acea

October 2025

ACEA policy paper

EU regulatory framework for the decarbonisation of road transport

Table of content

1. INTRODUCTION 2

2. CURRENT CHALLENGES AND MARKET OUTLOOK (LIGHT-DUTY VEHICLES) 4

3. PROPOSED SOLUTIONS FOR LIGHT-DUTY VEHICLES 7

3.1 Regulatory flexibilities required for cars for 2030 7

3.2 regulatory flexibilities for light commercial vehicles for 2030 9

3.3 Further essential measures: 11

3.4 Ensuring long-term technology neutrality for 2035 and beyond 11

3.5 Ensuring the right enabling framework 14

4. REVISION OF THE CO2 REGULATION FOR HEAVY-DUTY VEHICLE TRANSPORT 19

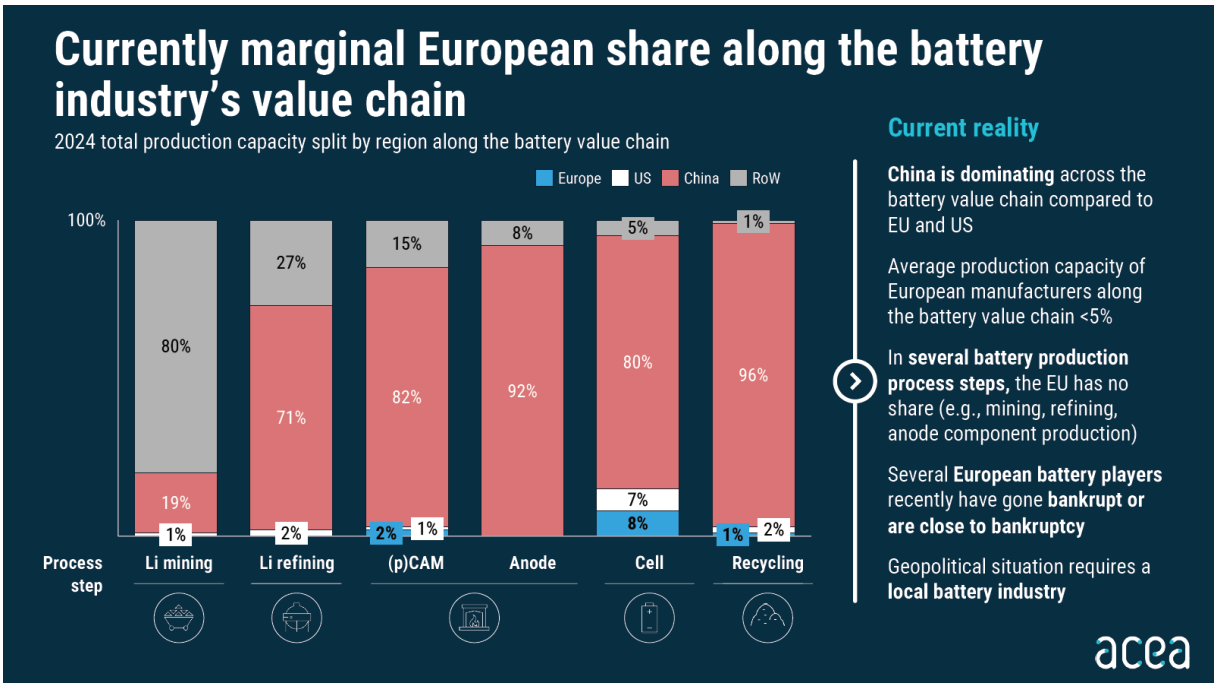
State of the enabling conditions for heavy-duty vehicles 20

1. INTRODUCTION

The automotive industry is fully committed to the 2050 climate neutrality goal. Vehicle manufacturers have invested hundreds of billions into transformation and new models – almost 300 electrified vehicles (BEV, PHEV, FCEV) produced by ACEA members are available on the market (including affordable models) and more models are coming up in the next 12-18 months. We have delivered. And we continue to do so. There is no turning back: European factories are being built and reformed, and the workforce reskilled.

But the current approach is not working because it:

- only focuses on new vehicles (instead of creating conditions to decarbonise the whole fleet)
- only regulates supply without equally robust demand measures (infrastructure, total cost of ownership, incentives)
- does not link decarbonisation to two other critical dimensions – competitiveness and resilience. The resilience dimension is especially vital as Asian companies dominate battery technology and production, and increasing Europe's independence by building a competitive domestic battery value chain is likely to take decades. The dynamics of EU relationship with China which dominates the electric vehicle (EV) battery industry and EU's ability to diversify its access to critical raw materials for batteries will have a significant impact on the success of the transformation.



