

BRIEFING - JUNE 2024

Stagnation and growth: the European EV market

How EU regulation and carmaker strategies impact the EV market

Summary

It is a myth that electric car demand is slowing around Europe. The current stagnation of the EV market has been expected for years. It is the result of:

- The stop-and-go design of the EU car CO2 targets (in 5 year steps)
- Carmakers' strategy to hold back the sales of EVs until it is required by the regulation, prioritising profits from ICEs and large, expensive EV models in the meantime.

The EV market is in between two growth phases

EV market growth coincides with EU car CO2 targets



Source: ACEA (up to Q1 2024) and T&E projection based on the CO2 regulation • Scope: EU27+NO

∃ T&E

In the stagnation phase, carmakers prioritise short-term profits through the sale of high-margin, expensive EVs and by pushing EV sales in the following year when they need the new models to reach the EU car CO2 targets. The disproportionate focus of carmakers towards larger, more premium models has resulted in high prices for EVs in Europe which has slowed down EV sales as a result. In 2021, the average price of EVs was below €30,000 and the share of large EVs sales was close to 40%. By early 2024, the average price had increased by more than €10,000 and the share of large EVs sold increased to around 60%.

In the next growth phase from 2025 onwards, electric car sales will pick up as carmakers need to prioritise EV sales to meet the next car CO2 target kicks-in. Carmakers make a shift towards mass-market affordable EVs as they plan to launch ten affordable Made-in-Europe EV models in the next couple of years.

Calls to dismantle the 2035 100% zero emission car target would lead to a loss of investment and leave the European auto industry less competitive and further behind global



rivals. Already today, with uncertainty over its 2035 zero-emission car target and a weak industrial policy, Europe is proving less attractive to electric vehicle manufacturers: Europe securing just over a quarter (26%) of global EV investment announced between 2021 and 2023. More than a third (37%) went to North America, despite the region being a smaller car producer.

In the aftermath of the 2024 EU elections, decision makers and industry should call for the support for Ursula von der Leyen's candidacy to EU Commission president and for the next EU Strategic Agenda to be tied to a firm commitment to the current EU car CO2 targets, in particular the 100% zero-emission car target in 2035. More generally, European carmakers need to be firmly committed to accelerate the ramp up of electric car models, especially the more affordable ones.

1. The EV market is in between two growth phases

The 5-year step design of the car CO2 regulation, and carmakers' tactic of waiting until the last minute to comply, creates an inevitable acceleration-stagnation, or stop-and-go momentum on the EV market. Indeed, past evidence shows that carmakers don't comply with car CO2 targets in advance, and instead simply comply when required by the targets (except a couple of EV leaders like Volvo¹).

The current EV market situation ahead of the new 2025 target is very similar to what was observed in 2019 ahead of the 2020 target². Despite the slow EV uptake prior to 2020, carmakers complied with the target in 2020³ as BEVs made up 6% of sales in 2020 and 10% in 2021, up from 2% in 2019. The same thing is bound to happen in 2025. T&E expects carmakers to meet the 2025 target as they have been planning it since 2017 (when the 2025 target was proposed) and have multiple compliance options.

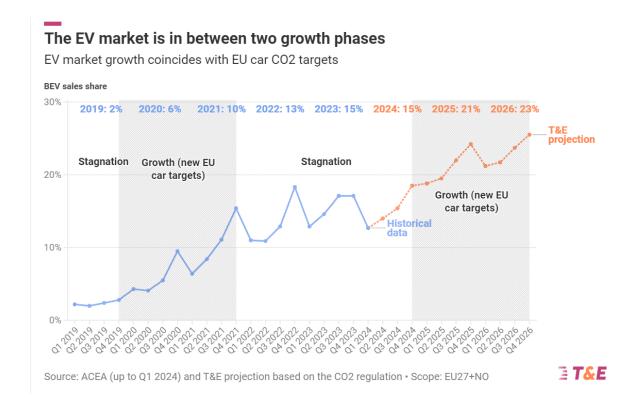
T&E has calculated that EV sales are expected to reach 21%, up from 12% for the first quarter of 2024, on average in 2025 to meet the target. This will launch the next growth phase (see graph below), thus ending the stagnation period that began in 2022.

