 for more on hurdles).

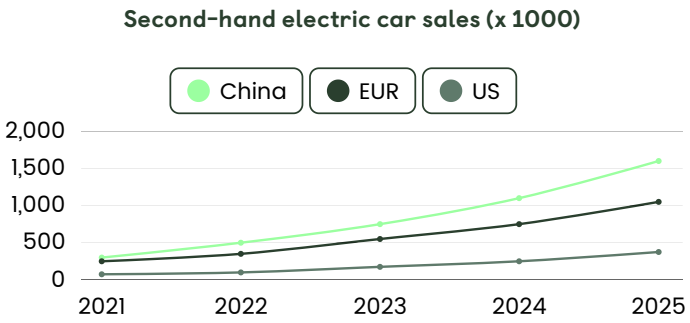
The used EV market is still nascent in all five geographies. Naturally, the market for new EVs first needs to pick-up. Around three years after first hitting the road, these EVs start to enter the used-car market.

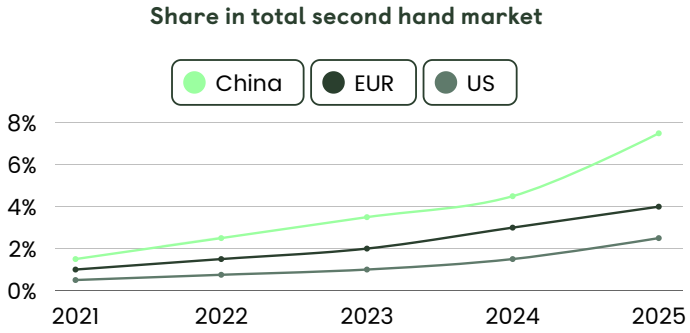
The International Energy Agency (IEA) reports that in Europe 4% of all used car sales are now EVs[12]. In France, used EVs account for 3.3% of second-hand transactions. In Poland, just 1.1% of used listings on OTOMOTO are BEVs[13].

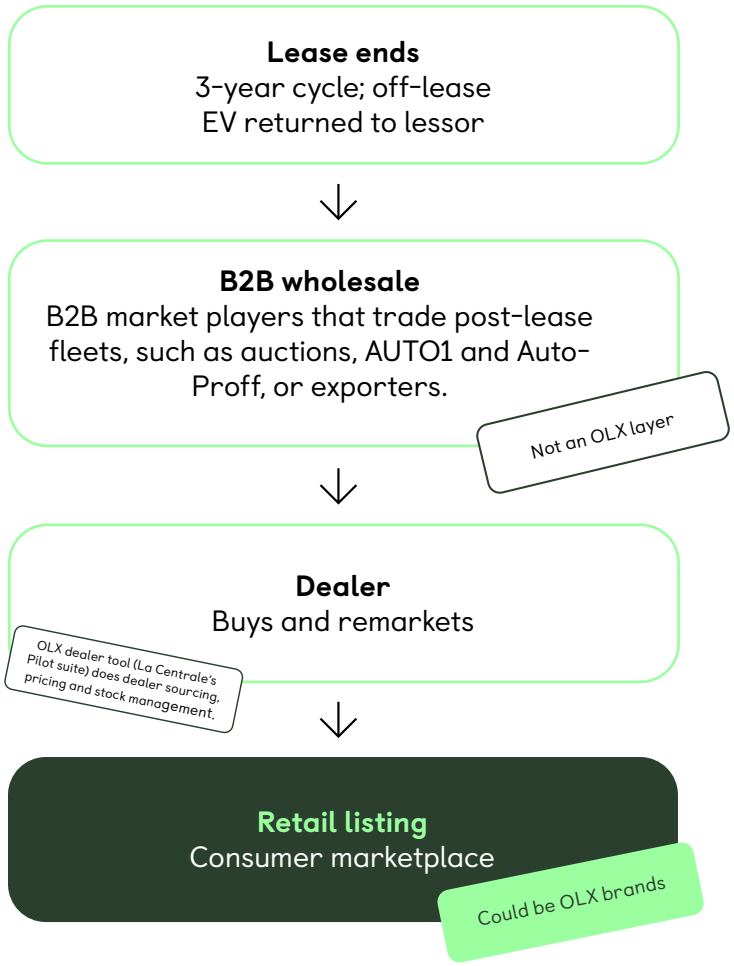
On AutoTrader (South Africa), used alternative fuel vehicle sales saw a 73% growth in 2025 compared to 2024, but from a very small base of just 5,727 cars, less than 1.5% of car listings[14]. Impressive are Portuguese numbers: in the first quarter of 2026, on Standvirtual, 10.27% of listings are BEVs and 8.11% are plug-in hybrids, making the EV share a staggering 18.38% of listings.



11. International Energy Agency (IEA), "Trends in electric cars"
12. International Energy Agency (IEA), "Trends in electric cars"
13. OTOMOTO, "Faktor „E": Impulsy elektromobilności wśród kierowców w Europie i w Polsce" (2025).
14. AutoTrader, "2025 AutoTrader Annual Industry Report: January–December 2025"







End-of-lease corporate cars serve as the primary source of used EVs, and they're high quality

- **60% of new BEV registrations in the EU are for business fleets, feeding the second-hand EV market at the end-of-lease**
- **They re-enter the consumer market through B2B auctions and certified pre-owned programs**

This used EV market is – naturally – entirely dependent on the new EV market. The primary mechanism feeding the used EV market is the corporate lease cycle. In the EU, around 60% of new BEV registrations are attributed to businesses and corporate fleets[15]. In other words: whenever a new BEV is registered, it's most likely a company car.

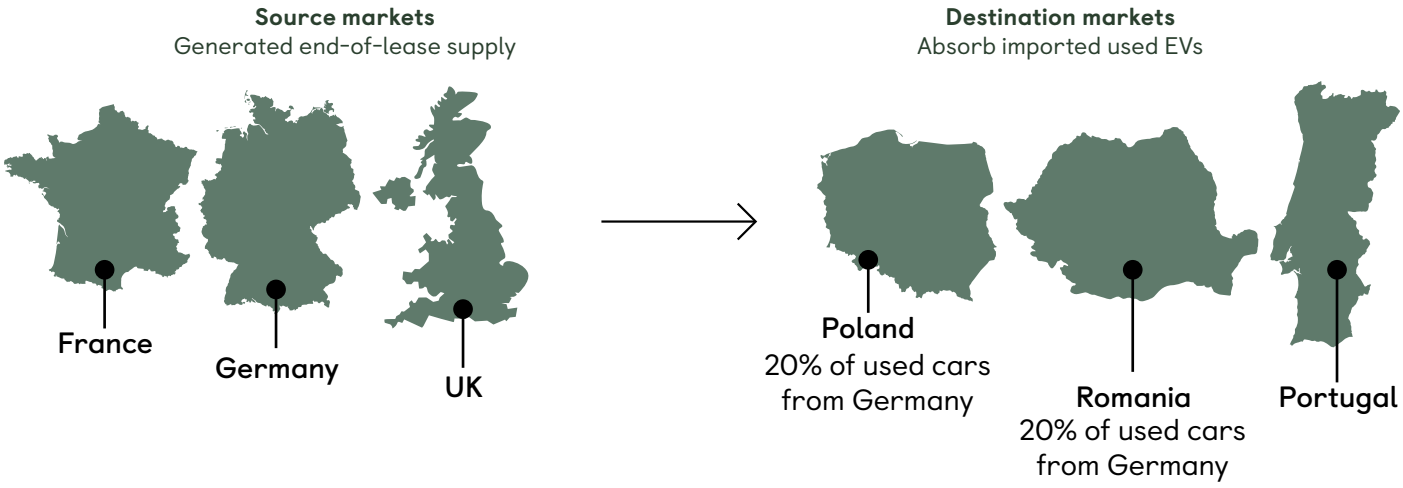
These new BEVs cycle into the second-hand market after end-of-lease, generally after about three years. Former lease cars generate a continuous high-quality supply of EVs re-entering the market with service records, low mileage, and residual warranty coverage.

They re-enter the market through B2B auctions (Manheim/Cox, AUTO1, BCA), OEM certified-preowned programs, and direct export. These are then purchased by dealers, who remarket them and bring them onto the consumer market. For example, via listings on OLX platforms.

Europe's used market is highly interconnected and driven by price differentials. The same loop that has moved diesels east for decades is now starting to move off-lease EVs, though still sparsely. South Africa is outside the Europe-cycle. Used EVs are mainly from domestic sources.

An interesting market 'quirk' is China's 'zero-mileage' used EVs (500k+ in 2025): barely-driven cars exported as 'used' to clear inventory, mostly to emerging markets.

15. International Energy Agency (IEA), "Trends in electric cars"



Chinese manufacturers are dominating global production and rapidly expand their international market share

- **Chinese OEMs produced nearly 75% of global EVs in 2025 and are rapidly expanding exports as production outstrips domestic demand.**
- **Their ability to offer affordable, high-tech models is significantly impacting EV adoption rates in both developing and mature markets.**

It can be seen on the road in many countries worldwide: Chinese OEMs are becoming more dominant in global EV sales. China is and remains the world's largest EV manufacturer, accounting for almost 75% of EVs produced in 2025: 22 million cars. Notably, BYD overtook Tesla as the world's top BEV maker, and is now the sixth-largest automaker group overall, accounting for over 5% of global cars produced. **Yes, that is 5% of all cars produced, not just of EVs[16]!**

China's EV exports doubled to a record high of over 2.5 million in 2025, as production outstripped domestic demand, overtaking the EU's position as largest EV exporter. Chinese carmakers supplied 60% of global electric car sales in 2025[16], (this differs from the earlier-mentioned 75%, which is production share) while European and North American makers accounted for 15% of global sales. Chinese brands roughly account for 8-10% of European BEVs sales and around 16% of EVs (so including hybrids), with numbers climbing fast. Also, nearly all battery cells used worldwide are supplied by companies headquartered in China.

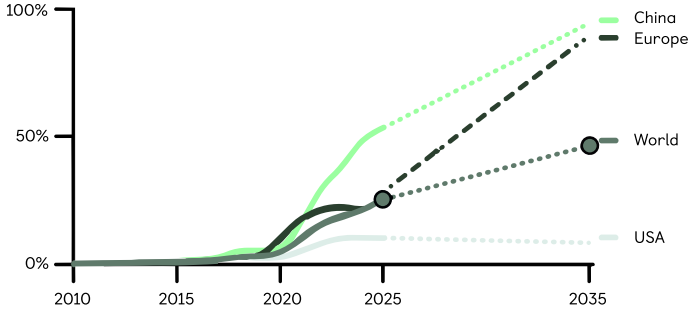
Chinese cars make a real difference in laggard countries. Many have seen rapid increases in EV sales due to the affordability of Chinese EVs. But also in more developed EV countries, price increases Chinese EV sales: BYDs start from €19,990.

Data and policy trends suggest a rapid shift towards electrification of car sales

- **Driven by a favourable policy landscape, Europe is projected to see EVs dominate new car sales by 2027, globally this may happen by 2035**
- **These sales trends suggest that a large influx of EVs into the second-hand market will happen in the near future.**

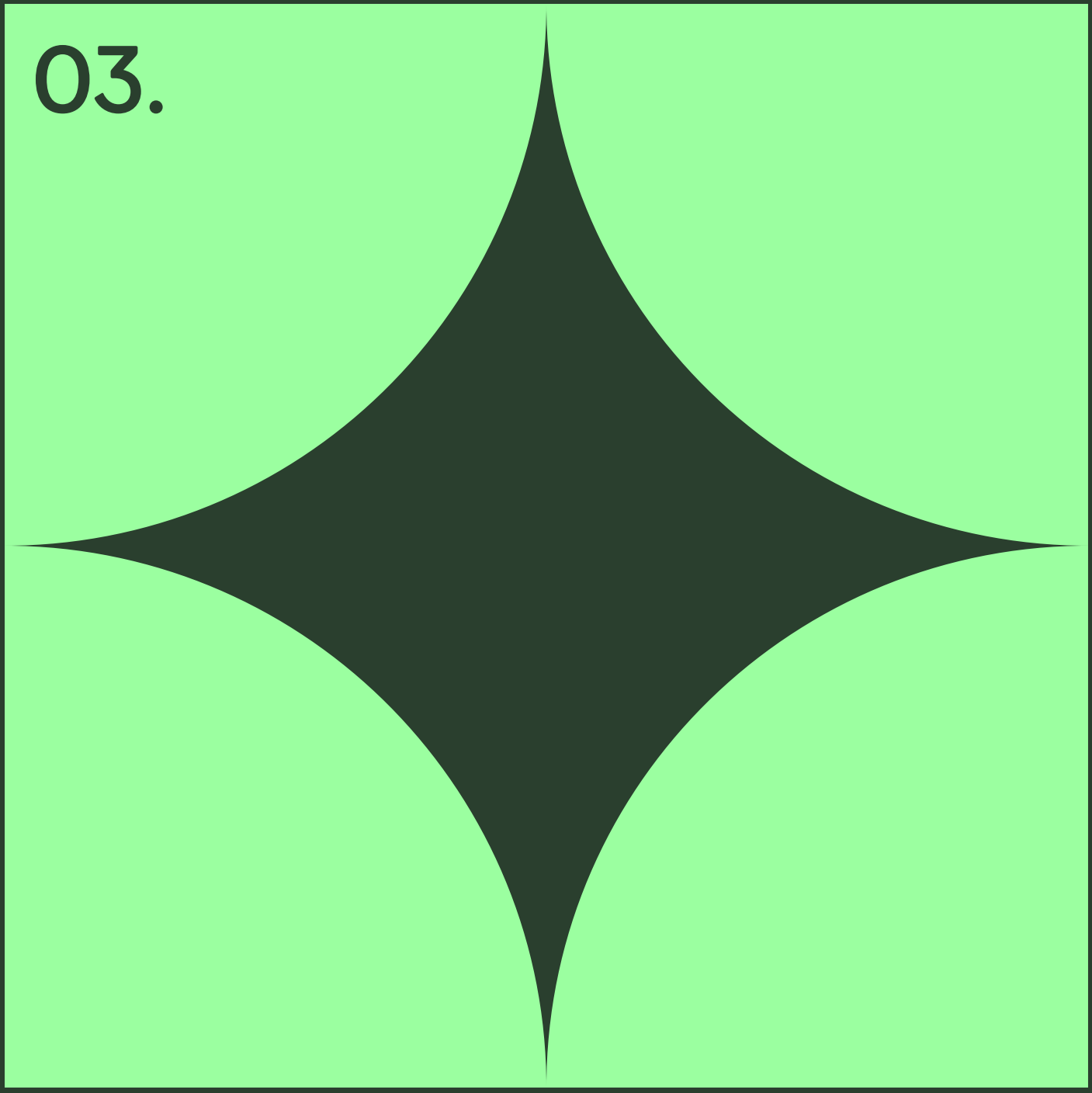
Why this all matters? It's because the future is electric. In Europe, EVs could dominate new car sales as early as 2027, and globally, this is projected to happen in 2035. That is when looking at current policies. When looking at stated policies, global car fleet sales electrify even faster. A few years after EVs are sold as new, they will enter the used market.[17]

EV sales share, cars



16. International Energy Agency (IEA), "Global EV Outlook 2026"
17. International Energy Agency (IEA), "Global EV Outlook 2026"

03.



The evolution of charging infrastructure

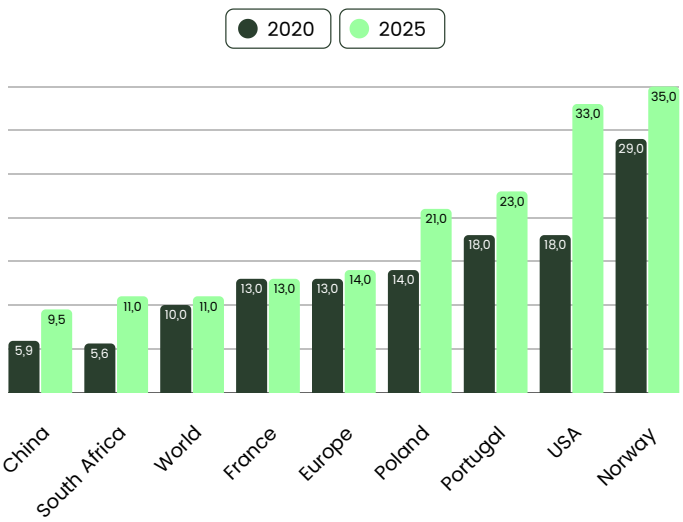
Public charging networks are expanding, but their need depends on charging behaviour are

- **Charging infrastructure grows alongside the EV market, but the necessity for public chargers varies based on local factors, like home charging access and driving habits.**
- **In most regions, the number of EVs has grown faster than the number of public chargers, resulting in a higher vehicle-to-charger ratio.**

There's no EV market without charging infrastructure. Therefore, the charging infrastructure evolves alongside the EV market.

Let's investigate the current state of the public charging infrastructure. Bear in mind that these insights require careful interpretation, as the need for public chargers and fast chargers depends on many local factors, such as access to home charging, driving patterns, and charging behaviour[18].

BEV and PHEV cars/vans per public charging point



In all analysed geographies, the vehicle-to-charger ratio increased (meaning that every public charger is shared by more vehicles), showing that the number of EVs grew faster than the charging infrastructure did.

In Europe, the number of charging points grew by over 35% in 2024. There are now over a million public charging points across Europe, with over 150,000 being fast chargers (DC). When we include home chargers in the number, there were over 9 million chargers in 2024. A company called NIO opened battery swapping in a few markets, but not yet in any OLX countries.

In Europe as a whole, EV-to-public-charger ratio decreased from 15 cars per charger to 14 in 2024, despite an increase in total EV fleet. This relatively high ratio – compared to the global average of 11, and 9 in China, and 6 in other Asian and Pacific countries – reflects that home charging is dominant in Europe.