- is based on outdated premises and optimistic assumptions. For example, the original impact assessment significantly underestimated the share of zero-emission cars/vans necessary to meet the CO2 targets in 2025 and 2030, which warrants the

reassessment of the feasibility of the whole trajectory and economic conditions and intervention needed to accelerate uptake of zero-emission vehicles (ZEVs)[1].

Overall, the current CO2 regulation has put in place a very rigid one-dimensional pathway: -100% CO2 in 2035 with interim targets in 2025 and 2030 which are no longer realistic to achieve. The system allows only limited flexibilities to comply. In volatile markets, non-compliance penalties risk draining OEMs' investment capacity without improving decarbonisation.

BEV will be the main path for decarbonisation, yet other drivetrain technologies (eg PHEV, range extenders, hydrogen fuel-cell, etc), which can play a viable role operating on renewable energy carriers, should not be excluded. Multiple technologies act, in fact, as a catalyst to accelerate market acceptance and achieve decarbonisation targets in real-world conditions. Other markets are successfully allowing this multi-technology approach. While China, contrary to some expectations in 2020, has not implemented a ban on internal combustion engine (ICE) vehicles, the United States has shifted away from the supply-side electrification approach previously led by California.

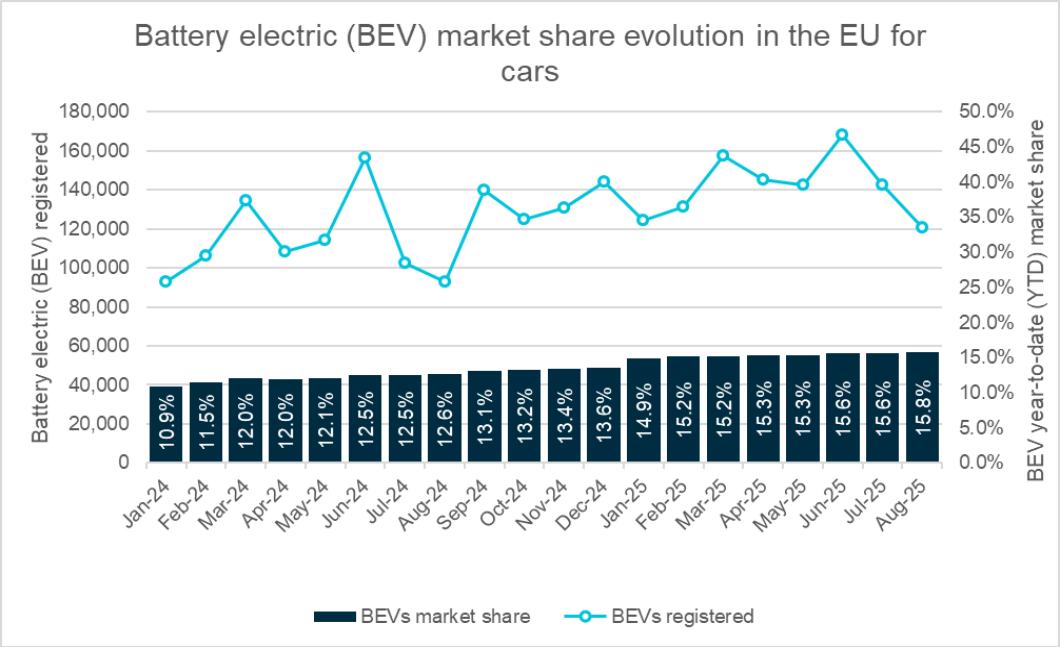
There is therefore a strong case to recalibrate the current CO2 reduction path in road transport to ensure it delivers on the EU climate goals whilst also safeguarding Europe's industrial competitiveness, social cohesion, and strategic resilience of its supply chains.

[1] Inside the projections: Assessing the EU's CO standards September 2025 -

2. CURRENT CHALLENGES AND MARKET OUTLOOK (LIGHT-DUTY VEHICLES)

As a result of this narrow approach combined with the current adverse market, geopolitical, and economic conditions, the current 2030/2035 targets have become unattainable without regulatory adjustments.

The market share of battery-electric passenger cars in EU27 was at 15.8% in August 2025 year-to-date (YTD) and at 8.5% for vans in the first half of 2025 (H1 2025).