³ VW was the only major carmaker to miss the target - and by a very slim margin: around 0.5g/km. Reuters (2021)



¹ Transport & Environment (2024). Bridging the gap: Carmakers' progress toward the 2025 car CO2 targets. Link

² The car CO2 regulation works in 5 year steps: the current target came into force in 2020 and applies until the end of 2024. In 2025, the next stage of the regulation comes into force with a 15% reduction compared to the emissions baseline in 2021.



In the next 2 sections, we explain how and why carmakers hold off the sales of electric cars in stagnation periods and accelerate them in growth phases.

2. Stagnation phase: Carmakers focus on profit maximisation

During stagnation periods, and in particular in the year just before the entry into force of new targets, carmakers hold back the sales of electric cars. The main reason for carmakers holding back sales of electric cars is to focus on maximising profits from existing petrol or diesel models. According to Bloomberg Intelligence⁴, "EU automakers scaling back BEVs [...] may boost 2024 margins."

Already in 2019, T&E has exposed⁵ this cycle, showing that EV sales were being suppressed in the run-up to the 2020/2021 car CO2 targets, illustrated by a long list of model launch delays and long waiting times. The number of new electric car models on the EU market⁶ surged from 18 in 2018 to 24, 43, and 55 new models in 2019, 2020, and 2021 respectively. For many years, T&E has warned about the risk of stagnation of EV sales in the absence of annual targets (e.g. in 2017⁷ and 2022⁸).

⁸ Transport & Environment (2022). Europe's electric car sales stagnating as China gains foothold. Link



⁴ Bloomberg Intelligence (2024). Europe Autos 2024 Outlook

⁵ Transport & Environment (2019). Trump's US relegates the EU to the third place in EV race. Link

⁶ T&E analysis of GlobalData's Global EV and hybrid forecast, excluding passenger vans and models that would never be sold in more than 1,000 units per year.

⁷ Transport & Environment (2017). Slow electric car uptake due to lack of choice, availability and marketing spend – report Link

Maximising ICE profits: A similar phenomenon is at play in 2024 as carmakers are cutting EV production and delaying the launch and the production ramp-up of new models to 2025 and following years, thus slowing down EV sales. This is further analysed in section 3.

Mass market EV models in expensive highest trims first: The few new EVs launched in 2024 are sold in limited numbers and in their most expensive (and highest margin) versions instead of the cheapest and most affordable version which would boost sales. For example, the Renault 5 model will initially be delivered in December 2024 in the two highest trim versions, with a starting price of €33,490. The cheaper, sub-€25,000 version of the R5 designed to deliver more affordable e-mobility and drive EV sales will only arrive in 2025⁹.

Focus on growing large and expensive EV models: Crucially, the absence of stronger targets allows carmakers to focus on selling large and expensive EVs, driven by their higher profitability than smaller models. In 2021, the average price of BEVs¹0 was €28,000 and the share of large EVs¹1 sales was close to 40%. By early 2024, the average price had increased by more than €10,000 up to more than €40,000 - even though the average price of batteries dropped from \$150/kWh in 2021 to \$139/kWh in 2023¹2- and the share of large EVs sold increased to close to 60%. These two factors (share of large models and average EV price) are intertwined but clearly shows that carmakers have not prioritised increasing EV sales by failing to bring smaller, more affordable models to the market which are needed to drive mass market sales and compete with ICEs.



⁹ Le Journal Des Flottes, 21 May 2024, Les commandes de la nouvelle Renault R5 E-Tech ouvriront fin mai 2024. Link

¹⁰ Average price in France, Germany and the UK from Bloomberg.

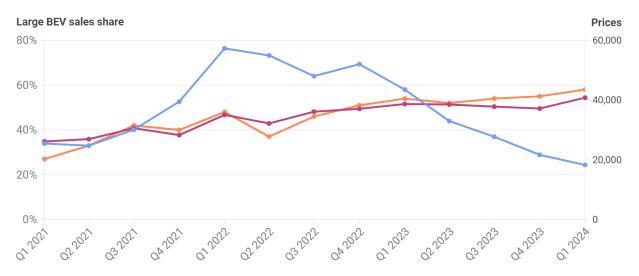
¹¹ Large EVs are defined as conventional cars from segment D and SUVs from segment C.