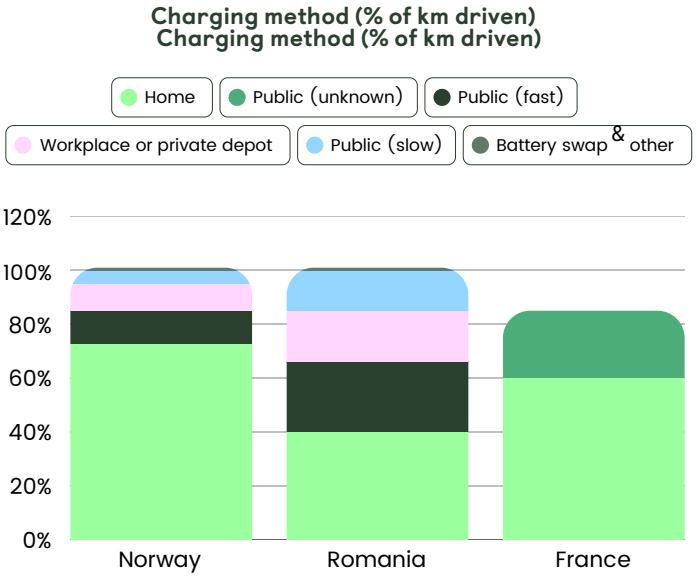
Most European charging happens at home, public access is becoming increasingly vital for mass adoption [19]

- **While the majority of European EV drivers charge at home, public infrastructure is becoming critical to reach lower-income households without private parking.**
- **The necessity of public access varies by country, with higher reliance on public networks seen in Romania, and lower in Norway, where a high vehicle-to-public-charger ratio is not as big of an issue.**

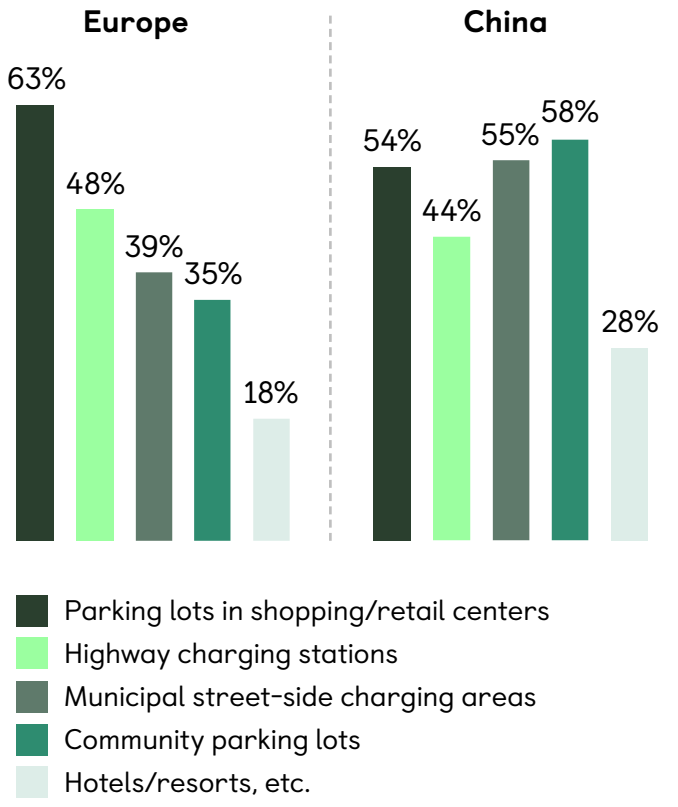
66% of European EV drivers have a home charger, and an additional 17% has a shared charger at their home exclusively for residents, for example at the parking lot of their apartment. As EV adoption moves towards lower-income households that have less access to home chargers, public charging infrastructure becomes more important.

Country-level data is sparse. We do know that Romania has one of the lowest shares of home charging, together with Vietnam and China. Norway - one of the highest.

18. Roland Berger, "Steady progress: EV Charging Index, Edition 6" (2025).
19. Roland Berger, "Steady progress: EV Charging Index, Edition 6" (2025).



Of drivers doing some or all their charging away from home, they do so at the following locations:



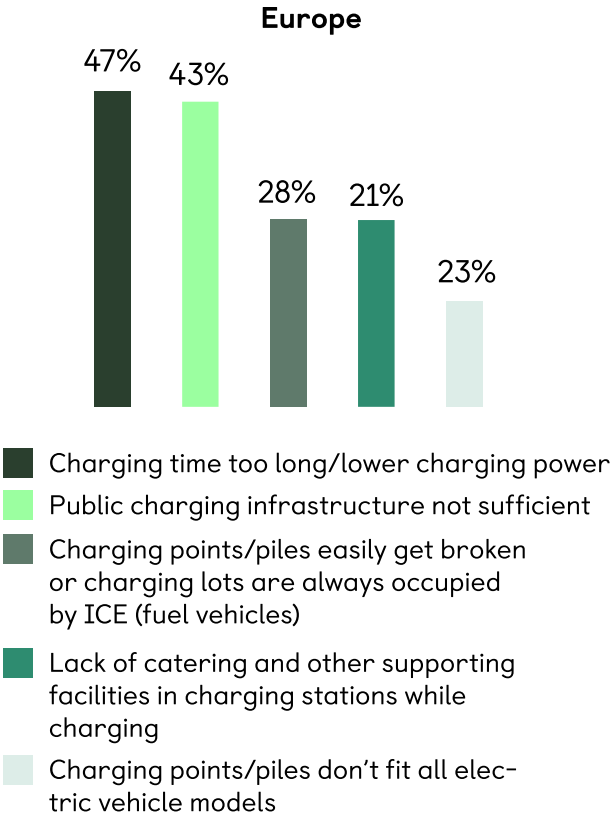
EV drivers generally report high charging satisfaction despite concerns regarding network density and wait times

- **Around 90% of BEV drivers report high satisfaction with their charging experience.**
- **Some drivers report occasional queues or broken chargers, especially in countries with higher vehicle-to-charger ratios.**

Although insufficient charging infrastructure is a hurdle for EV adoption for many (see chapter 4), actual BEV drivers are generally satisfied with their charging experience. In Europe, 89% of BEV drivers are quite or very satisfied with their charging experience in 2024, up from 77% the year before. Globally 89% were quite or very satisfied, in China 94% and in the Americas 91%.

In Europe, 70% of people believe public charging is becoming more convenient. In Portugal, this is even 83%. 60% of Europeans think public charging is generally fast enough in 2024, up from 48% in 2023. However, 39% of Europeans thinks that public charging is costlier than expected and should be cheaper[20].

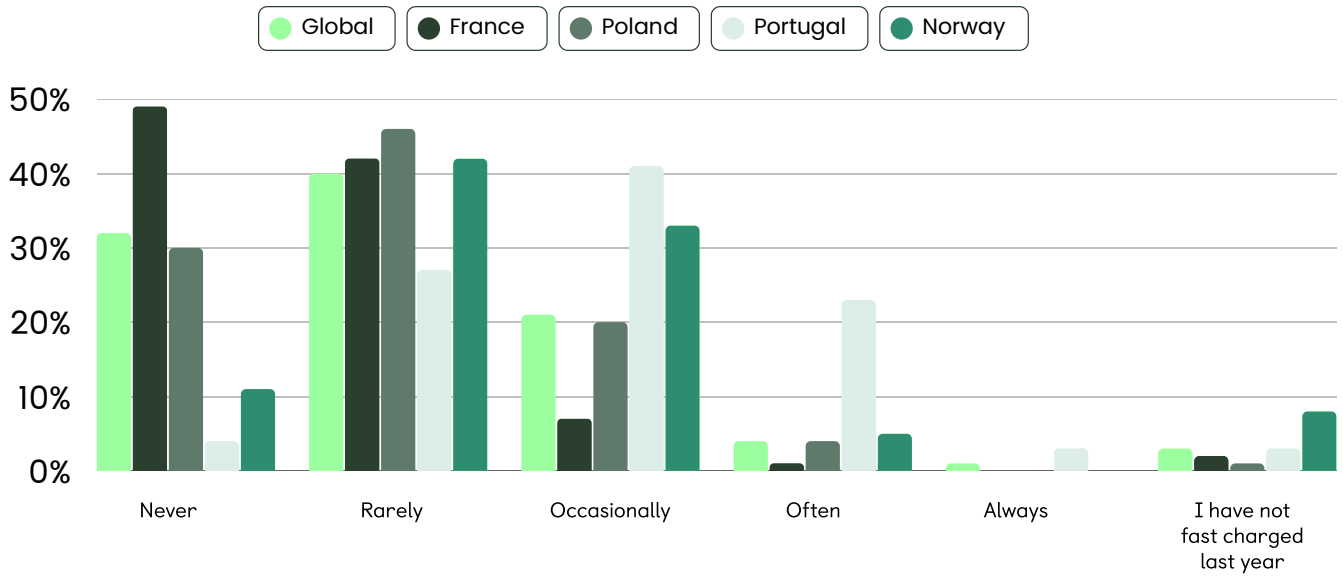
Interestingly, even though satisfaction is high, Europeans think charging times are too long and public charging infrastructure is insufficient.



20. Global EV Alliance (GEVA), "The Global EV Driver Survey"

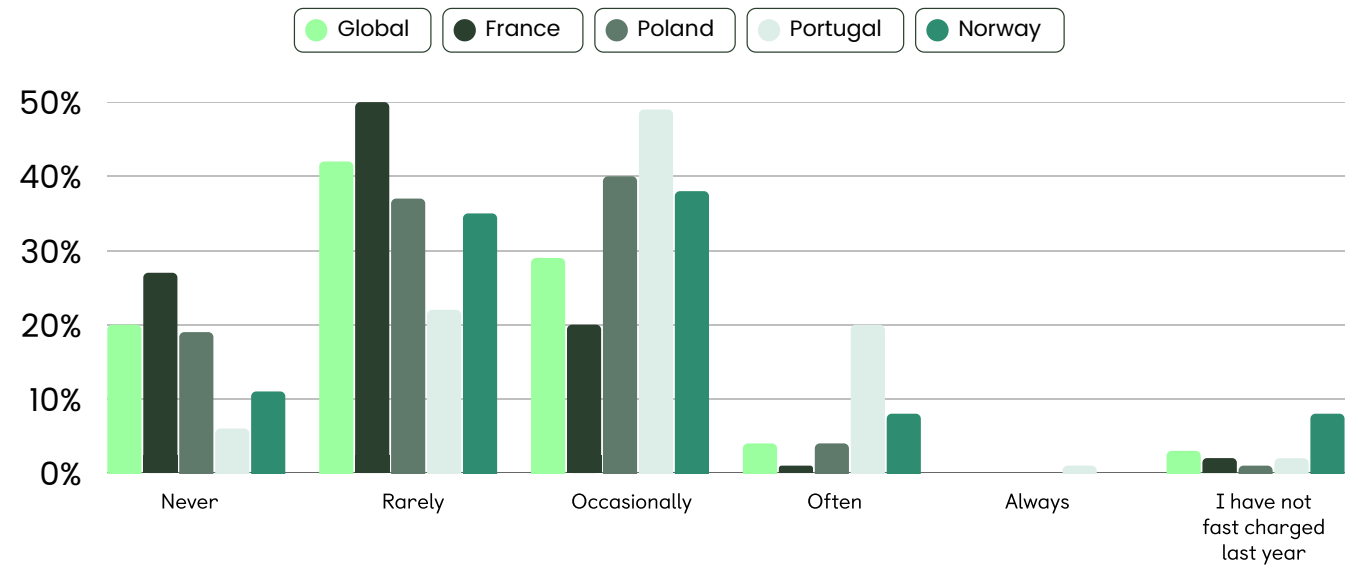
When EV drivers were asked if they experienced queues at the fast-charging stations, they answered the following[21]. In France, people hardly ever experience queues. Also in Poland, experiences are generally good. In Portugal and Norway, most people indicate that they occasionally experience queues. Not coincidentally, these countries have some of the higher vehicle-to-public-charger ratios, respectively 23 and 35, against a European average of 14, and a global average of 11.

Do you experience queues at the fast charging stations?



And when asked whether they find fast chargers aren't working when they are about to charge[22], they answered the following. The image is very much in line with the result when asked about queues. In France, chargers are never or rarely out of service, whereas in Portugal and Norway, this happens more often according to respondents.

Do you find that the fast chargers do not work when you are about to charge your car?



21. Global EV Alliance (GEVA), "The Global EV Driver Survey"
22. Global EV Alliance (GEVA), "The Global EV Driver Survey"

Regulatory uncertainty and concerns about overbuilding charging stations impact the pace of private investment in public charging

- **Private investment is slowing in Western Europe due to market consolidation and fears of overbuilding.**
- **Investors now shift focus to Eastern Europe: new funding from major financial institutions is currently helping to scale charging operators in emerging European markets.**

Due to regulatory uncertainty and concerns about public charging overbuilt in many Western European markets – when supply of charging services surpasses demand – charge point operators are hesitant to invest in public chargers. The market is starting to consolidate, as leading incumbents reach scale and maturity. Focus now increasingly goes to Eastern Europe, where the European Bank for Reconstruction and Development invested €15 million in charging operator Eldrive and investor Mirova €50 million in GreenWay[23].

23. Roland Berger, "Steady progress: EV Charging Index, Edition 6" (2025).



04.

Consumer readiness and perceptions

Over the years, EVs are met with increasingly positive sentiments.

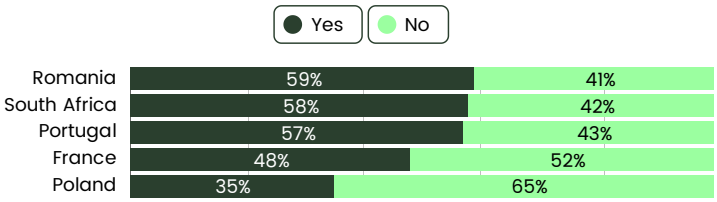
Over the years, EVs are met with increasingly positive sentiments.

Consumer interest in EVs is high, even in markets that currently have low adoption rates

- **A majority of consumers express a willingness to switch to an EV in the future.**
- **Despite this positive sentiment, the actual intent to switch to EVs if one had to buy a new car today is less convincing**

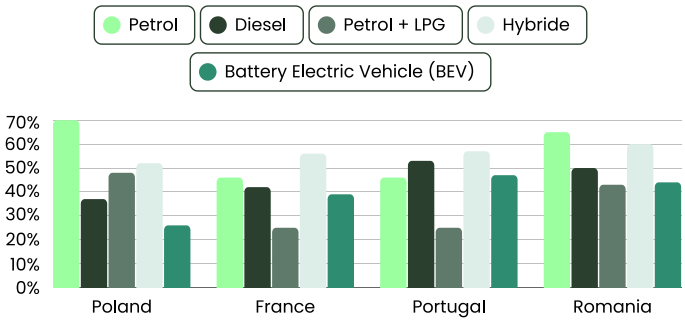
In most geographies, a majority of people are willing to switch to EVs. In Romania, 59% of people are willing to switch, down to 35% in Poland, where the majority is still reluctant. In South Africa, where EV penetration is extremely low – as discussed before – and charging infrastructure is insufficient, yet 58% of people are willing to switch to EV in the future.

Willingness to switch to EV in the future



That's someday in the future though. The picture flips when people are asked what engine they are willing to buy today. LPG (liquefied petroleum gas) cars are the least popular, followed by BEVs. In Poland and Romania petrol cars win the contest (followed by hybrids), in France and Portugal it's hybrids.

If buying a car today, what engine are you willing to buy?
(More than 1 answer possible)

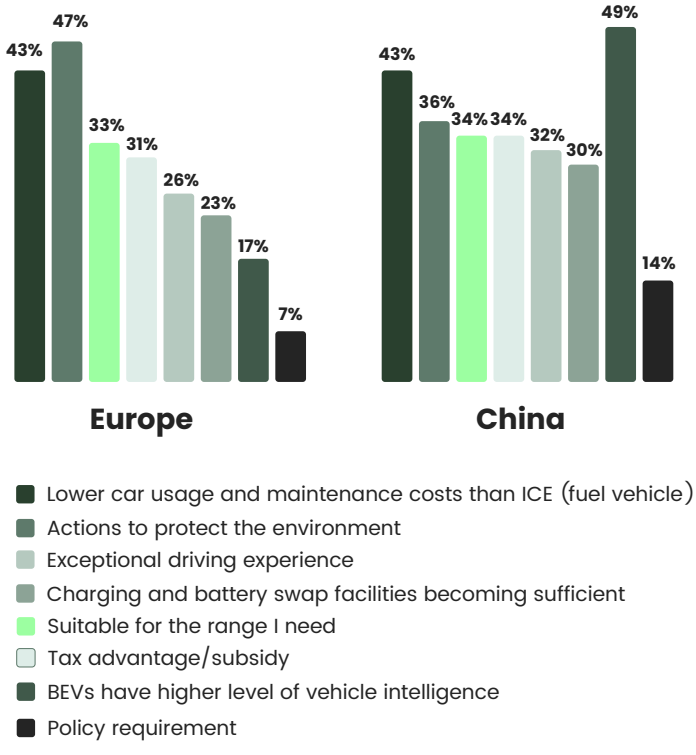


Attitudes towards EVs are overwhelmingly positive across all surveyed European countries. Notably, in Romania, people are 'very positive' towards EVs, yet uptake is still low. This is a high-potential country. Poland is characterised by a large group of people that is 'neutral' towards EVs.

Drivers primarily choose EVs to save costs and to protect the environment

- **Lower usage and maintenance costs, combined with environmental benefits, are the top motivators to choose an EV in Europe.**
- **In other regions, like China, technological considerations play a significant role as well.**

When EV drivers were asked about the key reasons why they decided to buy or lease a BEV, the environment was most often cited: 47% of European BEVs, closely followed by lower car usage and maintenance costs (43%). In China, people chose an EV because of their higher level of vehicle intelligence (49%) and their lower usage and maintenance costs (43%).



