

Closing the Gap Between Regulatory Ambition and Reality

Czech Automotive Industry Position on European Commission Proposal for the Revision of EU CO₂ Standards for Cars and Vans (Regulation (EU) 2019/631)

The December 2025 proposal is designed for the world we wish for, not the one we currently live in. It assumes that affordable energy, widespread charging infrastructure, a competitive European battery supply chain and strong consumer demand all fall into place at the same time. The reality is though, they have not, and there is no evidence they should do so at the pace the Regulation requires.

The evidence presented in this paper clearly shows a growing structural gap between what the policy demands and what the market can realistically deliver.

This transition is already decades in the making. Yet, today the market is only at 19% battery-electric vehicle sales, while compliance in 2030–2032 requires around 56%. In just 4 years. If this gap is not addressed, the outcome will have cost EU manufacturers up to €18 billion in annual penalties from 2030 for passenger car targets alone. For manufacturers active in both passenger cars and vans, the overall exposure would be significantly higher. In the van segment, where BEVs account for just over 10% of new registrations in 2025, the challenge is even more pronounced.

We are risking up to €440 billion of European economic output by 2035.¹ To put this into perspective, this is comparable to losing the entire annual economic output of a country of the size of Austria, or one third of the EU automotive sector. The consequences are clear: growing number of factory closures, job losses, mobility that is not accessible to all and ultimately a growing dependence on vehicles produced outside Europe.

A credible framework must therefore align ambition with reality. It must give a genuine, unquestionable and economically sustainable role to all available technologies as integral tools for decarbonising both new vehicles and the hundreds of millions already on Europe's roads.

Summary of key proposals

2030	Introduce compliance with CO ₂ emission limits averaged over 2028–2032 (EC proposes only 2030–2032).
	Implement Recital 11 (Reg. 2023/851) to allow vehicles running exclusively on CO₂ neutral fuels counted as 0 g CO₂/km with registration from November 2027 , aligned with Euro 7 phase-in.
	Adapt Crediting System 1) : Increase cap for CO ₂ neutral fuels from 3% to 5% and delete any other caps. Available as of immediately .
	Adapt Crediting System 2) : Remaining 5% should include wide-range of sustainable materials, such as aluminium , not just steel. Available as of immediately .
	Modify Super-Credits Mechanism , so that it better reflects market realities: 1) for small zero-emission vehicles "Made in EU" a super-credit of 1.5; 2) for all zero-emission vehicles "Made in EU" a super-credit of 1.3; 3) for small zero-emission vehicles (regardless of origin) a super-credit of 1.3.
2035	Declare clear and unconditional –90% CO₂ target in 2035, without reliance on the crediting system that should be used only as a bonus.
Vans-specific Priorities	<ul style="list-style-type: none"> • Lower the targets for 2030 to 35% and 2035 to 80%. • Introduce compliance with CO₂ emission limits averaged over 2 five-year periods 2025–2029 and 2030–2034. • Introduce Super-Credit Mechanism for vans: for zero-emission vehicles "Made in EU" a super-credit of 1.5; for all zero-emission vehicles a super-credit of 1.3.
Horizontal Priorities	Equalize Access to Flexibilities: Available to all manufacturers , including OEMs participating in open pools .
	Freeze the Utility Factor via the Automotive Omnibus or Euro 7 secondary legislation to allow further utilization of PHEV technology.
	Introduce a Regulatory Review in 2029/2030 , allowing for risk mitigation and timely adjustment to currently unknown future developments.

¹ McKinsey "A New ERA," Sept 2025. €440 bn GDP at risk by 2035;