¹² BloombergNEF (2023) Lithium-Ion Battery Price Survey

Rising BEV prices driven by carmakers' focus on larger cars

Battery material prices are not the cause of current high prices

■ BEV price (€) ■ Battery raw material price (\$/tons) ■ Large car sales share (%)



Source: Prices from Bloomberg, sales share from GlobalData's EV sales forecast (Q3 2023)
Scope: France, Germany, UK - Large cars: C-SUVs and all cars from segment D - Battery raw material price:
NMC cathode price

∃ T&E

Different OEM strategies can lead to very different outcomes for consumers. Although, in Europe, the disproportionate focus of carmakers towards larger, more premium models has resulted in high prices for BEVs. In China, the average BEV price has fallen in China by over 50% since 2015 thanks to, in part, a greater focus on affordable mass market EVs and supply chain integration¹³. In China there are 75 BEV models available for less than €20,000, but only one in Europe.

Missguided use of EV subsidies: Moreover, some OEMs are suspected to optimise their prices to benefit from purchase subsidies instead of delivering the best and most attractive price for consumers, which could also be contributing to slower EV sales. For instance, the cheapest version of the Corsa 5 door Electric currently costs €29,990 in Germany whereas it starts at €32,050 in France (€25,050 after the 7,000€ purchase subsidy)¹⁴. The higher price in France suggests that Stellantis may not be passing on all of the subsidy on to consumers¹⁵. If the starting price was the same in France could the Corsa be sold at a lower, more attractive, price of around €23,000 after subsidies?

Increasing profits, but losing competitiveness: As a result of this short term profit maximisation strategy, allowed by the lack of new targets in 2022-2024, carmakers' profits have soared to record highs at the expense of greater proliferation of e-mobility.

¹⁵ The additional 1% VAT rate in France would be expected to only add around €250 to the purchase price based on the sales price in Germany.



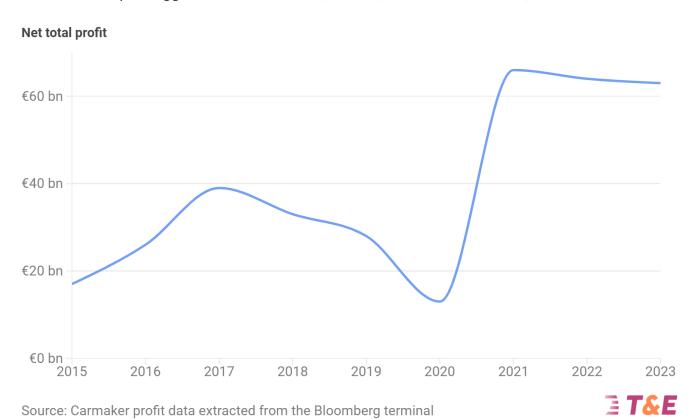
¹³ Transport & Environment (2022). Europe's BEV market defies odds but more affordable models needed. Link

¹⁴ Checked in June 2024 on Opel's German and French websites.

Prior to the Covid-19 crisis the total net profit of Europe's biggest carmakers (BMW, Renault, Mercedes, Stellantis and VW) was €28 billion. By 2021 (after a small decrease in 2020 due to depressed sales during Covid-19), profits had more than doubled to €66 billion and have stayed at around this level since. As described by carmakers themselves, these are record profit levels¹⁶ indicating that they are in very good financial health. The record profits have been accompanied by record shareholder payouts, in 2022 €27 billion was distributed to shareholders via dividends and stock buybacks¹⁷.

Since 2021 European carmakers are making record profits

Profits of Europe's biggest carmakers: BMW, Renault, Mercedes, Stellantis, VW



Carmakers' decision to focus on maximising profits is due to the prioritisation of short term shareholder returns over the longer term health and competitiveness of the carmaker. Record profits cannot be sustained indefinitely in a competitive market. With growing and fierce global competition on EVs, the strategy appears misguided at best. Already, it has resulted in a loss of competitiveness of European carmakers which now struggle to offer competitive mass market models after focusing on large, premium BEV models over the last 4 years.



¹⁶ Stellantis. (2024, 02, 15) Stellantis Delivers Record Net Revenues, Net Profit, Industrial Free Cash Flows for Full Year 2023.