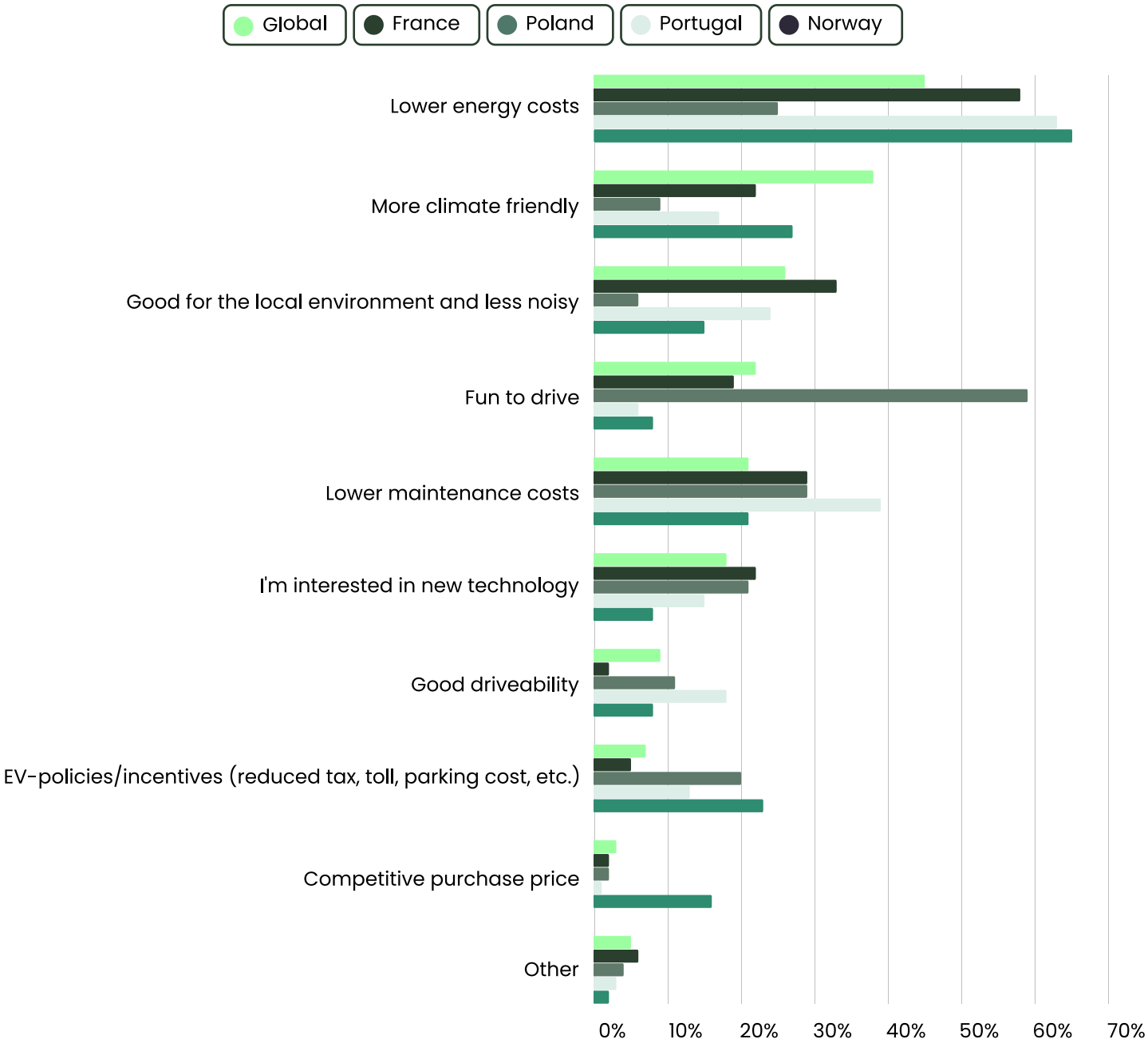
24. European Commission, Directorate-General for Mobility and Transport (DG MOVE), "Consumer Monitor 2025: EU drivers' view on electric cars" (2026). DOI: 10.2832/3961385.

The Global EV Alliance (GEVA) conducted a survey among 27,500 EV drivers from 30 countries for the second time in 2025. They asked EV drivers the same question: why did you go electric. Here's what they answered. Globally, lower energy costs won with 45% of respondents.

The climate closely followed with 38% of respondents.

In all countries included in this research, costs was the most important factor, except in Poland, where 'it's fun to drive' was cited most often (65%).

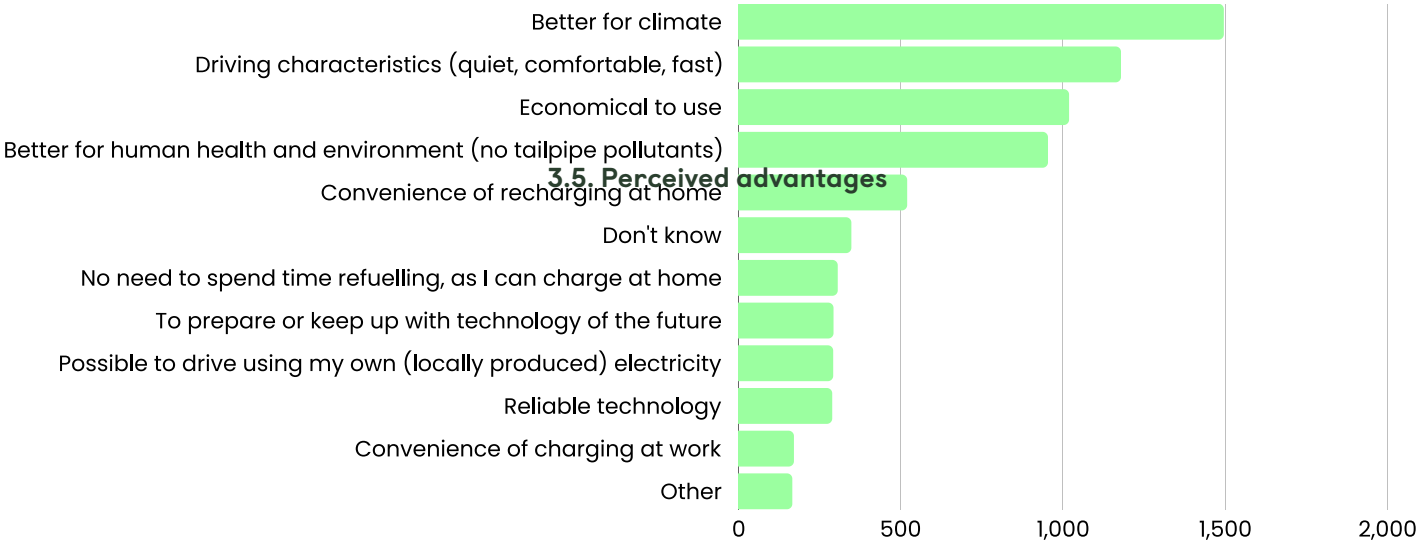
Why did you choose to buy an EV? (maximum of two choices)



And when a 2025 EU-wide survey asked drivers of all kinds[25] what they perceived as being the benefits of an EV, they answered the following. Despite the prevailing myth that EVs are not better for the climate than ICE vehicles, half of the respondents agree that EVs are better for the climate. Driving characteristics, usage costs and better for human health and local environment follow.

25. European Commission, Directorate-General for Mobility and Transport (DG MOVE), "Consumer Monitor 2025: EU drivers' view on electric cars" (2026). DOI: 10.2832/3961385 ; Survey among 3,000 car owners of which 2,300 ICE-drivers.

3.5. Perceived advantages



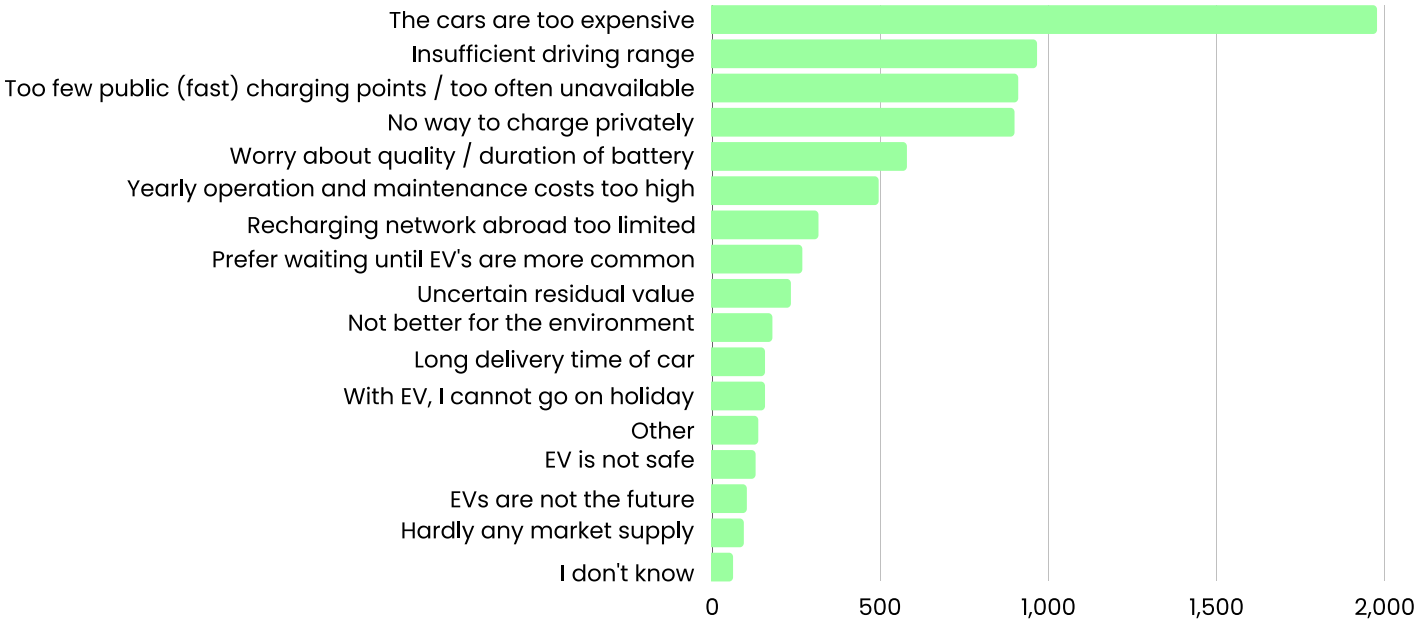
3.5. Perceived advantages

High upfront purchase prices and charging infrastructure concerns are primary obstacles for potential buyers

- **The initial higher purchase price, range anxiety, and lack of public charging remain the most cited barriers for EV adoption.**
- **There is a gap between the general interest in EVs and the actual decision to purchase.**

It seems as most people do know about the benefits of driving EVs. Yet, many people experience hurdles when purchasing one. A 2025 EU-wide survey among over 3,000 car owners – of which over 2,300 were ICE drivers and the remainder EV drivers – shows the perceived disadvantages of BEVs[26]. Overwhelmingly, they are seen as too expensive. The three following reasons all have to do with batteries and charging: insufficient range and chargers, and no way to charge at home.

Perceived disadvantages

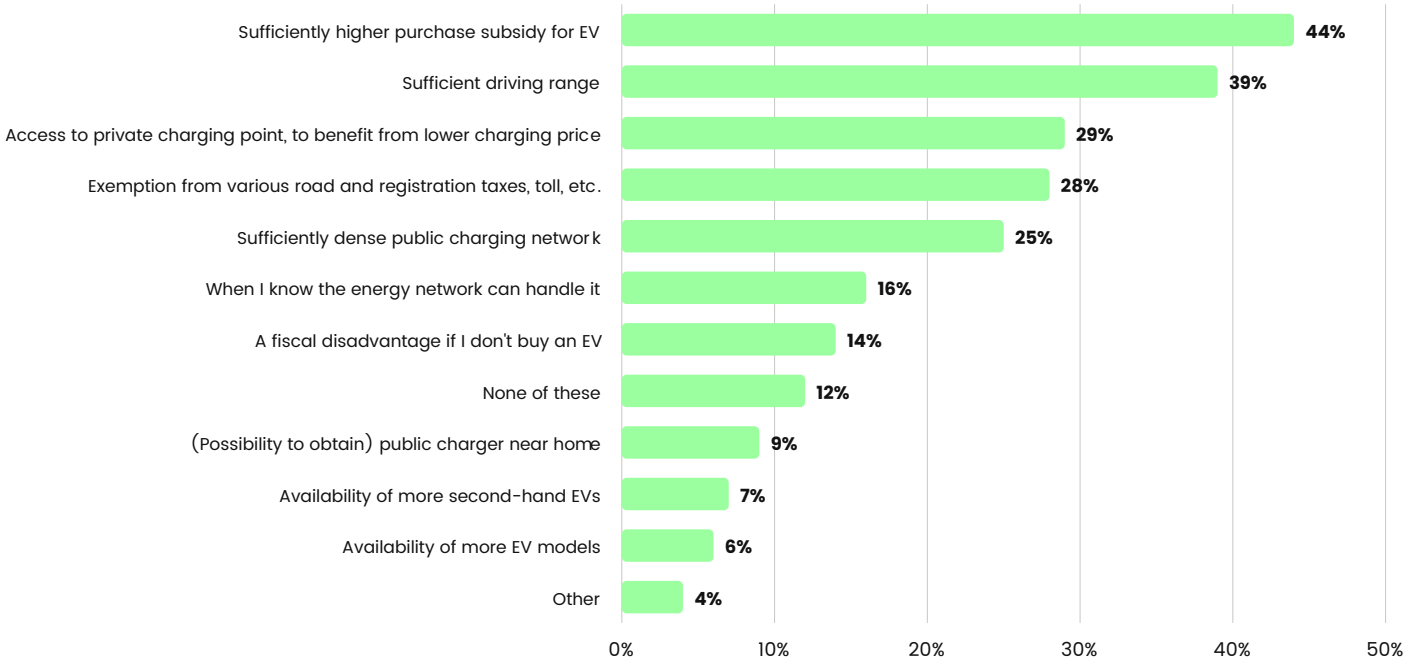


26. European Commission, Directorate-General for Mobility and Transport (DG MOVE), "Consumer Monitor 2025: EU drivers' view on electric cars" (2026). DOI: 10.2832/3961385 ; Survey among 3,000 car owners of which 2,300 ICE-drivers.

When those same people are asked what could convince them to buy an electric car in the (near) future, their answers were unsurprisingly also about costs, battery and charging.

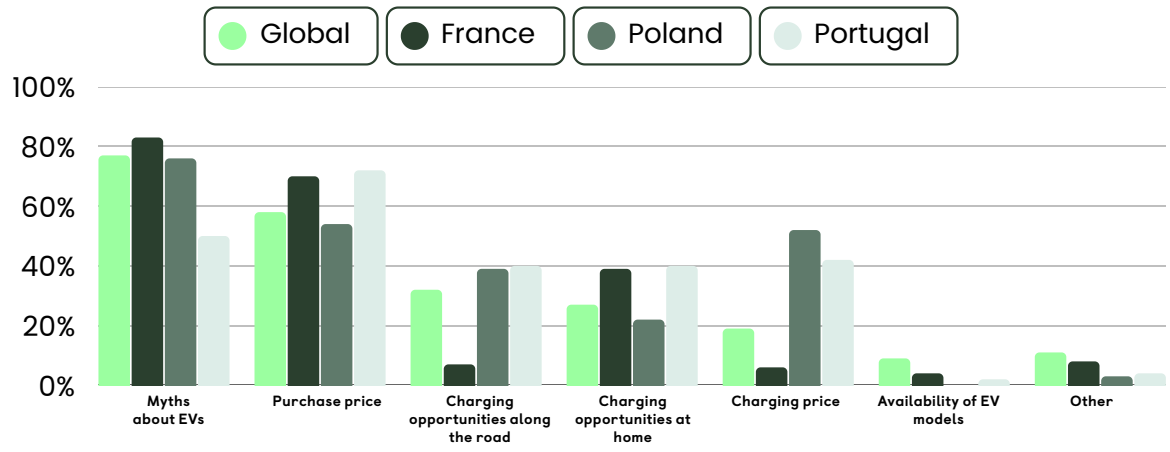
Sufficiently higher subsidies, sufficient driving range, and access to private charging could convince them to switch to an EV.