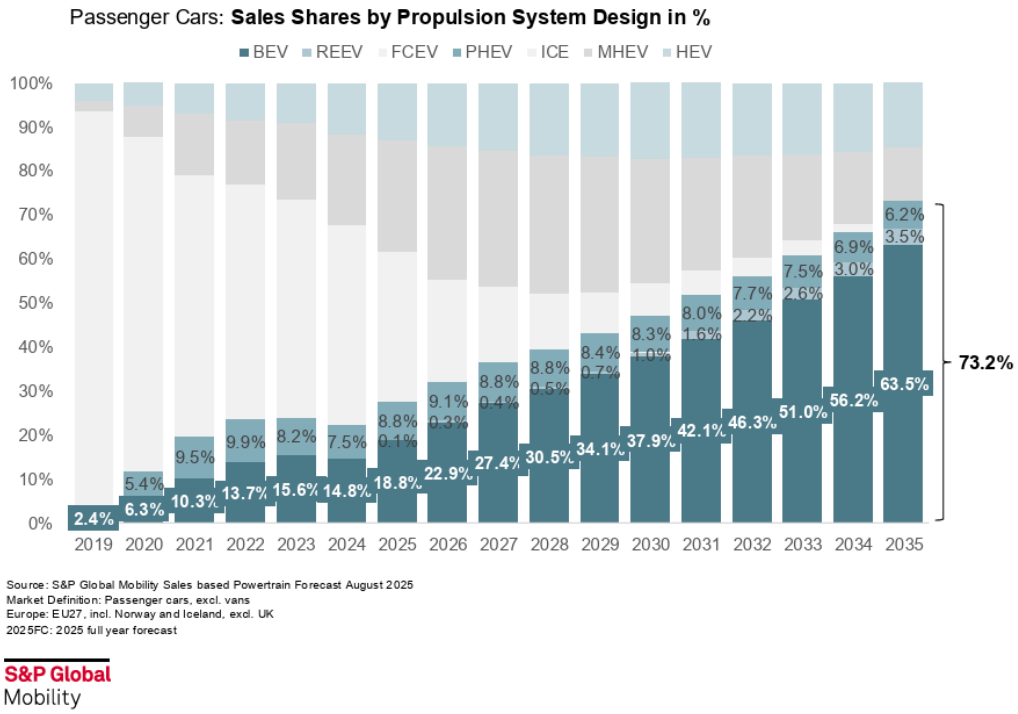
Source: ACEA

Governments and regulators have not invested in, nor demanded, sufficient levels of infrastructure and grid upgrades, or measures to improve total costs of ownership[2], and incentives have been patchy (withdrawal of incentives in Germany in December 2023 led to the BEV market collapse).

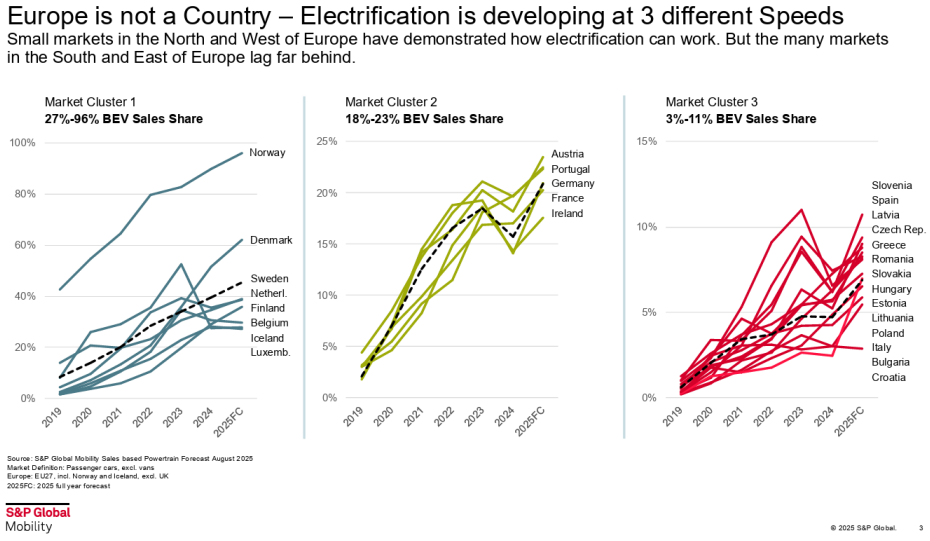
The 2025 BEV registrations needed to account 25% of the market share at this stage of the transition to ensure OEM compliance with the 2025 targets, but this forecast was downgraded in 2024 in light of the weak real-world market demand. Despite some expectations that the 2025 market share would quickly pick up, it continues growing at a slow pace and is unlikely to exceed 17-18% of the market. Whilst the three-year averaging for 2025-2027 may offer temporary relief for cars, it will not cover the dire straits for vans nor – in itself – get the transition back on track.