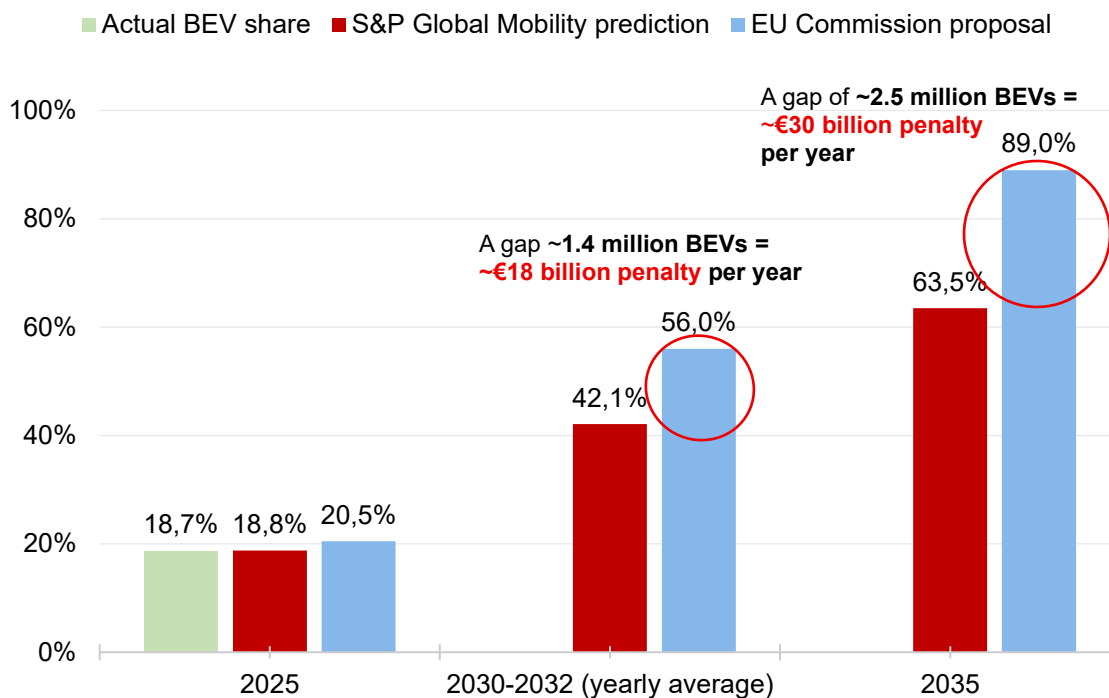
European Commission Proposal vs Market Reality

Europe's automotive industry has responded to mandatory CO₂ targets with unprecedented investment, with great results already visible. Around 20% of Czech vehicle production is electrified, over 300 EV models are available across the EU, including BEVs with ranges exceeding 800 km and PHEVs with over 100 km of electric range. The industry has committed over €250 billion to electrification, while meeting the world's strictest environmental and safety standards.

Yet market reality tells a different story. In the Czech Republic, BEVs accounted for just 5.5% and PHEVs for 4.3% of new registrations in 2025. Across the EU, consumer demand, infrastructure, and affordability are nowhere near what the Commission's proposal assumes.

To meet the proposed 2030–2032 average targets, pure battery-electric vehicle sales would need to triple in the next 4 years. From 1.9 million in 2025 to around 6 million per year (on average).

BEV share of sales / new registrations: Forecast vs EU Regulatory requirements² (~10 million vehicle baseline)



Even after accounting for super-credits, the projected BEV share of 42.1% leaves a gap of approximately 1.4 million vehicles per year - translating into **up to €18 billion in annual penalties from 2030.**³

The “new” 2035 target is even more demanding. The S&P Global Mobility forecast from 2025 projects only 63.5% BEV share by 2035, which is actually closer to the regulatory requirement in 2030–2032 than to the 2035 target. From 2035, the automotive industry would face a gap of 2.5 million vehicles per year, i.e. **annual penalties of around €30 billion.**

This gap is even more pronounced in the van segment. While more than 70 battery-electric van models are already available on the market, uptake remains at just over 10% of new registrations in 2025. This implies that, similarly to passenger cars, the market would need to more than triple within less than four years to meet the Commission’s proposed 2030 target of a 40% emissions reduction, which is unfeasible. Similarly, the 2035 target of 90% emission reduction remains unachievable under current conditions.

² Sources: S&P Global Mobility Sales based Powertrain Forecast August 2025 (Reality check: Is Europe on track to meet its EV goals? - ACEA - European Automobile Manufacturers' Association); European Commission proposal for the CO₂ LDV Review; ACEA, New car registrations, January 2026. BEV market share 18.7% in 2025 (covers EU + Norway + Iceland), Norway 2024 fleet average: ofv.no CO₂-utslippet
³ EU Commission Proposal 2030-2032: Adjusted by the estimated benefit of super-credits for small-battery electric vehicles made in EU, resulting in approximately 1.5-2% lower BEV requirement. 56% instead of 58.15%. A 42.1% predicted BEV share would still imply ~18.8 g CO₂/km exceedance and roughly €17.8 billion in penalties for a 10 million vehicle fleet. (10% PHEVs at average 65g CO₂/km after tightening of Utility Factor; 42.1% BEVs at 0g; 47.9% ICE/HEV/MHEV at 135g on average)

