CO_2 Fleet Regulation & Clean Corporate Fleets

Executive Summary:

The European Commission's Automotive Package from 16 December 2025 aims to support the automotive sector's transition to clean mobility through revised CO_2 fleet regulations for cars, vans, and partly heavy-duty vehicles, alongside mandates for zero- and low-emission corporate fleets and a new vehicle sub-category for "EU-made" small electric cars. While the package introduces some important flexibility, such as adjusted CO_2 targets for vans and a three-year averaging for 2030 compliance, it doesn't provide for the expected technology openness**,** which is essential for achieving an effective decarbonization and securing a resilient European automotive sector.

A core concern for Bosch is the insufficient recognition of renewable fuels in the *CO_2 fleet regulations for cars and vans* beyond a mere 3% and ahead of 2035. By not acknowledging vehicles running solely on renewable fuels, nor sufficiently considering advanced Plug-in Hybrid Vehicles (PHEVs) and Extended-Range Electric Vehicles (EREVs), the Commission overlooks viable technologies that could contribute to decarbonization, help keep technology know-how in Europe and increase end-user acceptance.

The introduction of "EU-made" criteria as a condition for small BEV supercredits and public funding for corporate fleets marks a paradigm shift from previous policy. This is an important first step to safeguard EU industrial capacities and restore a level playing field. But for true impact, Bosch advocates for a broader application of local content requirements.

Bosch views the proposed *mandates for zero- and low-emission vehicles in large company fleets* as problematic. They risk imposing substantial costs on companies due to higher leasing rates and reducing operational efficiency. Besides, best-performing PHEVs won't qualify as "low-carbon" due to the tightening of the utility factor, effectively rendering the "low-emission" quota into a de facto "zero-emission" mandate.

While the amendment to the *heavy-duty vehicle CO_2 fleet regulation* provides temporary relief, Bosch stresses the urgent need for a thorough revision in 2026. This revision is crucial to address critical enabling conditions beyond 2032 and ensure that complementary technology options for decarbonizing heavy-duty transport, including vehicles using renewable fuels, are considered.

Bosch advocates for recognizing and incentivizing all viable CO_2-reducing technologies, strengthening European industrial value chains, and focusing on creating the essential enabling conditions—such as robust infrastructure and competitive electricity costs — to make zero- and low-emission mobility attractive and feasible for all users across Europe.

Impact on Bosch as automotive supplier:

The EU's stringent CO_2 fleet rules and related legislation are reshaping its automotive market, with significant implications for competitiveness and value retention. While aiming for sustainable transport, these policies risk isolating the EU from global realities and impacting its industrial base. As a major automotive supplier, Bosch is sincerely affected by these developments.

The EU's legislation for cars and vans is the world's strictest. The EU also has the largest gap between its targets and consumer demand for electric vehicles (BEVs) and enabling conditions. The CO_2 targets demand tripling BEV market share in five years and near-complete electrification by 2035 – a speed exceeding China's transformation and requiring massive public investments in infrastructure and incentives to significantly increase consumer demand across Europe, which is currently not evident.

At the same time, the intense focus on electrification creates high technology and raw material dependencies. This is even more of a concern as the EU lacks a "rocket solid policy" for critical raw materials, as noted by the European Court of Auditors, leaving Europe vulnerable.

McKinsey projects that by 2035, OEMs' domestic market share could fall to 45% (from 60% in 2023) if the EU-China BEV production cost gap and China's dominance in battery supply chains persist. Europe could lose 55% of BEV-related value added if production moves abroad, potentially producing 20-25% fewer cars and seeing exports decline by 40%. For Bosch, this means losing a crucial share of its domestic market.

Meanwhile, global market trends indicate that around 50% of new global car registrations in 2035 will still utilize combustion technology (including PHEVs/EREVs). If the EU maintains an exclusive electrification strategy, it risks being shut out of at least half of this world market. Without a viable domestic base, EU production for export for these technologies will likely cease.

The extensive technology restrictions impact automotive suppliers in traditionally strong areas and have already prompted value creation to migrate from the EU. Employment effects in the automotive supplier industry are already apparent. Bosch views the EU Commission's current proposals as too limited and impractical to preserve employment and its competitiveness effectively. It needs a broader approach to secure the sector's future.

Bosch's political claims:

1. The automotive sector needs a technology-open *CO_2 fleet regulation for cars and vans,* with practical solutions to enable and justify investment in production capacities and technology development.
   - The utility factor for PHEVs/ EREVs should be frozen on 2025/2026 level to retain technological know-how and value-add in Europe.
   - Vehicles running exclusively on renewable fuels must be recognised as zero-emission vehicles (0g CO_2/km). For this purpose, a specific vehicle sub-category for carbon-neutral-fuel (CNF)-vehicles must be established by 2026.
   - Super credits should be granted to all "EU-made" electric cars and vans, with a crediting factor of at least 1.5, and ideally beyond 2034. "Made in EU" criteria must extend beyond vehicle assembly and batteries to include specific thresholds for supplier components.
   - Renewable fuels should be credited towards CO_2-targets, beyond the 3% proposed by the EU-Commission; and this already for 2030. The 2035 target should be reduced to 90% unconditioned.