[2] For details see chapter 3.2. of the regular TML report on enabling conditions available at: TML is working on Key Performance Indicators for tracking the transition to zero-emission passenger cars and vans.

As a result, as of September 2025, independent market analysts do not forecast more than 63% of BEV share of new sales in 2035 based on current assumptions and current pace of BEV market growth.



What is equally concerning is that the pace of electrification is not equal across all EU member states. Whilst some smaller, more affluent countries show steady growth, most of the countries, especially in Southern, Central, and Eastern Europe are lagging behind: at the moment we have a “Europe of three speeds”, which stresses the importance of robust long-term consistent incentives at the national level to achieve a higher share of zero-emission vehicles (ZEVs) and avoid the risks of transport poverty. For decades, the car was a symbol of widespread prosperity. Now, due to its lack of affordability, it is in danger of becoming a symbol of social division between countries.



Additionally, EU vehicle manufacturers are grappling with multiple challenges that slow down their transformation ability, including:

- Pre-COVID EU sales versus 2025: the EU market is missing three million cars; cars on the road are getting older (12.5 years old in 2023 up from 10.9 in 2013), indicating the longer use of cars with less advanced emission-reduction technologies.
- Decreasing competitiveness and profitability (**~+130%** average energy costs in Europe compared to the US and China; **-7pp** EU share of global car production between 2015 and 2024; EY reports that the 19 largest car companies in the world saw their profits shrank by 49% in the first half of the year as a whole. This money is missing for investments to remain competitive and fund the transition.
- Lowering profitability and competitiveness might also have negative impacts on the overall employment in the sector, as number of recent studies indicate[3]. According to IndustriAll, around 90,000 jobs were lost in 2024 alone.
- Increasing regulatory burden on the industry that goes beyond CO2 emission reduction targets. The industry will need to implement more than 100 delegated and implementing acts over the next few years spanning safety, materials, emissions, circular economy, data, and security requirements. Most of them go beyond merely reporting and introduce changes to manufacturing processes and vehicle design or have impact on investment decision. Some ACEA members report spending as much as 25% of their R&I budget on complying with regulations.

[3] VDA: Employment in the automotive industry: Prognos study shows profound change process through transformation | Automotive World
Press Release: Worst job losses in the automotive supply industry since the pandemic | CLEPA

3. PROPOSED SOLUTIONS FOR LIGHT-DUTY VEHICLES

The market, political, and economic situation dictates the need for adjusting the current regulatory regime in light of the real-world developments. Unequal pace of electrification in various vehicle segments (passenger cars, vans, heavy-duty vehicles) requires acting in "three lanes" with a tailored approach to each segment.

3.1 REGULATORY FLEXIBILITIES REQUIRED FOR CARS FOR 2030

According to current market estimates, the 2030 target is unachievable and penalties could range between €20 and €25 billion for the car industry. A set of targeted measures will be required to avoid this. These measures must meet several criteria:

1. They must be objectively justifiable.
2. They should support meaningful societal goals including the affordability of electric vehicles for the middle class and the promotion of innovation and efficiency in decarbonisation.
3. They must ensure fair competition between OEMs with different portfolios.
4. Where relevant, flexibilities should be limited in their total compliance impact so as not to slow down the market ramp-up of ZEVs or disrupt fair competition.

Therefore, we propose:

A. An **average-compliance mechanism** over five years, for the period 2028-2032, which would allow transfer of CO2 savings (volume-based). This would allow flexible compliance calculation reflecting the market development and possible fluctuations and should be used within the whole Regulation period.

B. **Incentives and flexibilities for affordable BEVs**, first and foremost super credits for small BEVs measured by battery capacity, to incentivise their production despite their very low margins.

C. To **safeguard the role of plug-in-hybrid electric vehicles (PHEVs)** and potential range extenders (REEVs) by maintaining the Utility Factor (UF) at Euro 6e-bis value to keep up incentives for OEMs to invest into this technology.

D. A **fixed renewable fuels coefficient** to be applied for the registrations of all powertrains in a given year to lower their respective CO2 performance as from 2028 onwards (provided finalisation of the review in 2027) based on EU SHARES GHG values for 2024, and possibly modified every two years during the regular review, based on the Commission implementing reports taking into account the development of the market and with the expected growing share of renewable fuels due to stricter Renewable Energy Directive (RED) requirements.