Technology neutrality only on paper

The proposal does allow manufacturers to compensate up to 10% of emissions (≈ 11 g CO₂/km) through a crediting mechanism, implying openness to wider-range of technologies. However, when assessing real-world examples, such as Norway, which reached a fleet average of ~ 11 g CO₂/km in 2024, broadly comparable to the Commission's proposed endgame, this implies a market structure of approximately **89% BEV, 6% PHEV, and 5% other** powertrains, effectively requiring **9 in 10 new vehicles sold to be pure battery-electric, given that they remain the only 0 g CO₂/km technology.**⁴

At EU-wide level, a **residual 5–6% share for alternative powertrains**, when divided among multiple automakers, brands, and vehicle segments, pushes production volume per model into the low tens of thousands. This is far below the minimum efficient scale required to keep unit costs affordable, making alternative powertrains economically unviable to produce, thus pushing industry further out of the EU.

This disconnect is even more evident in the van segment, where compliance is effectively dependent on battery-electric vehicles alone. Plug-in hybrid solutions play a negligible role and cannot meaningfully contribute to compliance, leaving manufacturers with limited technological options. In practice, this removes any real technological neutrality and further increases compliance risk in a segment where electrification is structurally more challenging.

The gap will not close on its own

The compliance gap described above is not a temporary lag that the market will naturally resolve. It reflects deep structural constraints. While this Regulation does not aim to address or solve them, **the current unrealistic proposal risks amplifying them** – slowing fleet renewal, weakening industrial capacity, and delaying decarbonisation rather than accelerating it.

The preconditions the proposal assumes – e.g. affordable energy, sufficient battery supply, positive total cost of ownership, and willing consumers – remain absent, and there is no credible trajectory for them to converge at the pace the Regulation requires.

The industrial base is under structural pressure

- European OEMs have **lost 20% of global market share since 2017**⁵, while **profitability is deteriorating sharply – down 49–53% across the world's largest carmakers** in the first half of 2025, with job losses and factory closures already materialising across Europe.^{6; 7}
- European automotive faces significantly higher production costs than its main competitors. **EU industrial electricity prices remain structurally uncompetitive**, standing at 148% above the United States and 126% above China, with no clear path to convergence.^{8; 9; 10}
- Suppliers, the backbone of the sector, are under acute pressure^{11; 12}, with approximately **90,000 jobs lost in 2024 alone**, threatening the loss of unique know-how and production capabilities.¹³
- What is more, a recent study by Roland Berger¹⁴ concluded there is a **15–35% competitiveness gap to non-European suppliers and 23% of per-vehicle value creation is at high or very high risk over the next 5 years**. This translates into **350,000 jobs at short-term risk across Europe's automotive supply chain**.
- Already in 2025, the automotive industry in the Czech Republic recorded a -1.5% decline in employment compared with 2024. In Germany, the situation is even more severe, with job losses reaching -6%, with more than 64% of surveyed automotive companies forced to lower their number of employees¹⁵.
- Europe holds less than 10% of global battery production capacity, while China controls over 80% of the global battery value chain.¹⁶ **Current EU battery production capacity would have to triple to meet the demand for electric vehicles in 4 years.**¹⁷

⁴ EU Commission Proposal 2025: Assumes effective target of 11 g CO₂/km, with forecasted fleet mix of 63.5% BEVs at 0 g, 10% PHEVs at 65 g, 26.5% other at 135 g. Fleet average 42.3 g CO₂/km, i.e. 31.3 g exceedance. Penalties at €95/g/vehicle applied to 10m fleet.

⁵ McKinsey MCFM, "A New ERA," Sept 2025. €440 bn GDP at risk by 2035; lost $\sim 20\%$ global market share since 2017.

⁶ Volkswagen is cutting 50,000 jobs by 2030, with operating profit down 53%. Stellantis recorded a €22.3 billion net loss, with its CEO citing "overestimation of the pace of the energy transition."

⁷ EY reports: Global auto industry slides deeper into crisis

⁸ Transport & Mobility Leuven, EV Market Report Q4 2025 (ACEA), EU electricity 147% above USA, 94% above China. Public charging more expensive than petrol in most Member States.

⁹ Draghi report p.145 – „Estimates suggest approximately 30% higher overall vehicle production costs in the EU compared to China, with significant differences in transformation cost between EU Member States.)

