

From boom to brake: is the e-mobility transition stalling?

After two consecutive years of CO2 emission drops - driven by the EU CO2 standards -, in the absence of a higher target, 2022 has seen both a stagnation of emission reductions and a slowdown of electric car sales. With little regulatory incentive for carmakers to scale up electric vehicle production over the coming decade, policy makers risk putting the brakes on Europe's e-mobility boom. Weak targets in the 2020s not only threaten the achievement of EU countries' climate goals, but also put at risk European industrial competitiveness, leaving the door open for Chinese carmakers to capture the mass market for BEVs.

- CO2 emissions decreased by just 2% in H1 2022, after falling by 12% in two previous years.
- BEV sales stalled, increasing by a mere 1% point in H1 2022 compared to 2021.
- Slowdown in European BEV sales contrasts with rising sales in China and the US where regulations are more ambitious.
- European automakers lose their stronghold as 2 out of 10 battery electric cars sold in Europe were produced in China.
- Loopholes in the car CO2 standards such as the ZLEV benchmark will keep weakening the targets by 4-5% and must be closed by policy makers.

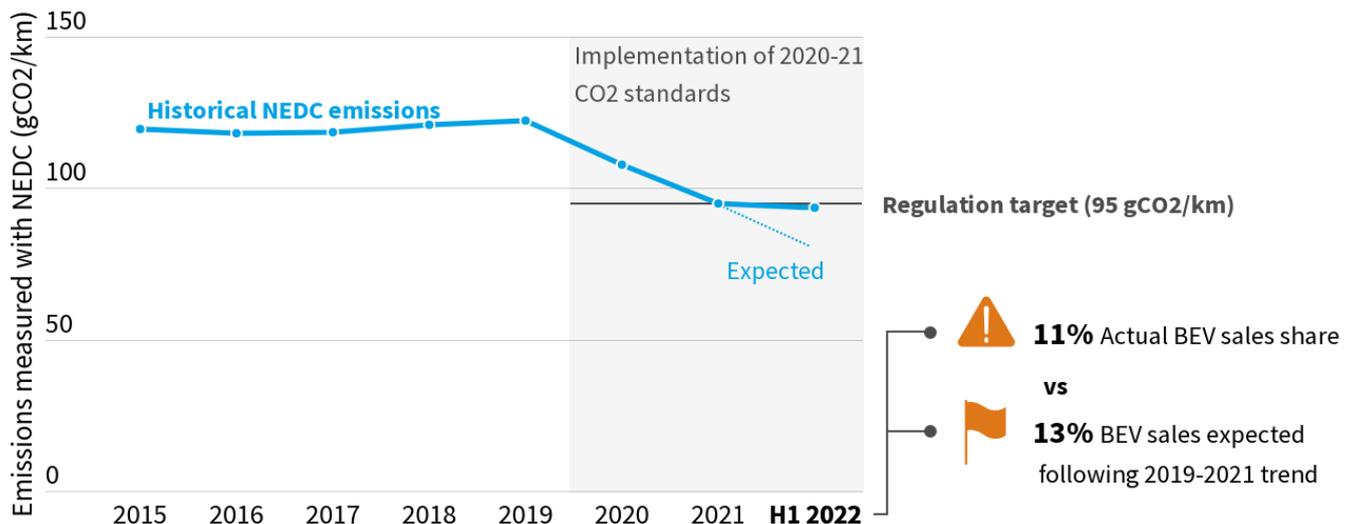
The EV stagnation has started

After an unprecedented drop in CO2 emissions from new cars driven by the 2020/21 CO2 standards, CO2 emissions

decreased by only 2% in H1 2022. The BEV market also slowed down, reaching 11% of the EU market. With EV sales growing in both China and the US, global supply chain disruptions cannot be said to be chiefly responsible. Even if the usual slump in start of

the year sales is included, the BEV share should have been closer to 13%. Despite the stagnating BEV sales, all but Volkswagen are on track to meet their 2022 CO2 goal, underscoring the weakness of the current regulation.