How to convince you to buy an EV in the future



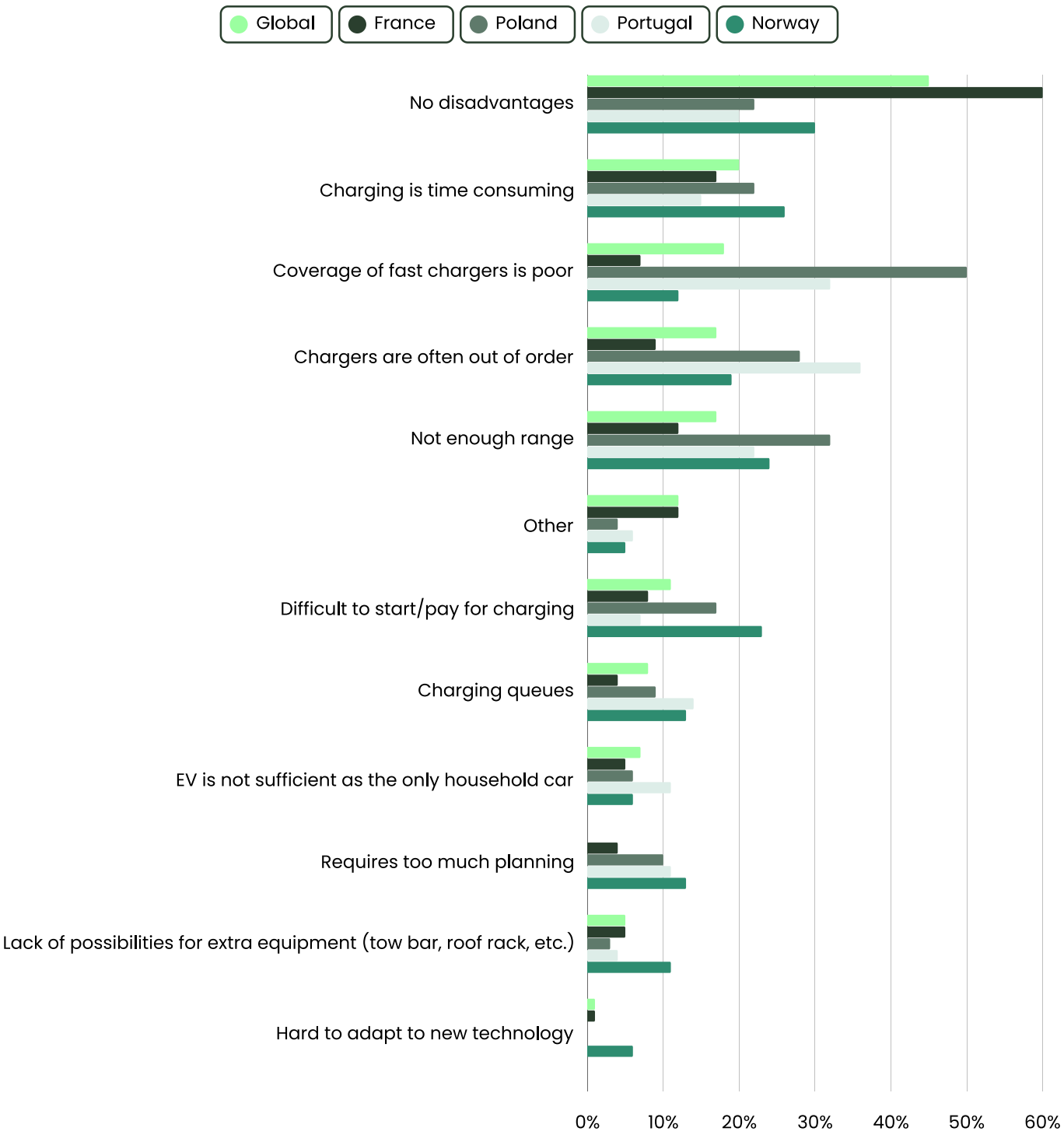
The Global EV Alliance survey among 27,500 EV drivers asked what's slowing down EV uptake in their view. Current EV drivers think that myths about EVs are the biggest hurdle for EV uptake, followed by purchase price, and public charging opportunities. When current EV drivers are asked what disadvantages they experience with having an EV, current EV drivers answered[27]:

What do you think is the greatest barrier towards EV adoption in your country? (maximum of three choices)



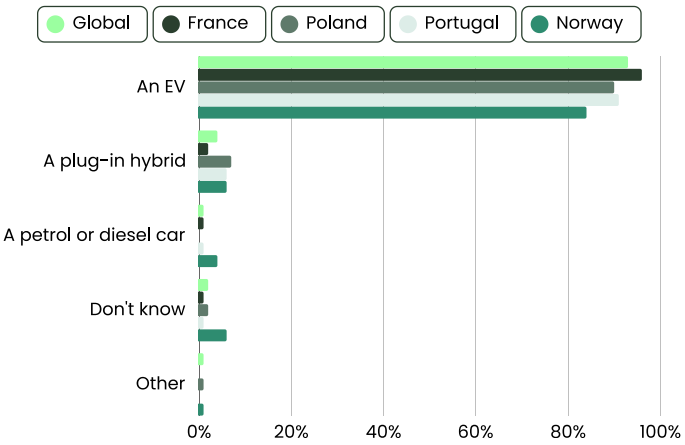
27. Global EV Alliance (GEVA), "The Global EV Driver Survey"

Do you experience any disadvantages with having an EV? (maximum of three choices)



Globally, 98% of EV drivers are very satisfied or satisfied with being an EV owner. Unsurprisingly, a vast majority of EV drivers would buy another EV if they had to switch cars tomorrow:

If you had to replace your EV tomorrow, what would you get?



Many perceived barriers regarding range and battery life are misconceptions disproven by the experience of actual EV owners

- **Actual EV owners experience significantly higher satisfaction and fewer disadvantages than non-owners expect, suggesting that many concerns are based on myths.**
- **Real-world data, such as a 0.1% battery failure rate, directly contradicts common fears regarding battery life and range.**

There are clear signs that many EV barriers are perceived rather than real: there is a gap between what prospective buyers or ICE drivers fear and what current owners report. Globally, 98% of EV drivers are satisfied or very satisfied with EV ownership and the majority would buy electric again, and they overwhelmingly report that they experience no disadvantage to EVs.

The largest concerns before purchase vanish once a person actually switches to EV, confirming the misconceptions. Battery range is the most prominent example. Insufficient driving range was the second biggest worry mentioned in the GEVA-survey, yet globally only 17% of EV owners report it as an actual disadvantage (and 32% of Polish, 22% of Portuguese and 12% of French EV owners).

The availability of charging points follows the same pattern. It's the third most cited disadvantage mentioned by all car owners in the GEVA-survey. Globally, only 18% of people say charging coverage is poor. That being said, in Poland, the barrier of charging point availability is not imagined, it's real: 50% of the current EV owners mention it as a disadvantage. 32% of Portuguese EV drivers think so, and 7% of French EV drivers.

Worry about battery life duration is another great example. It's the fifth most cited worry when buying an EV, yet there is a real-world battery failure rate of just 0.1% (in 2023), and charging capacity deteriorates way slower than people expect.

And finally in South Africa, a survey was conducted including questions on range and charging costs. Respondents systematically underestimate range and overestimate costs[28].

Let's dive into the barriers for EV uptake one-by-one, to get a full picture.

Falling battery costs and the introduction of new, affordable models are steadily improving EV price competitiveness

- **Declining battery costs and the influx of affordable Chinese models are lowering the price premium of EVs over ICE cars.**
- **In 2025, a significant portion of new BEVs sold in Europe were priced below the average of their ICE equivalents, making a shift towards improved price accessibility.**

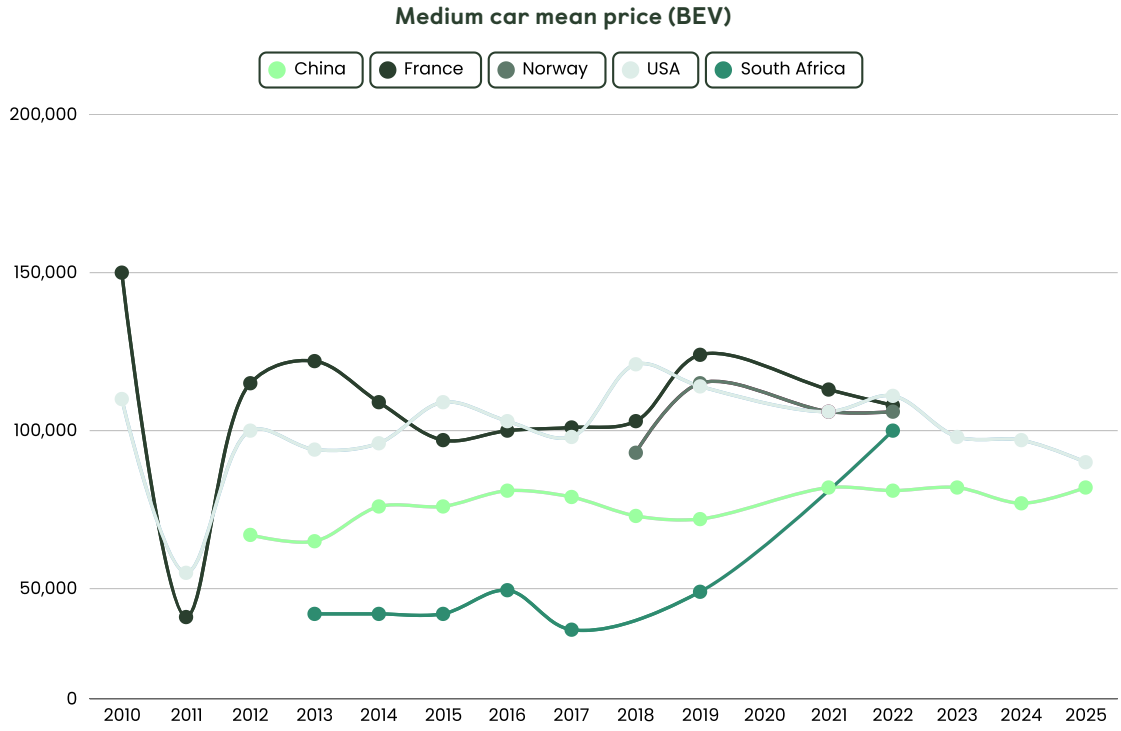
The most cited barrier to EV adoption is the higher upfront price of EVs compared to ICE cars. It is true that on average, EVs are still more expensive than ICE-cars: they still carry a price premium of around 20%. Many consumers are not willing to pay more for a BEV than a comparable ICE model. There's a median willingness-to-pay of around €20,000 whereas less than 10% of available BEV models in Europe is priced under €30,000[29].

Good news is that over the past decade, EV prices fell globally due to declining costs of battery

28. AutoTrader, "2025 AutoTrader Annual Industry Report: January–December 2025"
https://www.iea.org/reports/global-ev-outlook-2026/trends-in-electric-cars - 29

manufacturing, as well as the introduction of new affordable models. In Europe, in 2025, the average price of an EV decreased for the first time, after years of increase, as CO2-targets push carmakers to introduce new affordable models, and as new Chinese models enter the European market: over 30% of BEVs sold in 2025 were now below the average price of their ICE equivalents in Europe. Think of models like the Renault 5 E-Tech and Hyundai Inster, as well as various Chinese entrants. In China, 70% of BEVs sold in 2025 were already cheaper than the average ICE car. Notably, the affordability of small EV models displaced essentially all ICE alternatives in the small-sized car market in 2025.

However, the market for EV shifts towards larger vehicles and larger batteries, and therefore, the average EV price fluctuates. Not just in China, but also globally.



Total cost of ownership is generally lower for EVs than for ICE vehicles

- **Although electric vehicles often have a higher initial purchase price than their ICE equivalents, they typically offer a significantly lower total cost of ownership.**
- **Medium-sized EVs are reaching price parity this year, and small and large models are projected to follow by the end of this decade, even before accounting for additional savings from tax cuts, lower maintenance costs and subsidies.**
- **Due to their lower retention rate, second-hand and third-hand EVs are already much cheaper than their second- and third-hand ICE equivalents.**

Whereas there's still a price premium on the average EV compared to ICE-cars, the total cost of ownership (TCO) is generally much lower. It's the third mentioned benefit of EV ownership by all car-type drivers, after 'better for the climate' and 'driving characteristics'.[30]

When looking at total cost of ownership, medium-sized EVs reach price parity (where the price premium you pay for an EV drops below €0) this year, as the figure below shows. Small and large EVs reach price parity around the end of this decade. This is under the assumption of a first-hand vehicle driving 15,000 kilometres a year. Tax, maintenance, insurance and subsidies are not included. These are often in favour of EVs, meaning reality is even more positive for EVs than the graph shows.[31]

30. European Commission, Directorate-General for Mobility and Transport (DG MOVE), "Consumer Monitor 2025: EU drivers' view on electric cars" (2026). DOI: 10.2832/3961385.
31. The European Consumer Organisation (BEUC), "From transition to reality: A turning point for consumers' electric mobility" (2025).

TCO premium of a new electric car compared to a new petrol car

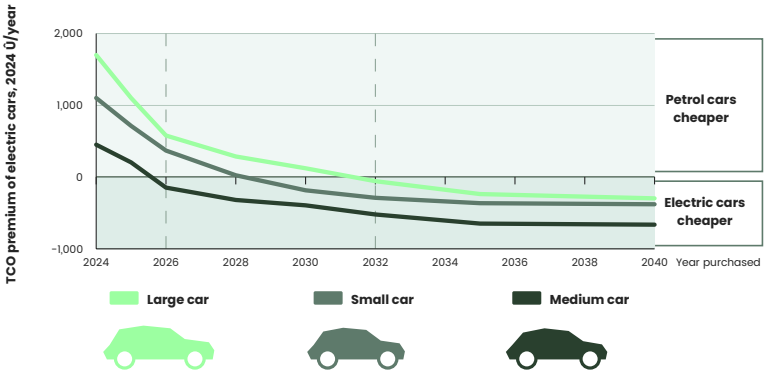
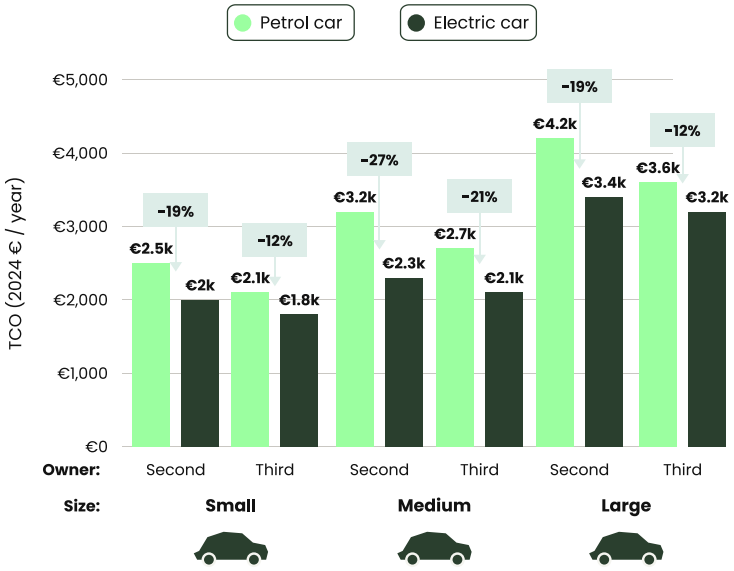


Figure 1: Annual total cost of ownership premium (over four years) of a new electric car compared to a new petrol car for small, medium, and large cars based 15,000 KM annual mileage. Taxes, maintenance, insurance and subsidies not included.

Second-hand and third-hand cars are already much cheaper in terms of TCO, for small, medium and large cars alike[32].

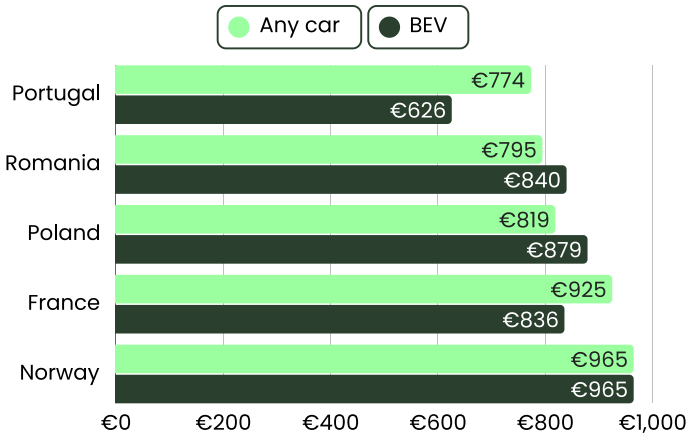
Cost of ownership of used electric and petrol cars first registered in 2024
(second owners purchase in 2028, third owners in 2033)



Lease EVs show a similar picture. Ayvens compares the cost of leasing BEVs to the cost of leasing other types of cars in Europe. In 17 out of 30 countries, BEVs are now cost-competitive. Portugal is the most affordable country in Europe for driving an EV.

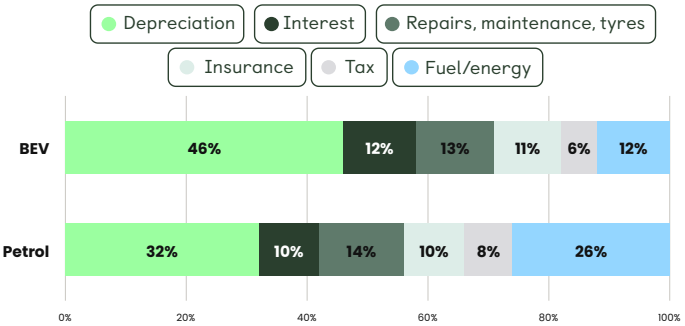
In 2025, the monthly costs – including depreciation, interest, repairs, tyres, fuel or energy, taxes and incentives and insurance – of BEVs were lower in Portugal and France than of other types of cars.

'Other types of cars' includes petrol, diesel, PHEV, hybrid and BEV[33].



Ayvens mentions that the reason for this cost gap – despite the fact that BEVs have much lower fuel or energy costs than petrol and diesel cars – is because they depreciate faster.

Breakdown of costs



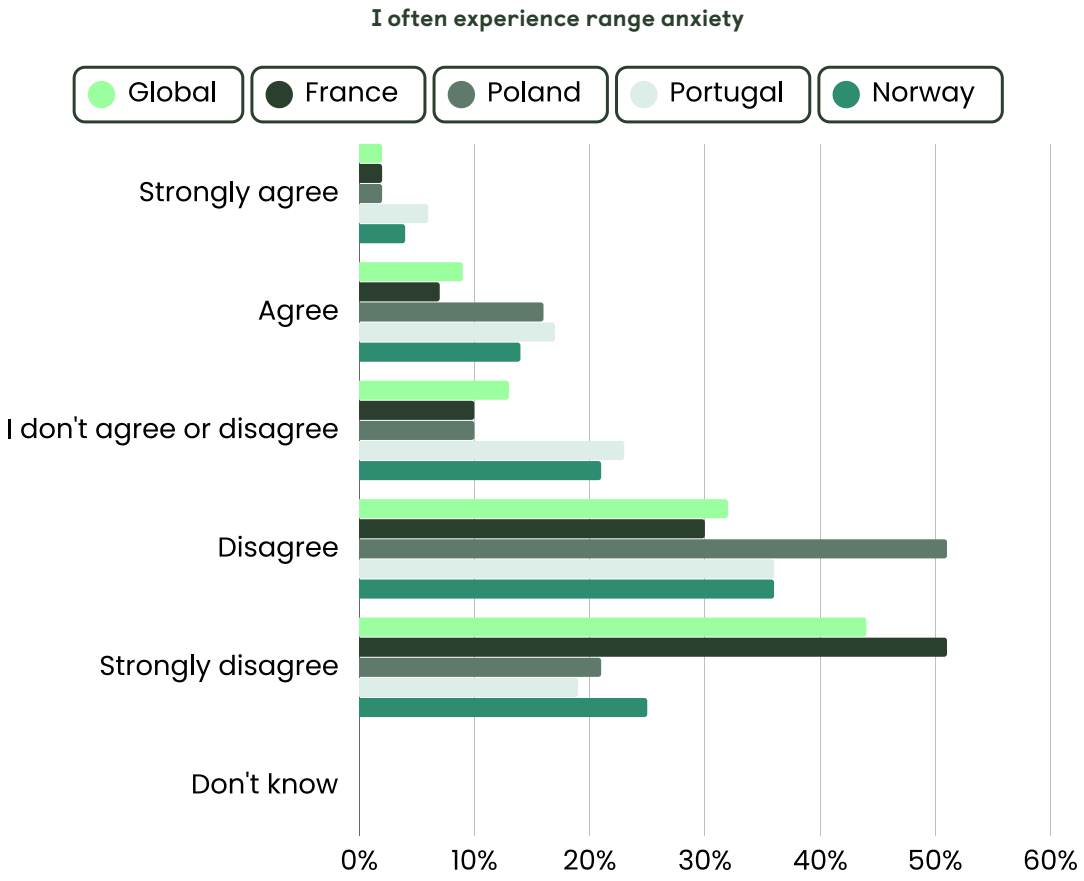
Battery range is perceived as a limiting factor of EVs, yet current models easily meet the daily driving needs of most users

- **While prospective buyers worry about range, most EVs have a sufficient range to cover the average daily commute of European drivers.**
- **The perception that range is a primary hurdle is disconnected from actual usage data, as most drivers rarely encounter scenarios where the full battery capacity is exhausted in a single trip. And if it does occur, charging infrastructure is sufficient nowadays to recharge during the trip.**

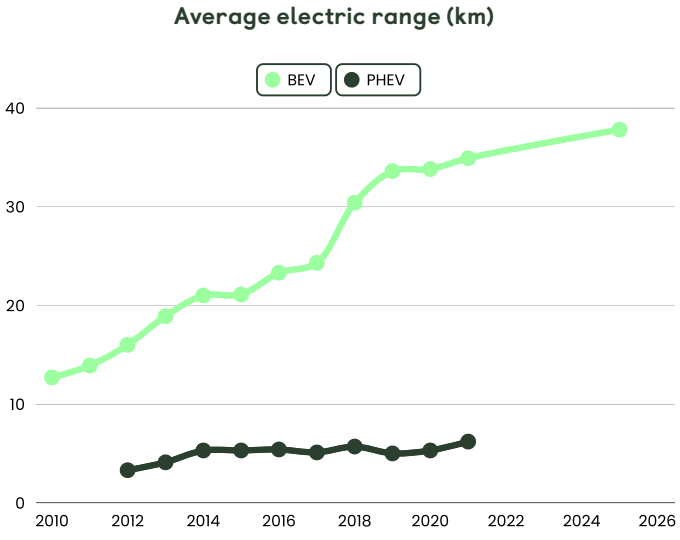
32. The European Consumer Organisation (BEUC), "From transition to reality: A turning point for consumers' electric mobility" (2025).
33. Ayvens, "Findings from Ayvens' 2026 Car Cost Index" (2026).