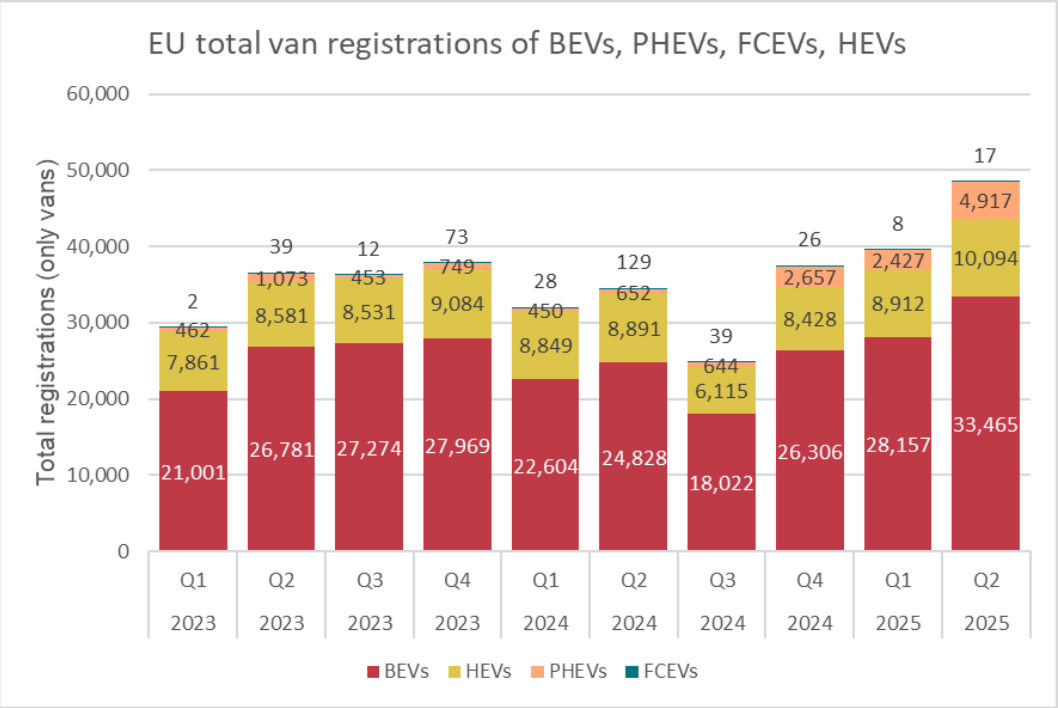
E. **Updating of the zero- and low-emission vehicles (ZLEVs) benchmark** to adjust the threshold level of the ZLEV parameter (x) 15% for cars for the years 2025-2029, provided the UF is kept constant, and eliminating the cap for target relief (maximum 5% today) and continue the ZLEV benchmark principle until 2034 with parameters based on market realities both for cars and vans, without a cap for target relief.

F. Incentives and flexibilities for OEMs to **reward their investments in innovative and efficient decarbonisation measures** inside and outside their products. Those measures should include targeted incentives, such as super credits, for the most efficient BEVs of an OEM's fleet; for geofencing (an OEM specific value depending on instalment of geofencing technology in PHEV), for vehicle-to-grid (V2G) readiness (OEM specific value depending on the instalment of V2G technology in vehicle); for value-chain related flexibilities (OEM specific value depending on the use of decarbonisation measurements, such as the use of green steel or green aluminium, and investments in e-fuels production and carbon capturing) and measures leading to acceleration of car parc renewal.

G. **Pragmatic implementation of recital 11** of the CO2 Regulation for cars and vans. Allowing registration of vehicles running exclusively on carbon neutral fuels allowing digital proof (this new vehicle category operating only on carbon neutral fuels that enters with 0g CO2 into CO2 compliance). Tax treatment should be aligned across the EU so that CNF-only vehicles receive similar benefits comparable to BEVs. This request relates only to passenger cars and light commercial vehicles (LCVs).

3.2 REGULATORY FLEXIBILITIES FOR LIGHT COMMERCIAL VEHICLES FOR 2030

The van segment is in a particularly difficult situation that needs to be addressed urgently as the battery-electric van sales in the EU's key markets remain insufficient to meet the 2025 compliance target, currently achieving an 8.5% market penetration in the EU compared to the required 15% CO2 reduction target in 2025-2029 (which would require around 15-20% BEV share) and significantly below the requested -50% in 2030 (in four years only).



Vans are commercial vehicles operating under completely different circumstances than passenger cars and purchase decisions for vans are driven largely by the total cost of ownership (electricity pricing, availability of charging) and capacity considerations (customers sometimes refuse trade-off between payload and enlarged battery).

Therefore, vans require a **targeted approach including the introduction of an additional specific set of flexibilities and a 2030 target change**.