Emissions stagnated as the car CO2 standards' stringency stopped increasing



Following 2019-2021 trend (dotted line), emissions are expected to decrease to 83 g/km (NEDC)

Source: T&E analysis of data in the European regulation scope from the European Environment Agency (2015-2021) and H1 2022 from Dataforce

Electric car sales are at a crossroad between two different pathways - industry trends based on carmaker promises vs. stagnation in response to weak regulation until 2030. Carmakers' own sales commitments would see BEVs making up 78% of the car market in 2030. But if carmakers do the minimum to meet their mandatory targets and prioritise sales of combustion engine vehicles - the sales will be 55%.

— 20 million: Number of BEVs at risk in case of stagnation

In case of EV sales stagnation, 20 million BEVs would not be sold compared to the industry scenarios.

This would be responsible for an additional 135 MtCO₂ over the decade, more than the yearly GHG equivalent emissions of the whole of the Czech Republic.

A last chance to fix the regulation

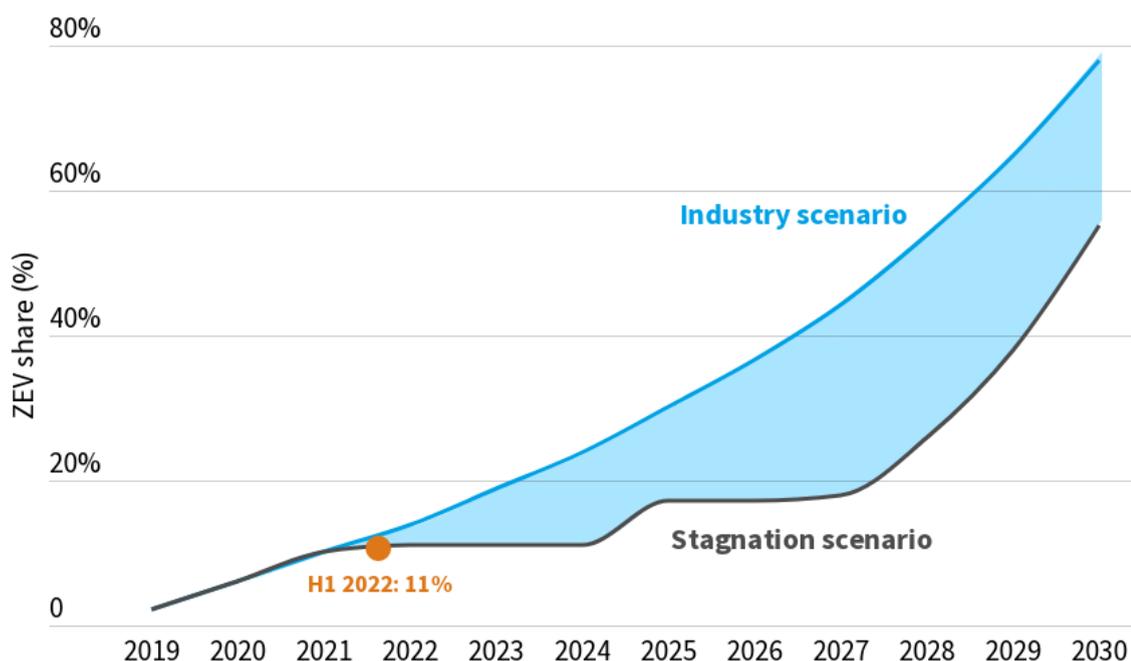
As the revision of the car CO₂ standards legislation nears the finishing line, policy makers will aim to find a final agreement by the end of the year. While the backing of the 2035 100% CO₂ cut by both the Parliament and Council is crucial and welcome, unfortunately, amendments to increase the ambition of the targets were rejected, limiting possibilities for a faster transition and leaving the door open to carmakers to backtrack on previous commitments and prioritise ICE sales.

Without strong supply-side policies though, the mobility transition in Europe is set to stall, threatening the achievement of the EU Green Deal goals.