The second most important hurdle to EV adoption is battery range, and it's a good example of where perception misaligns with reality, as mentioned earlier. The GEVA-survey shows EV drivers hardly experience range anxiety once they own an EV[34].

When they were presented with the statement 'I often experience range anxiety', they said the following. Globally 76% disagrees or strongly disagrees. In France this is 81%, in Poland this is 72%, and in Portugal 55%.



This shows that the range gap is largely perceived rather than factual. The fact that the average BEV has a battery range of almost 380 km, whereas the average daily drive is only 40 km, supports this[35].



34. Global EV Alliance (GEVA), "The Global EV Driver Survey"
35. International Energy Agency (IEA), "Global EV Outlook 2026"

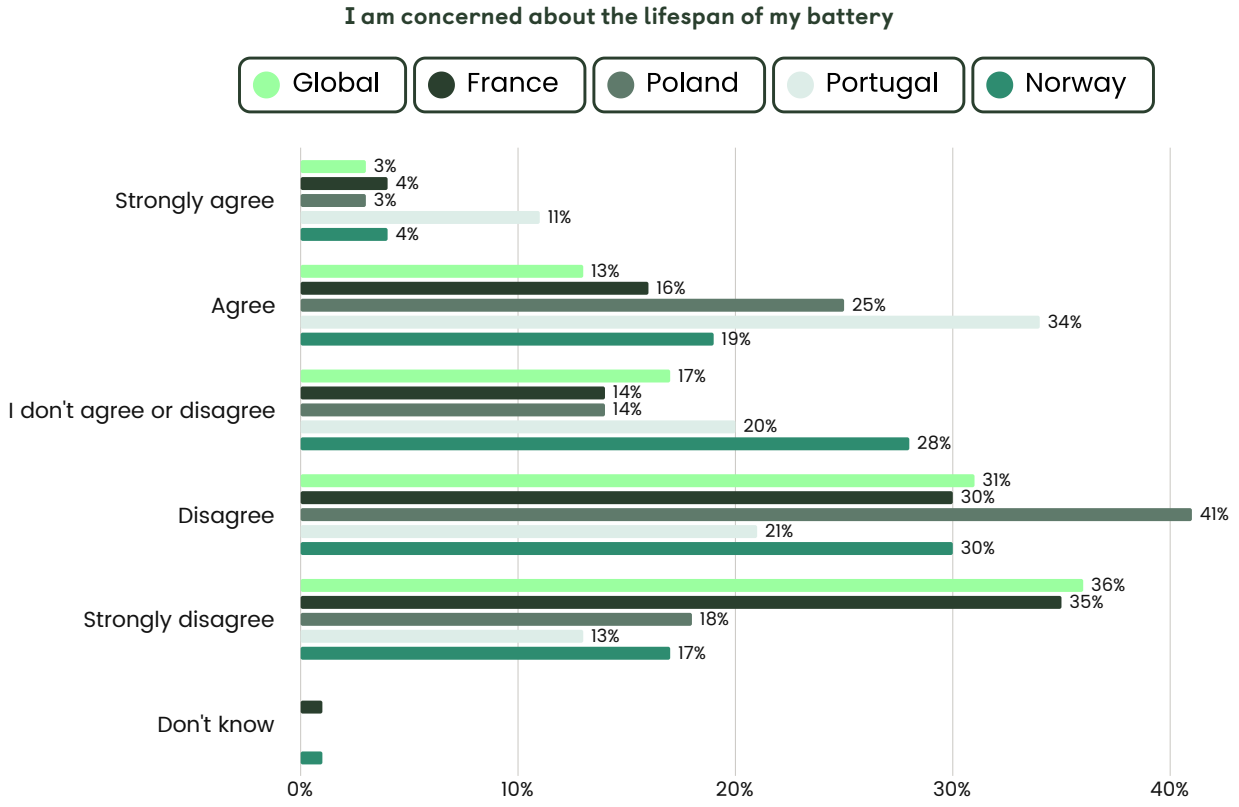
Battery range has plateaued in recent years. The average range of small and medium-sized cars increased by respectively 7 and 5%, but this was offset by global EV sales trends being increasingly concentrated around large cars and SUVs. Also, more affordable, shorter-range models contributed to the plateauing of the global average driving range.

Extending vehicle range by increasing battery capacity involves trade-offs. Larger battery packs can increase vehicle weight, partly offsetting gains in range, and cost. As charging infrastructure expands and fast-charging battery capabilities improve, incremental increases in battery size yield diminishing returns.

Battery lifespan worries are widespread among prospective buyers, but actual failure and degradation rate don't support these worries

- **Whereas battery lifespan is a hurdle for switching to EVs, 67% of actual EV drivers disagree that battery life is a concern.**
- **Batteries rarely fail and average degradation is only 2.3% per year, proving batteries do have a long lifespan.**

Another cited hurdle to EV adoption is concern about the lifespan of batteries. Interestingly, people already driving an EV are less concerned. When given the thesis 'I am concerned about the lifespan of my battery', people responded:



Globally, 67% of EV drivers disagree or strongly disagree with this thesis.

And they're quite right to be unconcerned about their battery, when it comes to failure rate. EV batteries are designed to last the lifetime of the vehicle, unlike starter batteries of ICE-cars that need replacement every few years. In 2023, the battery failure rate was down to 0.1%[36].

However, it is true that batteries lose some of their initial range over time, an important factor in the market for used EVs. Analysing data from more than 22,700 vehicles across 21 makes and models, they found an average degradation of 2.3% per year, meaning that after 8 years, the battery capacity is still over 80% of its original. Batteries charged at slower (home) chargers degrade slower than that, batteries relying mostly on high-power DC fast chargers degrade at about 3% per year[37].

New research in Sweden that tested almost 10,000 batteries between 2022 and 2026 shows that many models still retain 95 to 97% of their original battery capacity after 100,000 kilometres driven[38].

Faster depreciation is one of the few EV concerns grounded in facts, but it is only a downside of new EVs, and is actually a benefit for those buying used ones

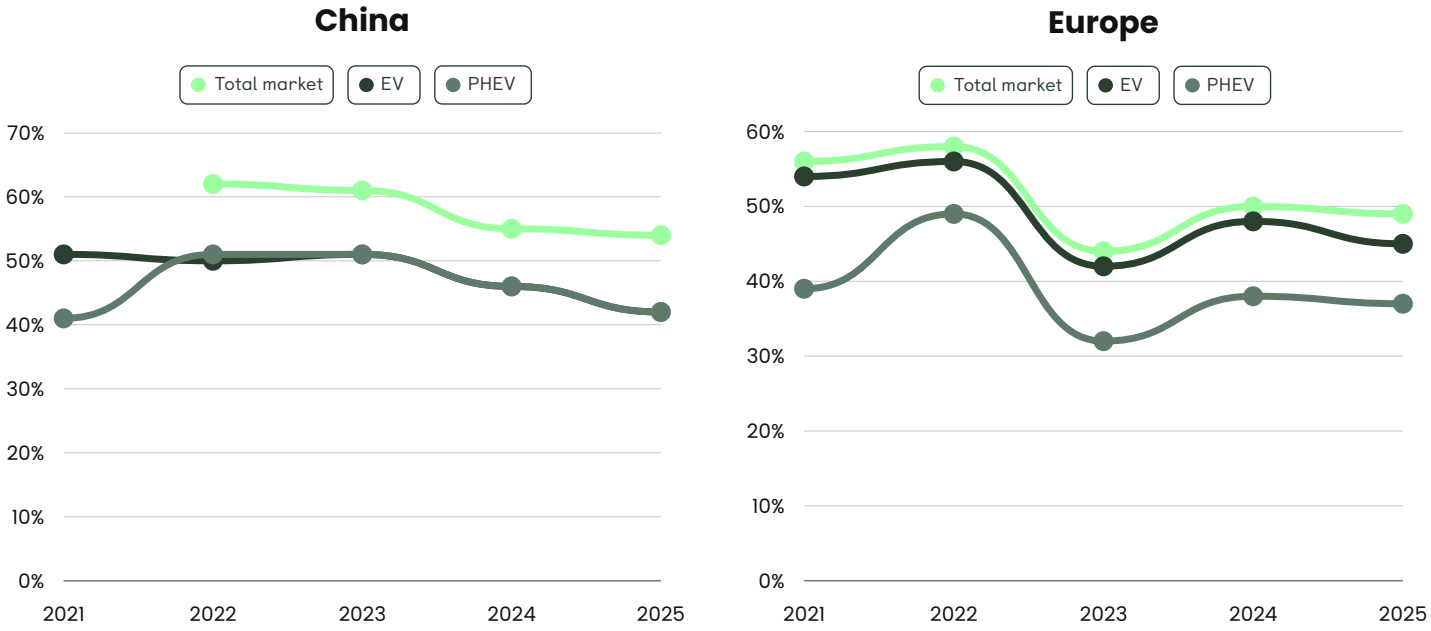
- **After three years, BEVs retained around 37% of their value, against 49% for the car market as a whole.**
- **Rapid battery technology advances make older EVs less attractive, accelerating depreciation of earlier models.**

The retention rate is a metric used in secondhand technology markets to show the residual value. It represents the value of the vehicle when being resold in relation to the original purchase value. A retention rate of 70% means that a product purchased new will lose 30% of its original value.

In 2025, the retention value of BEVs was around 37%, whereas that of PHEV and the total market was around 49%. Thus, the retention value of BEVs is indeed lower, meaning this concern is justified.

The figures below show the retention value after 3 years[39]

Retention value



Rapid advances in battery technology have quickly made newer electric models far more attractive, accelerating the depreciation of older electric cars. While electric cars generally require less routine maintenance than conventional cars, concerns about battery health and the potential cost of major repairs make the purchase of an older electric car less appealing. So much so that it is estimated that around 80% of used car dealers in China now refuse to accept BEVs that are more than 5 years old.

36. U.S. Environmental Protection Agency (EPA), "Electric Vehicle Myths" US EPA
37. Geotab, "How long do electric car batteries last? The updated guide to real-world EV battery health" Geotab
38. OTOMOTO, "Degradacja baterii w samochodach elektrycznych: jaka jest?" OTOMOTO News
39. International Energy Agency (IEA), "Trends in electric cars"

Cost is not what holds back prospective used EV buyers, uncertainty about battery health is

- **Uncertainty about battery health and fear of repair costs deter people from buying used EVs.**
- **Buyers without home charging – disproportionately lower-income households most reliant on the used market – have a lower total cost of ownership advantage as they pay for public charging, delaying parity between EV and ICE vehicles by up to six years.**

The steep depreciation rate of EVs is bad news for buyers of new EVs, but actually good for buyers of used EVs.

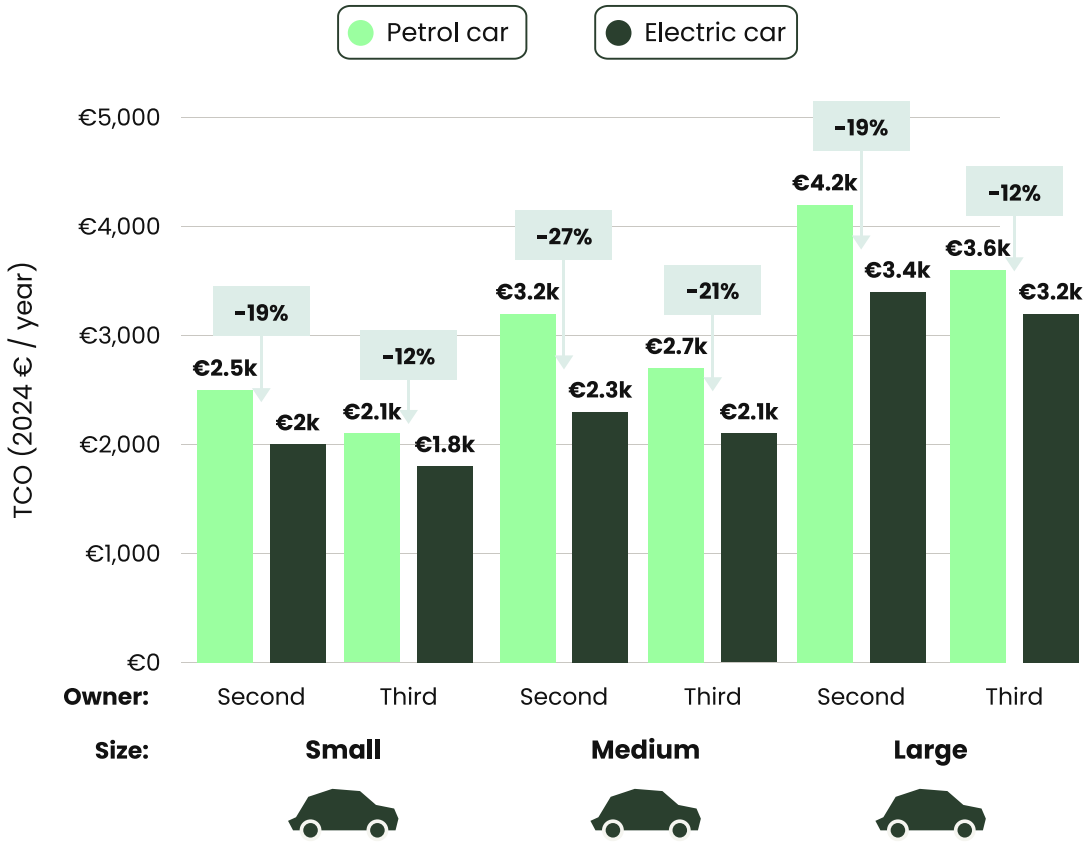
As discussed, when looking at total cost of ownership, second-hand and third-hand EVs are already cheaper than second-hand and third-hand ICE-vehicles. Thus, cost should not be the factor deterring people from purchasing used EVs.

New electric cars registered today, will bring savings to their second and third owner of between €262 and €849 per year, compared to an equivalent petrol car[40].

So, then what is holding people back to purchase a used EV? Since – as shown in chapter 1 – the used EV market is still nascent.

The single most important barrier to purchasing a used EV is battery health uncertainty and fear around repair costs. Another factor is that the pipeline of used cars is still thin, and depends on volumes of new EVs and lease EVs cycling through, which is still building. Moreover, the people most reliant on the used market – those with a lower income – often have no access to home charging. If you only rely on public charging, then the difference in TCO between ICE and EVs shrinks, delaying parity by up to six years. And, it makes owning an EV way less convenient[41].

Cost of ownership of used electric and petrol cars first registered in 2024
(second owners purchase in 2028, third owners in 2033)



40. The European Consumer Organisation (BEUC), "From transition to reality: A turning point for consumers' electric mobility" (2025).
41. International Energy Agency (IEA), "Trends in electric cars"

05.

The regulatory environment around promoting EVs

EV markets grow fast where sticks and carrot are combined, not deployed in isolation

- **Sticks include tighter CO2 standards, low- and zero-emission zones, higher road taxes on polluting vehicles. Carrots include purchase subsidies, tax exemptions, lane access and social leasing.**
- **Some countries go further with manufacturer mandates on minimum EV production shares.**
- **Regulation also targets charging infrastructure: mandatory charging points in new developments, capital grants, and de-licensing of charging operations.**

In times of global unrest – including unrest in the Middle East – the desire to be less dependent on oil imports could shape future policy choices for promoting EV uptake.

A combination of sticks and carrots, as well as the increasing cost-competitiveness of EVs, spurs EV market growth. In the category 'sticks', think of tighter CO2 standards, low- or zero-emission zones, and higher road taxes for more polluting cars. In the category 'carrots', we can think of purchase subsidies, tax exemptions, the use of bus and carpool lanes by EVs, and social leasing schemes for EVs.

There are also examples of countries adopting manufacturer mandates, where they must produce a minimum share of EVs per year, and segment-specific adoption mandates, where certain sectors – such as buses and taxis – must electrify. Regulation may also be targeted at the charging infrastructure. Think of mandatory charging points with new housing developments, capital grants for charging stations, and de-licensing of operating charging stations).