¹⁷ T&E. (2023) Euro 7: Carmakers' record profits made at expense of human health

3. Growth phase: Carmakers launch new mass market models

With the focus on maximising profits, carmakers are holding back mass market EV models to push sales into 2025, the next target year. By holding back more affordable BEV models carmakers are building greater demand for these cars in 2025 than would otherwise be the case if deliveries already started in 2024, especially since demand is often highest for models when they are first launched. By focusing on the higher trim and more expensive versions in 2024, carmakers are maximising profits, but also holding back sales of new cheaper models in order to launch them in higher volumes for the mass-market volume in 2025 when they are needed for compliance. Some examples include (volumes are based on industry forecasts by GlobalData¹⁸):

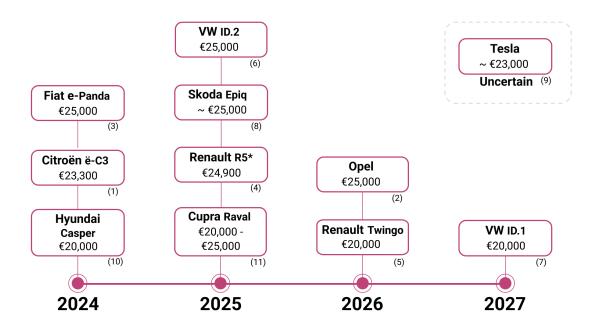
- The Fiat Panda electric will be revealed in 2024 but the ramp-up will be in 2025 (the expected production volume in 2025 will be 16 times the 2024 volume).
- The Citroën e-C3 will be launched in early summer 2024 but the low-cost version with a range of 200 kilometers will be launched in 2025 and a production forecast shows that most of the ramp-up will be in 2025 (the production volume in 2025 is expected to be 31 times the 2024 volume).
- The Renault R5 will be launched in autumn 2024 but the base model is delayed to 2025.
- The Hyundai Kasper's deliveries will start at the <u>end of 2024</u>, so the mass-market volume will be in 2025.

Beyond these models officially launched in 2024, but only seriously scaled up in 2025, there is a wider wave of affordable (sub €25,000) Made-In-Europe EV models expected on the market in the next couple of years. In total, 10 affordable EV models will be launched between 2024 and 2027, fuelling the next growth phase.

¹⁸ Q3 2023 forecast of GlobalData, there were likely many changes in more recent updates.



Affordable sub €25,000 BEVs arriving in Europe from 2024



Updated in June 2024 based on the latest announcements. The dates refer to official launch dates, while production generally ramps up to mass volume the following year. * The R5 base model will be launched in 2025 while more expensive variants will be available from 2024. Sources: (1) Electrive, (2) Reuters, (3) Bloomberg, (4) Electrive, (5) Autocar, (6) Electrive, (7) Carscoops, (8) Autotrader, (9) Reuters, (10) Automotive News Europe, (11) Cupra.



4. What is needed for the next EU legislative term

In conclusion, the EV market is on the brink of a new growth phase, driven by the compliance with regulatory targets and the introduction of new, affordable models. While the stagnation phase has seen carmakers prioritise short-term profits through the sale of high-margin, expensive EVs, the upcoming growth phase promises a shift towards mass-market accessibility. This cyclical pattern underscores the importance of regulatory frameworks in driving the transition to electric vehicles. As the market evolves, the focus of the industry must balance profitability with the urgent need to address climate change and enhance global competitiveness. The next few years will be crucial in determining the trajectory of the EV industry, with 2025 marking a pivotal moment in its development.

European carmakers have been asleep at the wheel for too long. But the race is not over. European carmakers are global leaders, command a quarter of global car sales, giving them the capital and brand recognition to succeed in the EV market. To succeed the EU needs to do two things.

First, European carmakers and politicians need to firmly commit to the 100% zero emission car target in 2035 and to accelerate the ramp up of electric car models, especially the more



affordable ones. In particular, the EU should not get sidetracked by polluting, inefficient and expensive synthetic fuels (or e-fuels) and biofuels¹⁹.

Second, the EU should support and reward local EV and battery manufacturing with a green industrial plan to complement the Green Deal. Made in EU policies should reward more sustainable local manufacturing for example via carbon footprint rules. Such an industrial strategy should also be complemented by a quick and effective implementation of the Critical Raw Materials Act and the Net Zero Industry Act to scale responsible local projects and supplies.

The longer the EU waits to make the transition, the less competitive the European automotive industry will become as global car sales transition to electric and the harder it will be to catch up with the global competition. It is crucial to make the efforts today to ensure that Europe is well positioned in the e-mobility race and for the European automotive industry to take part in the EV market boom, rather than remaining stuck in a technology of the past.

If the EU chooses to weaken its regulation or waiver the compliance fines for 2025, it risks discrediting the EU's climate agenda and rules, and leaving European carmakers unable to compete in domestic and global markets.

Further information

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¹⁹ Transport & Environment. E-fuels (2024). Link