2. Bosch supports the proposal to amend the *CO_2 regulation for heavy-duty* vehicles as it brings some relief on the timeline. Yet, a thorough revision of the CO_2 fleet regulation in 2026 remains urgent to assess critical enabling conditions and allow complementary technology options.

3. *Quotas for zero- and low emission vehicles (ZLEVs) in corporate fleets*, even if applied to EU Member States, will impact Bosch. National obligations risk being passed onto companies, generating high adaptation costs and causing disruptions.
   - Corporate fleet mandates are counterproductive. Fleet decisions are determined by TCO and operational suitability. Instead, the EU should focus on core factors for market-wide adoption of zero- and low emission vehicles (ZLEVs), like infrastructure deployment, including grid access, across Europe and TCOs, to render ZLEVs attractive to consumers and commercial users.
   - Vehicles using exclusively renewable fuels should be recognized as zero-emission vehicles. For PHEVs/EREVs, the current utility factor 2025/26 should be maintained.
   - Local content requirements for public funding for corporate vehicles are essential to safeguard EU industrial capacities until a level playing field is restored. Criteria must extend beyond vehicle assembly and batteries to include specific thresholds for supplier components.

Bosch assessment and position:

CO_2 fleet regulation for passenger cars and light commercial vehicles:

- The EU-Commission didn't deliver on its promise of technology neutrality for 2035; even less for 2030. Its proposal offers minimal impact on alternative tech options.
- Even under best conditions, it allows less than 16% PHEVs/EREVs respectively 8% pure ICEs beyond 2035. A share of 8% ICE powertrains in total, including PHEVs/EREVs, seems more likely. This is largely due to the limited impact of steel credits: they can provide only up to 2.8 g CO_2/km savings average[1], which is less than half of the 7% cap, as cars simply don't use more steel.
- The marginal recognition of renewable fuels offers no incentive for their ramp-up.
  The actual EU consumption of RED compliant biofuels in 2024 would have already generated 8.7 g CO_2/km fuel credits.
- Linking the future of PHEVs/EREVs and other ICE-related technologies to European low-carbon steel makes the solution complex and uncertain (availability, costs etc.).
- PHEVs will become unattractive for OEMs and end-customers alike, if the utility factor will be tightened for 2027. Besides, the absence of a clear long-term perspective will likely discourage OEMs from significant investments in hybrid technology improvements and electric driving range.
- For Bosch the freezing of the utility factor, the category for vehicles running exclusively on renewable fuels and the extension of super credits to all EU-made electric vehicles are key priorities. In addition, an unlimited crediting of renewable fuels should be introduced before 2030. A remaining ICE share should be allowed unconditionally beyond 2035. Residual emissions could be offset through increased renewable energy targets within the Renewable Energy Directive.
- The proposed supercredits for "EU-made" small electric cars address only a limited share of the BEV market. To provide meaningful incentive for local sourcing by OEMs they should be extended to all EU-made BEVs and the factor should be raised to 2.

CO_2 fleet regulation for heavy-duty vehicles:

- Critical enabling conditions as truck-suitable infrastructure, grid access and cost parity for zero-emission trucks, remain bottlenecks. Unless urgently addressed, OEMs risk missing their 2030 targets by at least 10%. While the amendment offers temporary relief, pressure returns from 2032+ as credits expire. Therefore, a thorough revision of the CO_2 fleet regulation for HDV is needed.

[1] Based on 0.5-0.7t steel demand/ vehicle in fleet average of EU-registered vehicles.

Corporate Fleets:

- The Bosch Group operates a fleet of ~10,000 vehicles in Germany, most being leased. Bosch applies internal policies to increase electric vehicle and renewable fuel shares, including in service vehicles, and incentivizes its suppliers to reduce their transport-related carbon footprint.
- Mandatory quotas, though applying for Member States, impact Bosch as a fleet operator as they risk being passed onto companies. Leasing prices for electric vehicles will severely increase and impact companies costs considerably.
- From experience, specific customer needs for service cars and vans make in many cases a straight-forward switch to electric vehicles unfeasible. Beyond adaptation costs, efficiency loss and supply shortages are likely. These challenges apply to many companies and will reduce their performance and productivity, impacting the EU economy altogether in an unforeseeable manner.
- Key factors for the choice of service vehicles are total costs of ownership, technical performance, uptime, battery range and infrastructure. Public support should target (electricity) costs and establishing widespread infrastructure. Besides, BEV leasing and charging point installation costs on company sites and in private homes are significant. Instead of mandates, there should be incentives designed to at least partially mitigate the financial burden for companies decarbonising their fleets.
- Extending corporate fleet targets to low-carbon vehicles has little real effect for European vehicles: with the 2027 Utility Factor tightening, no PHEV model is expected to meet the 50g CO_2/km threshold. Significant PHEV technical development (resulting in higher electric range across all modes) is unlikely due to high investment costs and low financial security with uncertain long-term prospects.
- The EU regulatory framework must ensure technology openness and enable companies to adopt individual, efficient carbon reduction strategies for their fleets.
- Strengthening EU value creation via local content requirements for public funding of corporate fleets is essential given the significant competitiveness challenges European automotive suppliers are facing. Criteria must extend beyond vehicle assembly and batteries to include specific thresholds for supplier components.