The tables below show the most effective policies worldwide, as identified by the International Energy Agency[42]

Demand-side fiscal incentives

Policy measure	Country examples	Evidence	Key limitations
Company car tax differential (benefit-in-kind) Preferential tax rate on EV company cars vs ICE	UK, Belgium, Denmark, Portugal	Belgium: **BEV-only depreciation deduction from 2021 -> corporate EV uptake 8.8% (2021) to 54.2% (2025); BEV share of new registrations reached 35% in 2025**, highest among major EU markets. Belgium's 128,000 new BEV registrations in 2024 -> 87% were company cars. UK: **differential drives ~60% of new registrations through fleet.**	Benefits primarily corporate buyers, not private households; creates risk of used EV market glut if private demand doesn't absorb fleet turnover; Belgium already seeing BEV residual values down 30-40%.
Social / targeted leasing scheme Subsidised EV leasing for low-income households	France (leasing social)	France's social leasing programme (€100/month EV rental for low-income) drove 14.9% BEV sales increase in H1 2024, outperforming most peer markets. Targets households unable to absorb upfront cost premium - broadens transition beyond high-income early adopters.	Budget-limited; discontinued prematurely in France after oversubscription; does not address private buyer market at scale without renewal.

42. International Energy Agency (IEA), "Trends in electric cars"

Discouraging ICE vehicles

Policy measure	Country examples	Evidence	Key limitations
High ICE vehicle taxation (registration / purchase tax) Weight- or cost-based tax making ICE vehicles expensive	Norway, Denmark	Norway, Denmark Norway's model is explicitly framed as **"taxing ICE out of business"** rather than subsidising EVs. ICE registration taxes average ~45% of pre-tax price; combined with zero VAT on EVs, this creates a structural price inversion. Head of the Norwegian EV Association: "It's very much also about the whip."	Requires political consensus and no domestic auto manufacturing lobby (Norway produces no cars). Countries with major ICE manufacturers face employment and industrial policy resistance.
ZEV mandate (manufacturer sales obligation) Legally binding minimum EV share per manufacturer per year	UK, China (Dual-Credit), California, EU CO2, standards	UK ZEV mandate first year (2024): BEVs reached 20% of new registrations despite removal of consumer subsidies in 2022. UK BEV sales up 21.4% in 2024 while Germany (no mandate equivalent, subsidies removed) fell 27%. China's Dual-Credit: NEV market share 48% in 2024, continued accelerating after direct subsidies ended. **ZEV regulations are the primary driver of structural market change; incentives accelerate early uptake but cannot substitute for mandates.**	Requires enforcement capacity; UK manufacturers used £5bn in discounting and credit borrowing to meet 2025 targets, raising questions about compliance cost sustainability. US rollback of federal mandates in 2025-26 demonstrates policy reversal risk.
Segment-specific adoption mandate Compulsory electrification of buses, taxis, moto-taxis	Rwanda (Kigali e-moto), Vietnam (urban bus), Chile (bus)	Rwanda: Kigali e-moto mandate (Jan 2025) targeting all new public transport motorcycle registrations - rapid uptake in a market where motorcycles account for ~20% of all trips. Chile: 3,000+ electric buses in Santiago (largest fleet outside China) via mandate + leasing model. Vietnam Decision 876: 100% urban bus and taxi electrification by 2030, driving near-doubling of EV car share in 2024. **Mandates work because the state controls the procurement decision.**	Works best where state exerts direct control (public transport, government fleets); harder to apply to private vehicle market without broad fiscal support.

Charging infrastructure

Policy measure	Country examples	Evidence	Key limitations
Capital grants for charging deployment State funding (50-100%) of charging station CAPEX	Turkey (75% grant), UK (LEVI), US (NEVI)	Turkey: 75% fast-charging grant grew public network from 3,000 to 11,000+ stations (Feb 2025). World Bank (2022) meta-analysis: **charging infrastructure investment is more cost-effective than direct purchase subsidies for driving EV adoption.** Roland Berger EV Charging Index: **markets with strong public charging grow EV satisfaction and adoption faster;** public chargepoint count grew 33% globally in 2024.	Utilisation lag: charging infrastructure takes years to reach profitability (slow ramp-up, permitting delays, high grid connection costs); public investment needed to bridge early-stage viability gap.
De-licensing / regulatory simplification Removing licence requirements to operate charging as a service	India	India's declaration of charging as a de-licensed activity (2024 guidelines) **removes the most significant entry barrier for private operators.** Combined with maximum connection timelines, it enables rapid private deployment without public CAPEX. Low fiscal cost; primarily regulatory. Conceptually similar to California's HB 1173 requirement that permits be approved or denied within 30-60 days.	Evidence base is younger than for grant programmes; effectiveness depends on whether private capital actually deploys in underserved areas (market failure likely in low-density or low-income areas without additional support).

Used EV supply and price

Policy measure	Country examples	Evidence	Key limitations
Fleet electrification mandate / incentive driving turnover Policies forcing or incentivising fleet EVs that cycle into used market	UK (BiK), Belgium (depreciation), France (fleet ZEV mandate)	Belgium: **89% of new BEVs in 2025 registered as company cars - these will enter used market from ~2027 onward, creating a structural supply pipeline.** UK: ~60% of new registrations through fleet; **company car tax differential the primary driver of used EV supply.** Belgium already has 450,000 BEVs on road by end-2025 with fleet turnover beginning - though private demand for used BEVs remains thin (only 3.2% of used transactions in 2024).	Fleet-to-used pipeline has a 2-4 year lag; if private used demand doesn't develop in parallel, used EVs depreciate steeply (Belgium: 30-40% in 4 years) and may be exported rather than reaching domestic used buyers.

Perception on EVs, batteries and charging

Policy measure	Country examples	Evidence	Key limitations
Battery warranty requirements Mandatory minimum battery warranty (capacity retention)	EU (8 years/160,000 km), California, China	EU requires minimum 8-year/160,000 km battery warranty with >=70% capacity retention. Roland Berger EV Charging Index 6 (2025): **battery degradation perception is a top barrier to EV consideration; standardised warranty coverage directly address this. Reduces perceived risk for both new and used EV buyers; supports residual values.**	Only address perceptions if consumers are aware of warranty terms - communication and point-of-sale disclosure equally important.
Transparent / standardised charging pricing kWh-based pricing mandates, discovery apps, interoperability	Turkey (EMRA kWh-only rule), EU AFIR, Turkey (Sarj@TR app)	Roland Berger EV Charging Index 6: EV drivers have an increasingly favourable perception of charging costs - partly attributed to improved **pricing transparency** and growing DC fast-charger share. Turkey's EMRA regulation (kWh-only pricing, no extra charges) prevents bill shock. EU AFIR requires ad-hoc pricing at all public chargers without registration. National charger discovery apps **reduce the perception that charging infrastructure is fragmented.**	Pricing transparency is necessary but not sufficient physical infrastructure density and reliability remain the primary charging satisfaction drivers.

Of the five OLX geographies, France has the most complete policy package, with purchase and social-leasing support, fleet mandates, and zero-emissions and charging point targets. Poland couples ambitious targets with the NaszEauto scheme - of which the budget is exhausted early 2026, with no intentions of adding extra funds - but remains a laggard in uptake. Romania has set targets without the instruments to meet them, and its 2023 Rabla Plus cuts triggered a sharp sales drop. South Africa aims to focus on domestic production of EVs as a way to accelerate the market.

Norway and China led the transition through sustained sequencing, not by using a single instrument

- **Norway ran the world's most generous incentive scheme for around 20 years: they flipped the market and now phase out.**
- **China leads through industrial policy: a complete domestic value chain plus a dual-credit system raising required EV production ratios over time.**

Norway is the world's frontrunner in terms of relative EV sales: 97% of new car registrations in 2025 was an EV. China is the frontrunner in terms of absolute EV sales numbers. Let's look at how they became the leaders they are.

The causal story for Norway is sequencing: Norway had the most generous incentive regime in the world for around 20 years. Norway used to run extremely aggressive fiscal incentives until the 2010s on VAT and punitive vehicle import and registration taxes for ICE vehicles. These could roughly double the price of ICE cars, and created a massive price advantage for EVs, for long enough to flip the market. Now it has reached its tipping point, Norway is in the phase-out stage.

Norwegians can largely charge at home, reinforcing the shift. Moreover, there is an ultra-low emission zone in Oslo, and a ban on sales of new fossil fuel cars is upcoming later this decade: the aim is to have all cars zero-emissions by 2030.

China leads through industrial policy, not consumer subsidies alone. There's a whole value chain of Chinese OEMs, giving its EVs a scale and price advantage. It's dual-credit system forces manufacturers to hit rising EV production ratios. From 28% in 2024 to 58% in 2027. Manufacturers that do not meet their ratio, purchase credits from manufacturers with a surplus, so it's an industry-funded incentive scheme.

The EV transition is accelerated by combining policies and by sequencing

- **A price gap between EVs and ICE vehicles opens the market, but progress depends on much more than that**
- **Investing in charging outperforms direct purchase subsidies in effectiveness.**

No single instrument delivers an EV transition by itself. The evidence from fast-moving markets is that sticks and carrots work in combination, and in sequence: a demand-side price gap between EVs and ICE vehicles opens the market, but durable progress depends on the rollout of charging infrastructure, discouraging ICE vehicles, and promoting the market for second-hand EVs.

The World Bank finds that investing in charging infrastructure is consistently more cost-effective than direct purchase subsidies.



06.

How OLX Group can promote the market for (used) EVs

Before diving into the measures that OLX Group can take in order to accelerate the EV market, first some important things to bear in mind.

New versus used: Both new and used cars are traded on OLX's platforms. When there's no market for new EVs, there's no market for second-hand EVs.

The measures OLX Group can take to accelerate the second hand EV market, do not need to be focussed directly on the second hand EV market alone.

Geographies:
EVs that end their lease term of ±3 years are often sold abroad. Therefore, measures to accelerate the second hand EV transition in a certain market do not need to focus directly on that market alone.

Charging infrastructure over purchase incentives:
The World Bank finding that charging infrastructure investment consistently outperforms direct purchase subsidies in cost-effectiveness is relevant for evaluating where policy resources should be allocated.

Perception:
There are some true hurdles to EV uptake, but the binding constraint is perception, not fact. Buyers overestimate charging times and battery failure rates, and underestimate battery ranges.

Let's discuss the major hurdles for EV adoption one-by-one, to see what is within OLX's circle of control – things it can directly act upon – and circle of influence – for which it can lobby.

Hurdle 1:

Initial price

The second-hand market is OLX's core answer to the price barrier

- **The used market makes EVs accessible to lower incomes**
- **Used EVs have a lower total cost of ownership than their ICE equivalents**
- **OLX is positioned to close the knowledge gap on total cost of ownership**

This is the core value that OLX Group brings. The initial purchase price of EVs is generally higher than that of ICE equivalents. Therefore, historically, EVs have been mostly taken on by wealthier sections of society. The market for second-hand EVs makes EVs accessible to households with lower incomes. OLX Group can put effort into generating more attention for this fact.

Moreover, total cost of ownership of second-hand and third-hand EVs is already much lower than TCO second-hand and third-hand ICE vehicles. Yes, the initial price may be higher, but after a few years of use, driving an EV is cheaper. By emphasizing this fact – which may be unknown to many second-hand car buyers – OLX Group can promote the market for used EVs. This can be done through information campaigns including white papers, social media posts, newsletters, et cetera, but also – for example – by publishing TCO calculators on its platforms, with which costs of driving ICE vehicles can be compared to EVs.

Hurdle 2:

Battery range

Range is a largely imagined barrier that information and tooling can dismantle.

- **Current battery ranges cover 90% of all trips, and the rest can be covered by charging during the trip.**
- **Charging discovery apps, integration of multiple charging subscriptions into one card, and routing apps that plan charging stops all reduce this perceived barrier.**

Battery range is sufficient for 90% of all trips, and for the trips that require intermediate charging, most European countries have sufficient (public) charging infrastructure. South Africa is an exception, where public charging is less well developed.

The barrier to purchasing an EV that battery range poses, is largely an imagined barrier. Information provision can alleviate this barrier. International charging discovery apps can help, as well as integration of different charging subscription cards into one, and routing apps that already plan out charging stops along the route.

Hurdle 3:

Public (fast) charging availability

OLX's user location data could pinpoint where charging gaps are suppressing used EV demand.

- **Residence data combined with data on charging availability can identify areas where charging is holding back EV uptake.**
- **These are the areas where investments in charging infrastructure may be most desirable.**

As OLX has data of the location of residence of its users, it could determine what areas are still behind in terms of used EV purchases, followed by research whether public charging availability is the barrier here. OLX Group could invest in public charging infrastructure in those underserved areas.

OLX could also use its contact with employers to influence them to install charging stations at the workplace, firstly setting the right example by doing this ourselves.

Hurdle 4:

No way to charge privately

This is beyond OLX's control.

The fourth hurdle is largely embedded in the urban structure, and is not something OLX can directly control.

Hurdle 5:

Quality and duration of the battery

Battery health is the transparency gap OLX can close, ahead of regulation

- **Whereas mileage is a transparent health indicator for ICE vehicles, the EV equivalent – battery charging capacity – is harder to access.**
- **From 2027, EVs sold in the EU must carry a digital battery passport disclosing state of health and condition.**
- **OLX can move ahead by making state-of-health statements straightforward to retrieve and publish, and by accommodating warranty transfers.**

Batteries lose their capacity much slower than people anticipate. Still, there is a trust issue around battery health, especially when it comes to used cars. For ICE vehicles, the most important indicator of vehicle health is mileage, which is readily available. The most important indicator of electric vehicle health is the battery's charging capacity, which for many EV models is less straightforward to gain insight into.

From 2027 onwards, EVs sold in the EU must carry a digital battery passport, disclosing state of health and condition, effectively a health report for buyers. OLX could anticipate ahead of time, and make retrieving and publishing battery state-of-health statements to listings more straightforward.

Moreover, OLX could accommodate warranty transfers.

Hurdle 6:

Supply of used EVs

OLX can both feed the used EV pipeline and make the limited supply easier to find

- **Dealer tooling and cooperation with dealers reselling end-of-lease EVs lower friction of bringing used EVs to the market.**
- **Electrifying OLX's own fleet increases new EV demand, and adds used supply at end-of-lease.**
- **While supply is thin, findability matters: intuitive EV-specific filtering, promoted placement and discovery via LLM's.**

OLX Group can make it easier for sellers to generate listings for their EVs, for example with tooling for dealers that bring used EVs to the second-hand market, and cooperation with dealers reselling end-of-lease EVs.

Another way to directly increase EV demand and influence the supply of used EVs is by fleet electrification mandates of the OLX car fleet. These cars enter the used market at their end-of-lease.

And as supply is still thin, it's even more important to increase the findability of listings of available EVs. This can be done by intuitive filtering on EV characteristics, promoting or prioritizing EVs on the platform and letting people discover the benefits of EVs using AutoGPT.

OLX brands are already working on battery-health transparency, charging access and OEM partnerships

- **OLX brands are working on mandatory state-of-health reporting, and health checks on EVs**
- **Supply and demand are worked on in parallel**

OTOMOTO in Poland, Autovit in Romania and Standvirtual in Portugal published a range calculator on their websites (beta). For almost all electric car brands, models and versions, including build year, it shows you the range in the city and on the highway, and charging times on a slow charger and fast charger, all of that in warm weather, mixed weather and cold weather.

OTOMOTO and La Centrale in France are working on mandatory battery state of health (SOH) reporting for used EVs. Listings will show battery-health percentage, and users will be able to filter by SOH. The project uses a specialist company in Poland that can access battery-health data across vehicles and manufacturers.

OTOMOTO is also working on a tool for dealers making it easier to publish SOH information, in order to make the battery condition easier to understand for buyers.

Partnerships are being forged with Chinese OEMs, including support for new car listings, used car support, marketing-as-a-service, and promoting these brands on social media, a strategic approach to winning these growing brands over.

La Centrale uses its position to educate buyers around specific concerns for EVs: battery health, total cost of ownership, residual value, and trust in dealers and marketplaces.

OLX in Romania is electrifying its own car fleet. Cars that enter the used cycle at their end-of-lease. This way, Autovit is directly feeding the used cars market. It's a small number from the market perspective, but it is setting an example.

Standvirtual in Portugal is partnering with new EV brands (including Chinese brands), to encourage them to include new car listings on their platform. There is also a verification service for cars, called VerifiCar, that checks over 200 points on a used car to provide an unbiased, digital technical report of its actual condition. VerifiCar has a dedicated add-on specifically tailored to EVs, including a battery scan service, where they check the battery health of EVs, PHEVs, and hybrids. They measure the State of Health (SOH), but their check goes further: it includes analyzing cell status (voltage and temperatures), diagnostic testing of the powertrain, and inspecting connectors, because issues in the electrical system can lead to costly breakdowns. VerifiCar covers nearly all brands, the only exceptions being where OEM's do not allow the vehicle to be diagnosed. And finally, Standvirtual collaborates with the charging provider Atlante, where Standvirtual distributes charging cards to dealerships, for activation by the end consumer as they purchase an EV.

OLX motors marketplaces are using marketplace data to educate dealers that may be reluctant to stock EVs, by showing them market-day-supply (how many days it would take to clear all current collective inventory in the marketplace based on recent sales velocity), which is very favourable for EVs: between 30 and 95 days.

Globally OLX is planning a large scale behavioural survey, including EV sentiments. This helps OLX position itself as the platform for both new and used EVs, trusted by private and professional sellers and buyers alike, but also to position itself as the market educator, providing unique data on the used EV market.



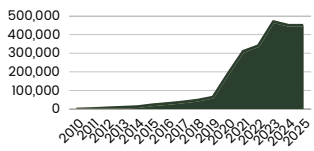
07.

Appendix: Country-level information

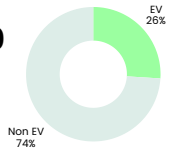
France

In France, an impressive 26-29% of cars sales are EVs (depending on the source consulted), as well as 10% of two- and three wheel vehicles, and vans. 11% of buses is EV. There are 2.2 million EVs in France, representing 6% of the total stock.