With respect to the whole **period of 2025-2034**:

A. A **change in the average-compliance mechanism** from three years to five years for vans for the periods 2025-2029 and 2030-2034.

B. **Modify the ZLEV criteria threshold** for vans at a level of 80g CO2/km, reflecting the specificities of the vans segment (modification of Article 3 (m)).

C. A **fixed renewable fuels coefficient** to be applied for the registrations of all powertrains in a given year to lower their respective CO2 performance as from 2028 onwards (provided finalisation of the review in 2027) based on EU SHARES GHG values for 2024, which could be possibly modified every two years during regular

Regulation review based on the regular Commission implementing reports based on development of the market with expected growing share of renewable fuels due to stricter RED requirements.

D. **Avoid an EU average** in the vans calculation (Phi factor) – (specific emissions target = (specific emissions reference target – (ø targets – EU fleet-wide target 2025)) x ZLEV factor).

E. Enable BEV, PHEV, and range-extender electric vehicle (REEV) N2 category vehicles up to **4.25 GVW for electric versions** (moving from N1 category due to electrification) into N1 CO2 compliance calculation. Elimination of the speed limiters and tachographs for that vehicle category.

F. The CO2 regulation should acknowledge the **additional value of the LCVs for passenger transportation** by benefits for M1 CO2 compliance through an "inverted" super credit of 0.6 in the CO2 compliance calculation for vehicles with at least eight seats (it means that the CO2 value of M1 LCV with eight or nine seats would be counted with the factor 0.6 in the M1 fleet compliance calculations).

G. Incentives and flexibilities for OEMs to **reward their investments in innovative and efficient decarbonisation measures** inside and outside their products. Those measures should include targeted incentives, such as super credits, for the most efficient BEVs of an OEM's fleet; for geofencing (an OEM specific value depending on instalment of geofencing technology in PHEV); for V2G readiness (OEM specific value depending on the instalment of V2G technology in vehicle); for value-chain related flexibilities (OEM specific value depending on the use of decarbonisation measurements, such as the use of green steel or green aluminium, and investments in e-fuels production and carbon capturing); and measures leading to the acceleration of the car parc renewal. Overall, those flexibilities could potentially be limited in their total compliance impact so as not to disrupt fair competition.

Specifically, with respect to the **period 2025-2029**, we propose:

H. to consider the **introduction of a super-credit system for ZEV vans**, at least for the period 2027-2029;

I. as an alternative, and provided the Utility Factor is kept constant at Euro 6e-bis level, to **update the ZLEV benchmark** to adjust the threshold level of the ZLEV parameter (x) 8% for vans for the years 2025-2029, and to eliminate the cap for target relief (maximum 5% today) and continue the ZLEV benchmark principle until 2034 with parameters based on market realities both for cars and vans, without a cap for target relief.

Concerning the **period 2030-2034**:

J. **Target adjustment of the 2030** reduction target close to the impact assessment low target levels scenario (-30% to -35% reduction target) assessed within the last Regulation review that already increased the 2019 ambition level.

3.3 FURTHER ESSENTIAL MEASURES:

A. High ambition GHG reduction targets **requirements in the RED**. For the share of renewable fuels (including their definition) in line with a long-term trajectory to reach climate neutrality in 2050 and to comply with the proposed -90% overall target in 2040.

B. **Modification of the penalty level**. The ceiling should not exceed whichever is the lowest of either €95 per g CO2/km or average ETS1 price in a given compliance year[4].

C. Possibility to **transfer compliance credits limited with a cap** (volume weighted) between M1 and N1 segments in order to allow flexible compliance within the segments.

D. **Introduction of a review clause.** The current pace of change in economic, market, and geopolitical circumstances, and the complexity of this transition necessitate stricter review and scrutiny of the CO2 Regulation going forward. We propose to insert a possibility for a two-year review clause following the Commission's implementing reports in the amended Regulation.

3.4 ENSURING LONG-TERM TECHNOLOGY NEUTRALITY FOR 2035 AND BEYOND

According to **Mario Draghi's latest assessment** of the state of the industry, "the 2035 deadline for zero tailpipe emissions was meant to trigger a virtuous circle: firm targets would drive investment in charging infrastructure, grow the home market, spur innovation in Europe and make EV models cheaper. Adjacent industries – batteries, chips – were expected to develop alongside, supported by targeted industrial policy."

But this has not happened. Charging point installation must accelerate three- to fourfold in the next five years to reach adequate coverage. The EV market has grown more slowly than expected. European innovation has lagged, models remain expensive and supply-chain policy is fragmented. In fact, the European car fleet of 250 million vehicles is ageing and CO2 emissions have barely fallen in recent years.