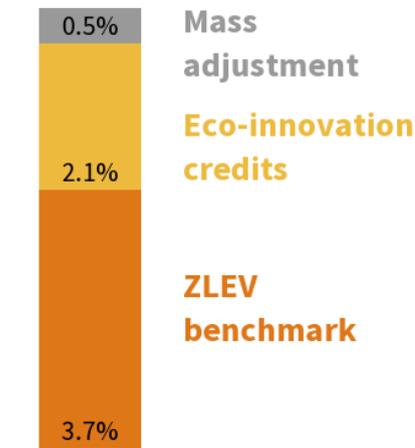
Even if targets will remain unambitious until 2030, some regulatory flexibilities - such as additional CO₂ bonuses for EV sales - can still be fixed.

These flexibilities would lead to a weakening between 5% and 8% of the targets between 2025 and 2029, and would be equivalent to 500,000-700,000 missing BEVs - that would otherwise have to be sold - annually. This is the climate cost of the flawed design of the regulation.

Zero emission vehicle sales face large uncertainties in the coming decade



Weakening of the target
(average over 2025-2029)



The CO2 bonus - or “ZLEV benchmark” that gives credits to carmakers for sales of electric cars - is the largest contributor to this weakening. It would amount to a 3.7% weakening from 2025, equivalent to about 800,000 BEVs sold between 2025-30.

EV sales stagnation not without consequences

Stagnation of European electric car sales contrasts with trends in China or the US where incentives continue to fuel the EV boom. In Europe, carmakers are now failing to meet the growing consumer demand with longer waiting times than elsewhere and most car brands sold out. This stagnation is accompanied by

Chinese carmaker entry in the EU market - reaching 5% of the BEV market already in H1 2022 - and a growing share of electric cars produced in China (2 BEVs out of 10). If Chinese carmakers continue on the current trend, their market penetration in Europe could reach between 9-18% of the BEV market in 2025.

The failure of EU carmakers to scale up BEV supply could result in foreign automakers offering affordable models and capturing a large share of the mass market in Europe. If the EU is unable to efficiently regulate its own market, it risks losing its economic sovereignty in the automotive industry.

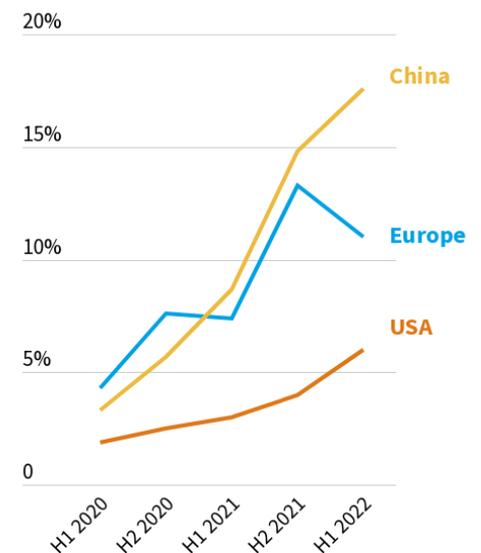
20%:
Share of BEVs on EU market produced in China in H1 2022

Stagnating BEV sales are also bad news for the climate - as the emission reduction slow down will make it difficult for member states to meet their climate targets - and consumers, who will not reap the benefit of cheaper

EU EV models given the lack of economies of scale.

In this context, the EU must consider additional measures to accelerate BEV supply on top of the weak CO2 targets before 2030. Smart policies, including local content thresholds to mirror the US Inflation Reduction Act, are needed to guarantee a more resilient and socially acceptable pathway toward carbon neutrality. We need global markets, including China, for scale and competition. But Europe should not be naive and should put in place targeted industrial policy to capture parts of the BEV supply chains.

Battery electric car sales share



Key recommendations

For car CO2 trilogues:

█ Lock-in 100% CO2 reduction from all new cars by 2035

█ Oppose any exemptions or credits for e-fuels in new cars

█ Delete the ZLEV benchmark from 2025

█ Support energy efficiency standards for future BEVs

Additional measures to spur BEV supply in 2020s:

█ Electrify all new sales of corporate fleet vehicles by 2030

█ Use EU funds and national measures to accelerate BEV production beyond minimum targets

█ Integrate local content requirements on BEV, batteries and minerals into national EV support schemes

█ Ensure minimum public charging network on all EU roads from 2025 (via AFIR) and mandate all buildings to pre-cable their garages by 2035 (via EPBD).



Further information:

[Full report](#)

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