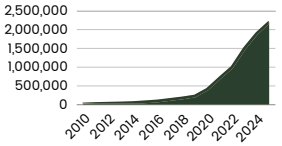
Yearly sales



450 000
Cars



Stock

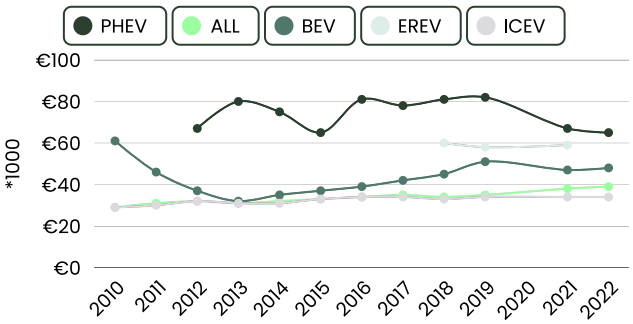


2 200 000
Cars

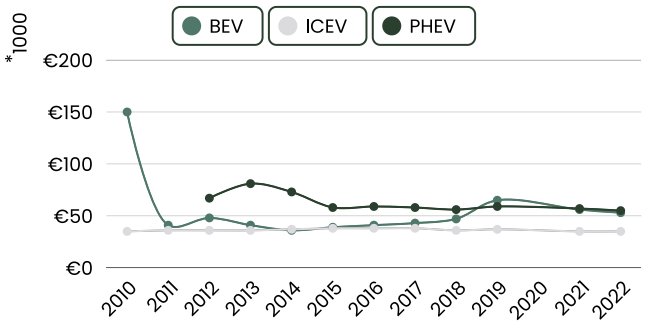


In Europe, new models like the Renault 5 E-Tech, Hyundai Inster and Chinese entrants drove prices down. Even so, an average BEV still carries a ~20% price premium over equivalent ICE models. Less than 10% of available BEV models in Europe cost below €30,000, against a consumer willingness-to-pay of around €20,000. The affordability gap in Europe remains wide.

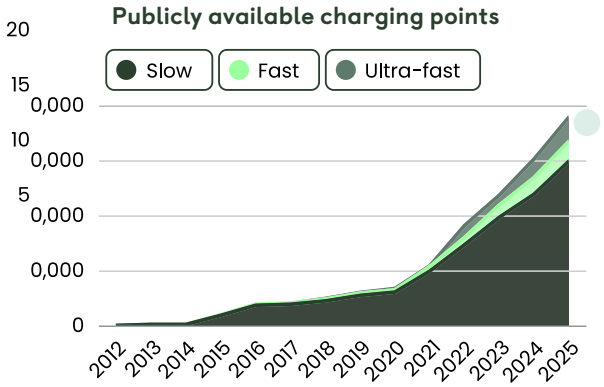
Price all car sizes



Price medium size car

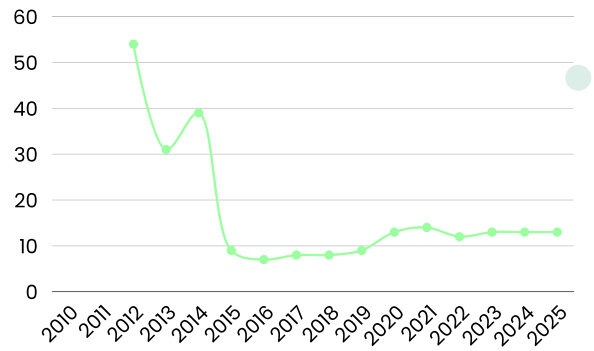


Publicly available charging points



190 000 Charging points

BEV and PHEV cars and vans per public charging point



13 Vehicles per charger

Perceptions and behaviours

Environmental protection is the main driver of EV purchase. The main hurdles are charging times and public infrastructure sufficiency. Home charging is dominant, and charging experience is overwhelmingly positive (61% is satisfied with public charging times, 36% finds public charging too expensive).

When battery range and charging times improve, the French EV market will likely pick up further.

Drivers of growing EV penetration
Environmental protection is the main driver of EV purchases, with 54% of respondents*, higher than Europe (47%) and the world (46%). Respondents are not overwhelmingly convinced by the economic benefits of going electric. Only 54% believe cost per kilometer is lower than in an ICE car (compared to 59% for Europe and 61% global). 36% mention lower usage and maintenance costs as a key purchase driver (43% Europe and 47% global).

Main concerns: charge times and public infrastructure sufficiency.

Policy
EV sales dropped by 4.7% in 2024 due to lower government subsidies and stricter eligibility criteria.

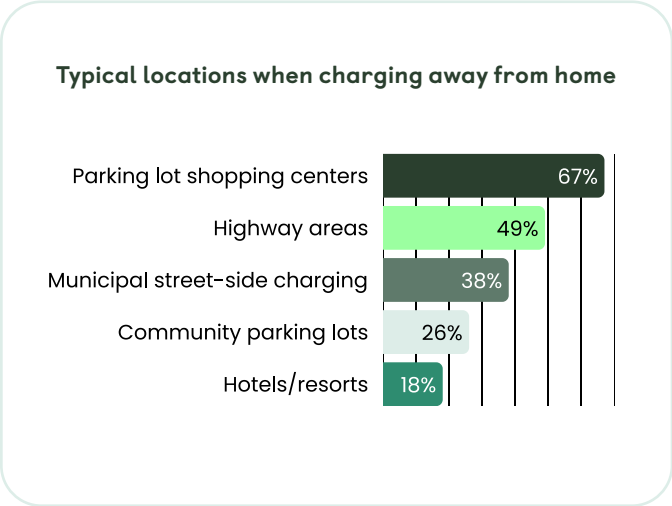
EV use
Long distance use remains limited (15% of EV users drives over 20,000 km annually), regular daily usage becomes more established. Business cases in heavy transport are beginning to emerge.

Charging
Home charging dominates: 67% uses a private home charger. 17% has no access to a home charger (similar to European averages). 60% of distance driven is charged at home (56% Europe, 17% global).

Charging experience improved significantly. In 2024, 75% was (very) satisfied with general EV charging, in 2025 this was 92%. 61% of French EV owners is satisfied with public charging times (60% Europe and global). Last year, this was just 38%, an effect of growing DC availability (19% of public chargers).

36% of EV drivers say public charging should cost less. There is a potential for cheaper slow charging at destination use cases (malls, supermarkets, hotels).

What needs to change
There is an untapped potential for broader usage and deeper market penetration, especially as future improvements in battery range and charging infrastructures help overcome current limitations.



Legislation summary
France has a solid base of regulations across multiple factors influencing EV adoption.

France continues “social leasing” for low-income households, and grants (cut from €7k to €4k), plus fleet mandates and a 2-million domestic EV/HEV production target by 2030.

ICE is discouraged via the COP26 ZEV pledge (zero-emission new sales by 2035), a 2030 ban on cars over 123g CO2/km, low-emission zones, and an end to fossil-fuel LDV sales by 2040.

Charging targets 400,000 public points by 2030 (from 190,000), with support for home and public chargers.

Lowering the upfront costs of EV purchase
On a EU level: purchase incentives for BEVs continue ('25); and lower income households can use a 'social leasing'programme to lease new BEVs.
France has grants for the purchase of new BEV and FCEV, as well as used EV and retrofits, with bonuses for low-income individuals. Grants lowered from max. of €7k to €4k.

At least 50% of public LDV renewals must be low-emission vehicles, rising to 70% from 2027. For local authorities, from 2026, 37.4% of all LDV renewals must be very low-emissions.

In 2022, companies with over 100 LDVs must include at least 10% low-emissions vehicles in their renewals, rising to 20% in 2024, 35% in 2027, and 50% by 2030 (Article 77).

Encouraging the production of EVs
Target of 2 million EVs and HEVs produced domestically by 2030.

Discouraging ICE cars
France is a signatory of COP26 ZEV Declaration: all sales of new cars and vans being zero-emissions no later than '35.

By 2030, ban on sales of new passenger cars that emit over 123g CO2/km.

Low emissions zones in cities with over 150,000 inhabitants and interest-free EV purchase loans for low-income households in these zones.

End sale of new fossil fuel LDVs by 2040.

Encouraging charging point installation
France has a target of 400,000 public charging points (current = 190,000) by 2030, incl. 50,000 fast chargers (current = 18,000 fast and 22,000 ultra-fast).

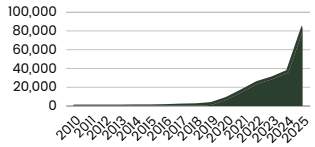
To that end:

Tax relief on installation of home chargers
Subsidies on the installation of chargers that are made publicly available (30% of the cost)

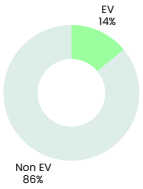
Poland

EVs made up 11-14% of yearly sales in 2025 (depending on the source consulted). They now represent 2% of the entire stock, making Poland a laggard.

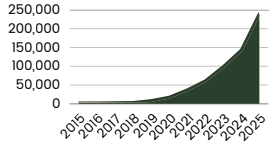
Yearly sales



84 150
Cars



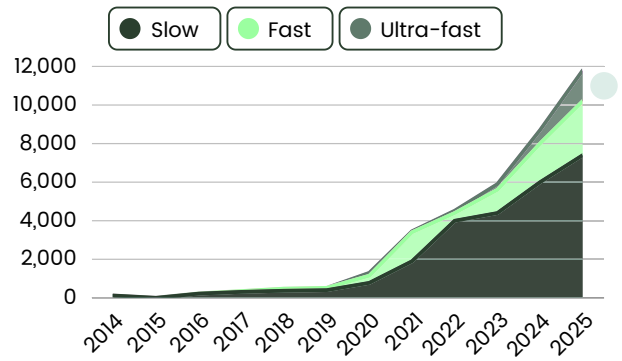
Stock



240 370
Cars

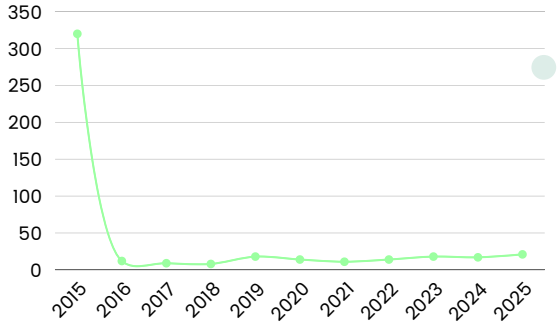


Publicly available charging points



11 800 Charging points

BEV and PHEV cars and vans per public charging point



21 Vehicles per charger

Perceptions and behaviours
Poland is the most EV-sceptical of our five countries. Only 35% of Polish ICE drivers say they would switch to EV in the future, the lowest in the EU.
A knowledge gap likely shapes this scepticism. Only one in eight respondents of the EAFO Consumer Monitor 2025 mention good familiarity with e-mobility. They are also least convinced by the benefits of EVs.

Polish people cite limited range (40%), high purchase price and too few charging stations as barriers to switch to EVs.

Lowering the upfront costs of EV purchase
Grants towards the purchase of ZEVs, with higher amounts available depending on vehicle size, commercial use, and annual mileage. Grant available equal to 30-50% of the eligible costs depending on power rating.

NaszEauto: PLN 1.6 billion budget supports private individuals and sole traders in acquiring new electric passenger vehicles (M1 category).
Registration tax exemption for BEVs and FCEVs; registration tax exemption for PHEVs until 2029.

Additional subsidies specifically for the purchase of EVs by the country's national parks.

Government fleet targets: local governments: at least a 30% share of ZEVs in their LDV fleets by 2025. Central government central LDV fleet target is 50% by 2025.

Discouraging ICE cars

Signatory to COP26 ZEV Declaration to work towards all sales of new cars and vans being zero emission by no later than 2035 in leading markets.

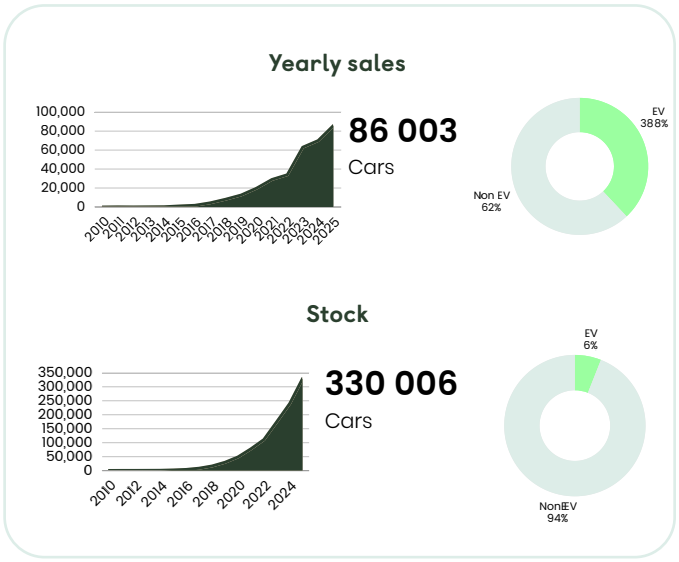
Encouraging charging point installation

Target of installation of 49 000 slow and 11 000 fast charging points by 2030, with an ambition for as many as 85 000 and 15 000 respectively.

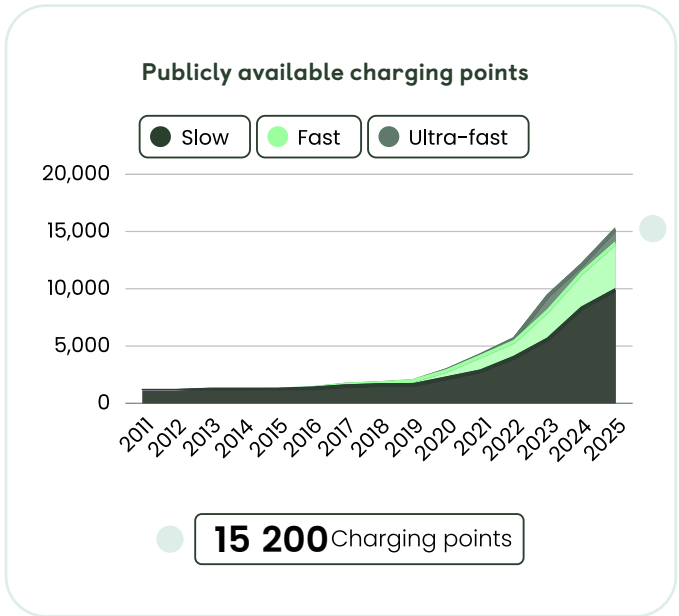
Additional subsidies specifically for the purchase of chargers by the country's national parks.

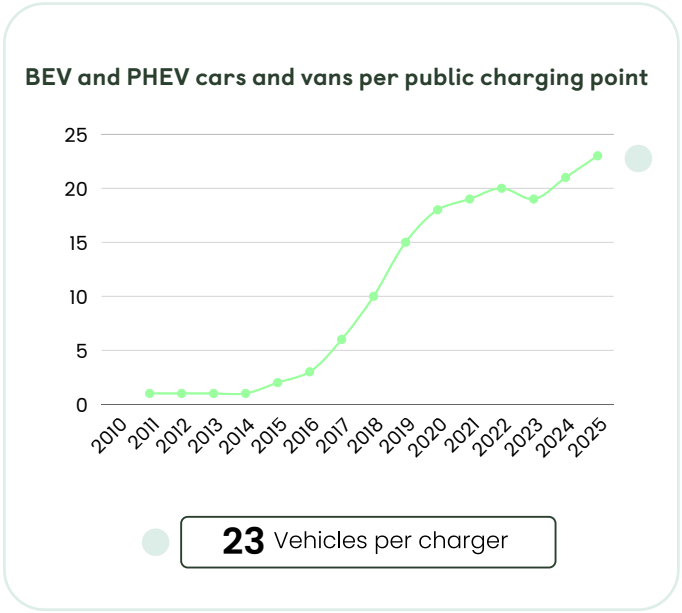
Portugal

Over one in three new car sales in Portugal was an EV in 2025, above European averages of nearly 27% and global averages of 25%. BEV share rose from 9% in 2021 to 20.5% in 2024. A growth double as fast as the European average.



Public charging points in Portugal grew by 50% in 2024, with 38% now being higher-speed DC points (more than double the European average), but the EV-to-public-charger ratio remains high at 23, almost double the European average.





Perceptions and behaviours

Drivers of growing EV penetration

Charging infrastructure expansion, purchase incentives and growing model choice (particularly Chinese OEMs) drive growth.

Charging

49% of respondents* find charging infrastructure insufficient (43% is European average). 54% find charging times too high (47% European average).

What needs to change

As Portugal enters a new stage of EV market maturity, larger high-capacity charging hubs in strategic locations such as highways and major urban corridors will be key, alongside more integrated infrastructure planning to prevent capacity bottlenecks and disrupting consumer sentiment.

Legislation summary

Portugal encourages EV adoption through grants, vehicle and road tax exemptions and grants for home chargers.

The discouragement of ICE cars is mostly captured in ambitions rather than in policy.

Lowering the upfront costs of EV purchase
Grants towards the purchase of private BEVs, with higher amounts available for BEV LCVs.

Lowering cost of ownership
BEVs are exempt from payment of vehicle and road tax, reduction of 75% for PHEVs, and 40% for HEVs.
Discouraging ICE cars

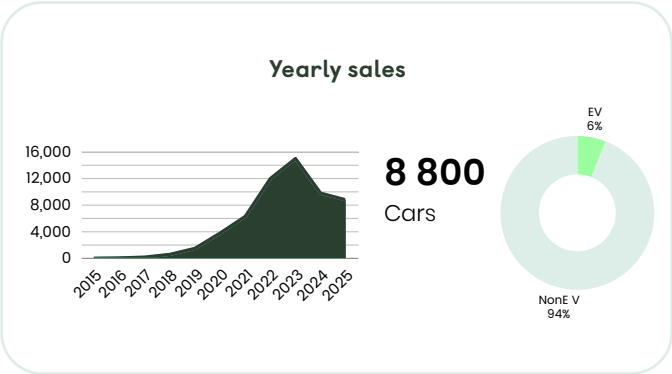
Target of 30% EV share of car sales by 2030, 100% by 2050. Diesel to no longer be cost effective by 2030, petrol by 2040, in both cases replaced by EVs.
Encouraging charging point installation

Grants available for the installation cost plus up to 80% of the cost of a home charger.