As suggested in the report, "**the upcoming review of the CO2 emissions regulation should follow a technologically neutral approach and take stock of market and technological developments.** We also need a joined-up approach to the ramp-up of EVs – covering supply chains, infrastructure needs, and the potential of carbon-neutral fuels."

We agree with Mario Draghi's assessment. The EU automotive industry supports the Paris agreement and the EU 2050 climate neutrality goal. Our sector has received the most stringent target as it was perceived to be one of the easiest to decarbonise. But the reality

[4] Reasoning: 200,000km x 1g CO2/km (exceedance) = 200kg CO2 x 5 (to reach 1 tonne CO2) 5 x €95 penalty = €475 per tonne. Today, an ETS certificate for 1 tonne costs about €70 Therefore, as long as the ETS certificate is below €475, we would prefer to pay the ETS price

has proven much more complicated as the supporting ecosystem (infrastructure, incentives, battery value chain development) and consumer demand can't follow the pace set by the 100% zero tailpipe emission target – even though the range of available and more affordable electric vehicles (EVs) is constantly growing.

Technically, carmakers could simply stop selling combustion engine and hybrid vehicles in Europe. But at what price? One cannot force European customers to switch to electric mobility by sheer political will. Widespread mass-market adoption of EVs has not happened yet. And it will not happen if we don't speed up the infrastructure and bring down the total cost of ownership.

Consequently, the market and industrial footprint stand to shrink dramatically. Since COVID, Europe has already lost three million car sales per year and is the only region not to recover. People would hold on to their old cars longer, meaning more CO2 and pollutants – the average car age on European roads has been increasing over the years and almost 60% of all cars in the EU are now older than ten years. Jobs and supply chains would be further at risk. Hitting net zero by 2050 will look uncertain in that outlook, too.

Instead, **Europe needs more pragmatism**. The current CO2 reduction path in road transport must be recalibrated to ensure it delivers on the EU climate goals whilst also safeguarding Europe's industrial competitiveness, social cohesion, and strategic resilience of its supply chains.

Electrification will remain the mainstream pathway and policy support should focus on increasing the share of battery-electric vehicles. At the same time, all drivetrain technologies (eg PHEV, range extenders, hydrogen fuel-cell, etc), which can play a viable role, should not be excluded. Allowing some flexibility on tailpipe rules could keep the market closer to 10-12 million cars by 2035. Additional emissions can be compensated, and this can be done in a legitimate and verifiable way using proven abatement measures.

The focus should therefore be on **anchoring technology neutrality** as the most flexible and market-driven approach moving forward. This would sustain jobs, innovation, and investment, while helping replace ageing, more polluting vehicles with newer, cleaner ones.

Neither the Paris climate agreement nor the EU Climate Law prescribe the exact technological pathway for CO2 reductions. This is also consistent with Commission's own approach on all climate and energy-related legislation[5].

The current market shows uneven uptake across vehicle segments, each operating under different conditions and requiring distinct policy incentives and regulatory approaches. While heavy-duty vehicles are recognised as a distinct segment, light commercial vehicles (vans) are still bundled with passenger cars. In reality, a **"three-lane approach"** is needed, with tailored policies for cars, vans, and heavy-duty vehicles.

[5] For example, Proposal for a Regulation of the European Parliament and the Council amending Regulation (EU) 2021/1119 establishing the framework for achieving climate neutrality: "All zero and low carbon energy solutions (including renewables, nuclear, energy efficiency, storage, CCS, CCU, carbon removals, geothermal and hydro-energy, and all other current and future) are necessary to decarbonise the energy system by 2040"

Finally, the current Regulation for cars and vans puts a disproportionate burden on vehicle manufacturers, and only on a small share of the vehicle fleet. New registrations represent only 4% of the 250 million cars on the road today, yet they face a disproportionate amount of penalties for non-compliance. A discussion about **redistributing burden** among all stakeholders in the energy system – vehicle manufacturers, fuel providers, grid operators, and infrastructure providers – must be held as well.