¹⁰ Draghi report p.149 – „Structurally higher energy costs and labour costs (up to 40% higher nominal unit labour cost in the EU compared to China) today contribute to the serious competitive disadvantage for the EU on the cost side.“

¹¹ VDA: Employment in the automotive industry: Prognosis study shows profound change process through transformation | Automotive World

¹² Press Release: Worst job losses in the automotive supply industry since the pandemic | CLEPA

¹³ IndustriALL: Thousands of jobs at risk: unions call for urgent action to halt automotive sector crisis, 07/2025

¹⁴ <https://www.rolandberger.com/en/Insights/Publications/Global-Automotive-Supplier-Study-2025.html>

¹⁵ VDA Annual Press Conference 2026

¹⁶ CEPA, "Europe Embraces Chinese EVs," Feb 2026: "After Northvolt filed for bankruptcy, no major European battery producer remains." China controls $>80\%$ global battery value chain.

¹⁷ McKinsey, ibid. EU battery capacity $<10\%$ global; 600–800 GWh needed by 2030 vs. ~ 200 GWh. 85–90% of ICE value added stays in Europe vs. 50–60% for BEVs.

Consumers and customers cannot and will not follow at the pace required

- **Only 23% of Europeans intend to buy a BEV.** Approx 30% of customers prefer hybrids and 40-50% prefer combustion. At current price levels, **just 33% of respondents** say they are likely to purchase an EV at all.¹⁸
- The smallest and most affordable vehicle **A-segment** has collapsed from 1.78 million units in 2009 to under 300,000 in 2025.¹⁹
- **Public charging** is often **more expensive than refuelling** in a majority of Member States, undermining the total cost of ownership case and OPEX for EVs.²⁰
- **EVs are still a long way from being a “one size fits all” solution** for all customers. Small EVs lack the range and charging speed of their ICE counterparts. Towing with an EV remains impractical, due both to high energy consumption and reduced range, as well as limited access to existing charging infrastructure when using a trailer.
- These constraints are even more pronounced in the **van segment**, where vehicles are primarily work tools for businesses and SMEs, and purchasing decisions are driven by total cost of ownership. Operational requirements such as high utilisation, payload constraints and limited charging flexibility make full electrification significantly more challenging than for passenger cars.

These are **structural constraints** that will not resolve within the timeline the Regulation demands.

What is at risk

We are risking the automotive sector, Europe’s largest industrial ecosystem and a pillar of the Czech national economy, which:

- at EU level represents ~7% of EU GDP; 13.8 million jobs, €570 billion in exports and €84.6 billion invested annually in R&D (34% of EU total);
- in the Czech Republic represents ~10% of GDP; 500.000 manufacturing jobs with the highest manufacturing salaries in the country, Europe’s third-largest passenger car producer (~1.45 million vehicles produced annually);
- the risks are particularly acute in the van segment, which underpins day-to-day economic activity across Europe. Vans are essential for SMEs, logistics, construction and service providers, meaning that reduced availability or rising costs directly affect the functioning of the real economy.

Hence, the economic risks of the current transition are substantial. McKinsey estimates up to €440 billion of GDP is at risk by 2035 if the transition is not managed effectively²¹. National budgets are also exposed, with Member States receiving around €384 billion annually from the automotive ecosystem²².

Under these conditions, maintaining the current trajectory does not accelerate decarbonisation. It produces the opposite outcome: **penalties that weaken manufacturers, factory closures that reduce capability and accelerate the transfer of industrial capacity to third countries.**

What is more, with over 250 million vehicles on EU roads and only around 4% of the fleet renewed annually, fleet turnover is inherently slow. **Europe’s average fleet age has risen to 12.3 years and 16.5 years in the Czech Republic.**²³ At this pace, vehicles registered just before 2035 would remain in use well into the 2050s.

Relying predominantly on BEVs as the only 0g CO₂/km technology is therefore not sufficient to deliver timely and socially acceptable decarbonisation. A credible framework must create a genuine **short-term flexibility that would significantly lower the risk of penalisation** and long-term, allow for an **economically sustainable role to PHEVs, REEVs, and CO₂ neutral fuels as integral instruments for decarbonising** both the new fleet and the hundreds of millions of vehicles already on Europe’s roads.

¹⁸McKinsey MCFM, “New Twists in the EV Transition,” April 2025.

¹⁹S&P Global, “Could New EU Regulations Revive the European Car Market?,” Oct 2025. A-segment sales down 11.1% in 2025; from 1.78 m units (2009) to ~299 k (2025).

²⁰Transport & Mobility Leuven, EV Market Report Q4 2025 (ACEA). Public charging more expensive than petrol in most Member States.

²¹McKinsey “A New ERA,” Sept 2025. €440 bn GDP at risk by 2035;

²²ACEA: Passenger cars: what they are and why they are so important

²³European used car market data: average fleet age 12.3 years (industry analysis, 2026). Czech Republic: Car Importers Association (CZ), 16.5 years.