Romania

There's little data on Romania's EV market, and sources contradict each other. Whereas the EIA reports a 6% EV sales share, national data reports over 12%.

What is striking is the drop in EV sales after 2023. This is a result of drastic cuts and temporary suspensions of the government's Rabla Plus purchasing subsidy.



There's a lack of clear data on the Romanian charging infrastructure. What is apparent, however, is the importance of a solid public charging infrastructure, as most Romanian's lack home charging access.

There are persistent infrastructure concerns. Romanian users have one of the lowest home charging rates globally (around 40%), with 38% lacking any home charging access. This places additional pressure on public networks.

The expansion rate of charging infrastructure has slowed down, but still there was a year-on-year increase of 33%. In May '25 Romania's largest EV charging hub was built, including points for electric trucks. The EU-funded project is part of a broader initiative to install 328 high-speed charging points across Romania. Yet, only 20% of the government-intended 22,400 charging points were installed at the end of 2024.

The share of public fast-charging usage reached 26% of kilometers traveled, among the highest globally, reflecting the availability of DC fast-charging infrastructure. In Romania, 42% of public charge points are DC – more than double the European average of 17%.

Perceptions and behaviours

Drivers of growing EV penetration
User satisfaction is rising and Romania's long-term e-mobility potential remains promising.

Cost dominates purchase decisions: 60% of buyers citing lower usage and maintenance costs as key decision criteria; 50% mentioned environmental protection; around 30% mentions suitable range and tax advantages.

Charging
Romanian users have one of the lowest home charging rates globally (around 40%), with 38% lacking any home charging access.

60% reports public charging infrastructure insufficient. Almost half find charging times too slow. The market's resilience depends on infrastructure development pace, subsidy program sustainability and consumer adaptation to changing mobility options.

Legislation summary
Romania has set a few targets, but has few policies to make the targets happen.

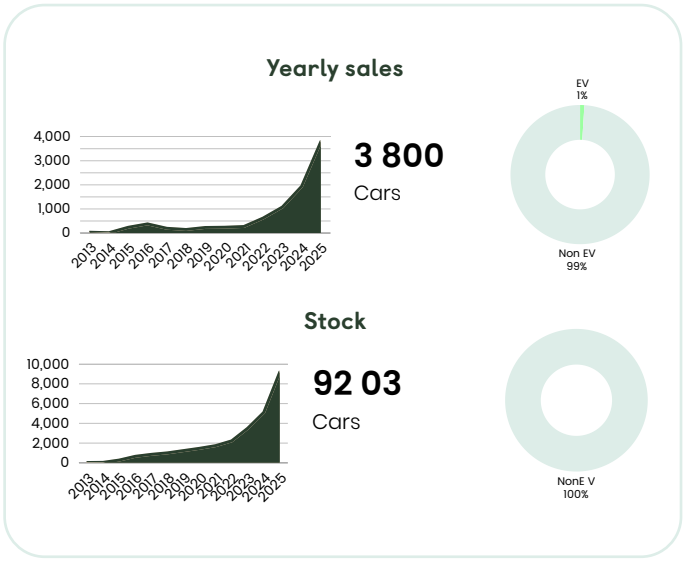
Lowering the upfront costs of EV purchase
Target of 700 000 BEV and P/HEVs by 2030.

Grants towards the purchase of a BEV, lower amounts for a PHEVs, with mandatory scrappage of one car, and various bonuses available as well as tax incentives.

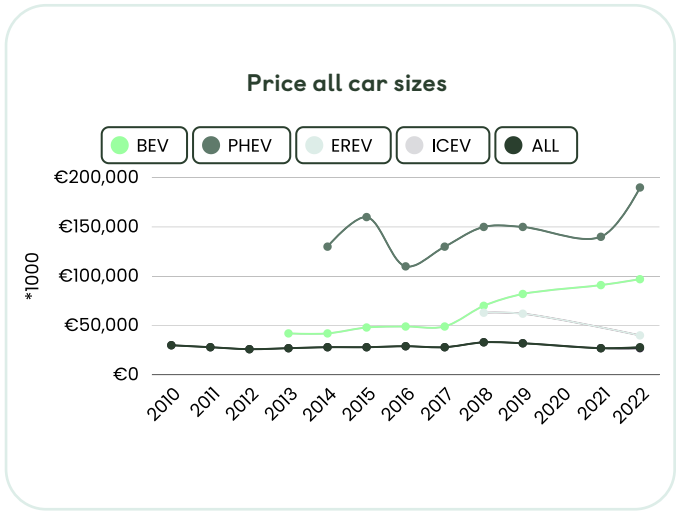
Encouraging charging point installation
Target of 600 000 charging stations (current number unknown), 40 000 of which are fast or semi-fast.

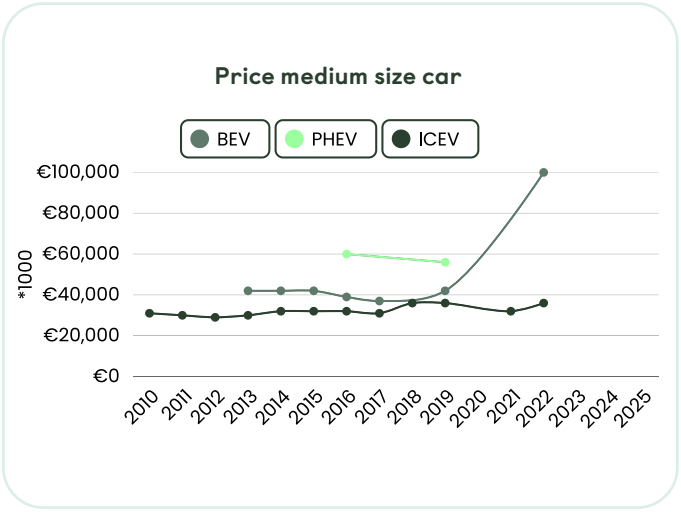
South Africa

EVs make up less than 1% of the South African vehicle stock.

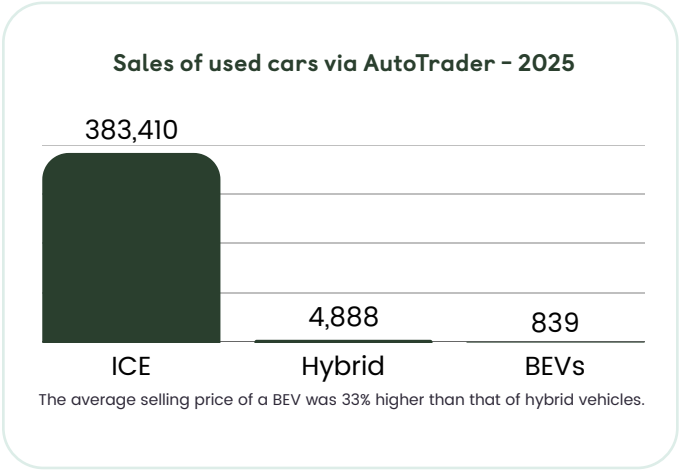


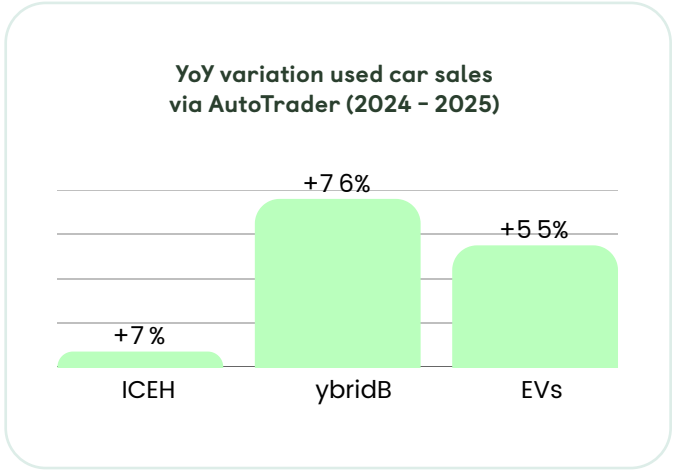
Also in South Africa, the price gap persists. Since close to 100% of the current car stock is non-EV, the average price of all cars overlaps with the price of ICE vehicles.



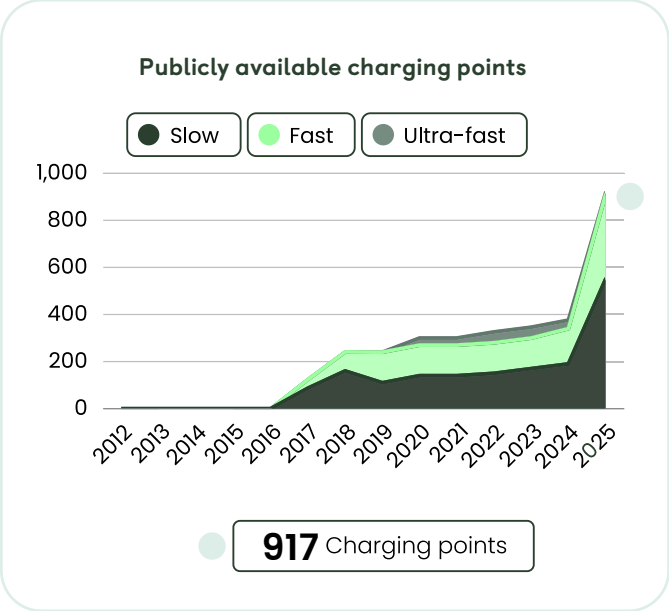


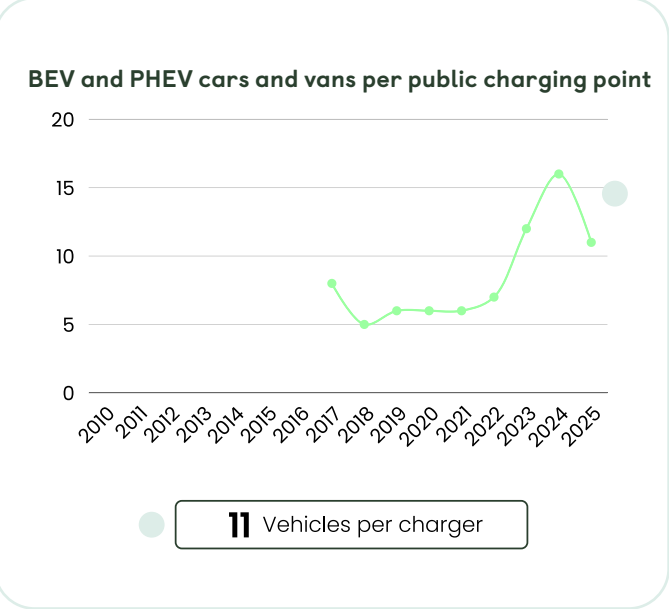
Sales of used alternative fuel cars in South Africa is still way below that of ICE cars. However, when we look at year-on-year variations, the picture changes. New energy vehicle sales grew by 73% between 2024 and 2025, whereas ICE sales grew by only 7%.





The low vehicle-to-charger ratio in South Africa does not suggest a well-developed charging infrastructure in this case. It suggests a very low EV stock, meaning that with only 917 chargers nation-wide, the vehicle-to-charger ratio is still low. In 2020, the first 30 public ultra-fast chargers were introduced in South Africa. Last year, the number of ultra-fast chargers was back to 7.





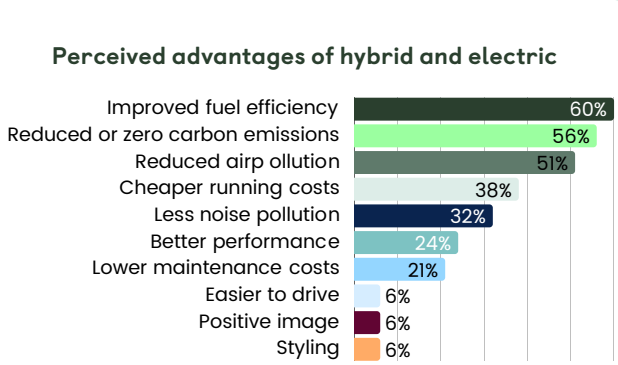
Perceptions and behaviours
Only 10% want their next vehicle to be electric, versus 52% hybrid and 38% ICE.

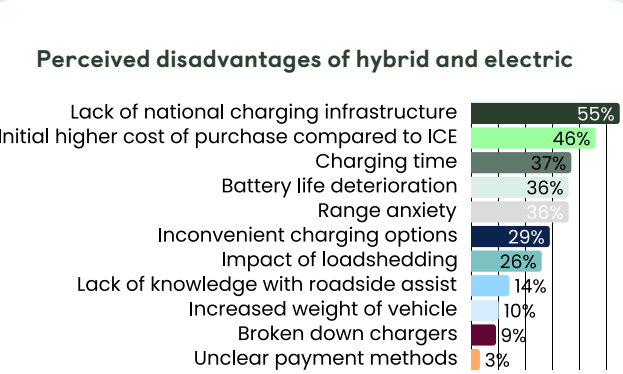
The top barriers in South Africa are charging infrastructure, upfront cost, charging time, and battery/range concerns.

Respondents consistently overestimate charging times and underestimate real range. The binding constraint is perception of charging, battery, and range. Not actual performance.

Drivers of EV penetration
Respondents* were asked to pick the three main advantages.

Battery efficiency, safety and price are most influential factors when buying a NEV.





52% wants their next vehicle to be a hybrid, 38% ICE, and 10% electric. 49% of respondents is likely and 25% very likely to buy a hybrid car in the future. 60% plans to buy one in the next three years. 54% of respondents will only consider buying hybrid if its fuel consumption is less than 4 liters / 100km.

For EVs: 41% is likely and 17% is very likely to buy one in the future. 60% intends to buy one in the next three years and 27% in 4-5 years.

Knowledge gaps around charging
Whereas it takes 2-4 hours to fully charge a plug-in hybrid with a standard home charger, 48% thinks it takes 4-12 hours and 10% thinks it takes over 12 hours. 45% of respondents would buy a hybrid if it charged in 2-4 hours or slower. 56% if it charged in 2 hours or less.

It takes 1-2 hours to charge a PHEV to 80% on a public charger, but 47% thinks it takes longer than that. 68% would consider buying a PHEV when it takes less than an hour. 21% when it takes between 1-2 hours.

Home charging typically takes 8-12 hours. 38% thinks it takes less than 4 hours, 17% thinks it takes over 12 hours. 83% considers buying an EV when it takes less than 4 hours.

It takes 1-2 hours to charge at a public fast charger, but 53% of respondents think it's more. 64% would consider buying an EV when it takes less than an hour.

Range
On average, a PHEV travels 600-900km on one charge and a full tank (depending on model and driving conditions). 29% of respondents think this is less than 500km and 32% between 500-700. The rest thinks it's higher. 28% considers buying a hybrid when it ranges 900-1100km and 24% when it ranges over 1100. The rest is fine with lower ranges.
A typical EV ranges 400 to 560km. 28% thinks it's less than 300km, 55% thinks it's 300-500km, 17% thinks it's over 500km. 42% of respondents considers buying an EV if it ranges between 500-700km and 32% when it ranges over 700km. The rest is okay with lower ranges.

Cost
Per km driven hybrids are 30% cheaper than ICE cars. And for R200 of charging on a municipal charger, you can drive 400km, whereas in petrol or diesel, this would cost six times as much. Less than 25% of respondents knows the costs of charging and refueling hybrid vehicles, or charging EVs.

51% of respondents is willing to spend over R600,000 on a hybrid car. 52% of South Africans is willing to spend R500,000 - R800,000 on an EV.

Legislation summary
South Africa's EV policy is almost entirely supply-side: production incentives and an export/battery value-chain strategy, with only modest demand measures: 40 solar charging stations a year and a 5% public-fleet conversion.

So on actual adoption it's not doing well: no consumer purchase incentives, no ICE disincentives, no sales targets. It's a weak strategy for getting EVs onto the road.

Encouraging the production of EVs
Specific investment incentives for the production of electric and hydrogen-powered vehicles under the Automotive Production Development Programme. It is proposed that an investment allowance be made available for new investments from 1 March 2026. Producers will be able to claim 150% of qualifying investment spending on production capacity for electric and hydrogen-powered vehicles in the first year of investment.

Electric vehicle white paper: A strategy with the aim of maintaining duty-free export market access for vehicles and components produced in South Africa to support the resilience of the industry; and facilitation and development of an electric battery regional value chain, including raw material refining; battery active materials and component production; and cell manufacturing. This is to deepen the Southern African Development Community region's participation in the automotive value chain.

Encouraging charging point installation
Target of adding 40 solar powered public EV charging stations per annum.
Transition the government fleet

Target of converting 5% of the public and national fleet to cleaner alternative fuel and efficient technology vehicles by 2025, with annual increase of 2% thereafter.



Glossary:

AFIR – Alternative Fuel Infrastructure Regulation (EU)

B2B – Business-to-business

BEV – Battery Electric Vehicle (fully electric, no combustion engine)

BiK – Benefit-in-kind (IK tax on company car provision)

CAPEX – Capital expenditure

CO2e – Carbon dioxide equivalent

CPO – Certified Pre-owned (manufacturer-backed used vehicle program)

DC – Direct current (used for fast/rapid charging)

EAFP – European Alternative Fuel Observatory

EREV – Extended Range Electric Vehicle

ESG – Environmental, social, governance

EV – Electric vehicle (includes BEV and PHEV)

FCEV – Fuel Cell Electric Vehicle (hydrogen-powered)

GEVA – Global EV Alliance

ICE – Internal Combustion Engine (petrol, diesel, or LPG-powered vehicle)

IEA – International Energy Agency

LDV – Light-Duty Vehicle

LPG – Liquefied Petroleum Gas

M1 – Vehicle category: passenger cars (EU classification)

NEV – New Energy Vehicle (includes BEV, PHEV, FCEV)

OEM – Original Equipment Manufacturer (vehicle manufacturer/brand)

PHEV – Plug-in Hybrid Electric Vehicle (combustion engine + rechargeable battery)

SOH – State of Health (measure of a battery's current capacity vs. original capacity)

TCO – Total Cost of Ownership

VAT – Value Added Tax

ZEV – Zero-Emission Vehicle


OLX