The following levers can be used to compensate for additional CO2 emissions:

- **Car parc renewal**: A faster fleet renewal to more CO2 efficient vehicles of all categories and the scrappage of the old ones has not only a benefit for the climate and the air quality, but also for employment in the automotive sector. Considering the total CO2 emissions in the use phase of a vehicle (typical lifetime mileage of 200,000km), a reduction of these emissions results from an earlier scrappage of a vehicle. For every old vehicle that is scrapped, newer vehicles will enter the market and therefore lower overall emissions[6]. Moreover, the current outflow of used cars to non-EU countries – resulting in hundreds of thousands of additional kilometres driven by ageing, high-emission vehicles – could be reduced through such schemes. Car parc renewal is essential to avoid the market disruption whereby owners keep to their older (ICE) vehicles ahead of the 2035 ban and slow down the road transport decarbonisation.
- **Accelerated decarbonisation of fuels**: More ambitious Renewable Energy Directive (RED) targets should guide the oil industry to increase the share of decarbonised fuel in the EU car fuel consumption volume. Ambitious ETSII (CO2 price) and RED targets would foster an accelerated growing EU market for such decarbonised fuels. Increasing the RED target by only 3% would have a significant CO2 reduction impact due to its high leverage of the approximately 280 million vehicles car parc compared to the remaining conventional share of the new car fleet in the timeframe from 2025-2050.
- **Carbon removals**: In line with the 2040 proposal for the climate law of the European Commission, high quality international carbon removals should be accountable for at least 5% of the additional emissions. In the transition phase until 2040 the money could be also used to research and pilot possible innovative technologies to accelerate market readiness of these technologies.
- **Supply chain measures**: CO2 reduction in the production of steel, aluminium, and battery should be also accounted for in the compensation of additional emissions originating from adapting the CO2 regulation. The Commission is advised to develop a mechanism which gives a CO2 bonus to the manufacturers using these levers as

[6] For example, the standardised CO2 emissions of a vehicle with a WLTP value of 140g/km corresponds to an absolute CO2 reduction of 1.4t per 10,000km reduced driving distance. If a vehicle is scrapped at a mileage of 150,000km instead of 200,000km, this results in 7t of CO2 not emitted. If an OEM purchases this vehicle and scraps it, the bonus of 7t could be accounted positive in its fleet performance based on the typical lifetime mileage resulting in a bonus of 35g/km recalculated to a value referencing its overall registration figures in the year of purchase

an option. This could give the manufacturers compensation for offsetting the decarbonised materials and components thereby mitigating extra costs of these new climate friendly material and components.

- **Others**, eg green charging certificates, use of home solar panels, HVO100 fuelling, investment in e-fuels, etc.

3.5 ENSURING THE RIGHT ENABLING FRAMEWORK

Only revising the CO2 Regulation for cars and vans is not sufficient to decarbonise road transport – all other pieces of the legislative framework that govern decarbonisation must be adjusted.

These enabling conditions are not "nice-to-have" but are critical enablers and the success of the transition is contingent upon their successful implementation.

1. **A strong AFIR review in 2026**

To push for more demanding targets – achieve a target of 300 public charging points per 100,000 inhabitants (there are currently just 173 chargers per 100,000 inhabitants). The success of the transition is contingent upon these conditions being met. ACEA projects that 8.8 million charging points will be needed by 2030, substantially more than the European Commission's target of 3.5 million. Despite reporting that almost all member states met their AFIR targets, more action is needed. The share of fast charging versus slow charging is unsatisfactory and significant regional disparities remain (60% of all recharging infrastructure is located in only three EU countries). Additionally, the targets for the uptake of hydrogen refuelling infrastructure must – at a minimum – be kept as they are, ensuring a basic network coverage. Going below the agreed targets will put any market development at risk.

All relevant KPIs with respect to the enabling conditions are regularly monitored within the TML quarterly reports available at: TML is working on Key Performance Indicators for tracking the transition to zero-emission passenger cars and vans.

Charging infrastructure	Key performance indicator	Q2 2025	Q1 2025	On target?
Recharging infrastructure	Public charging capacity	32.2 GW	28.57 GW	
	Number of public charging stations	161.5 k	147 k	
	EV fleet per charging point	11	12	
	Public charging per 100k inhab	173	145	
	DC charger share - US Target	18%	17%	
	DC charger share - China Target	18%	17%	
Refuelling infrastructure	Number of hydrogen refuelling stations per 200 km TEN-T	0.6	0.7	

2. **Urgent and coordinated investments in transmission and distribution networks**

These are also essential to upgrade existing grids and meet rising electricity demand from EV charging while enabling greater renewable integration. The customer experience at charging points must be drastically improved through simplified payment methods, real-time information on availability and reliability, and a reduction in the need for multiple apps.

3. **A regulatory and tax reform for V2G**

Establish a supportive regulatory framework and reform electricity taxation to remove double taxation on storage, enabling vehicle-to-grid (V2G) integration and development.

4. **Streamline administrative processes**

Such as:

- Permits and planning permissions, and clearly defining the roles of public and private stakeholders are also crucial to prevent delays in infrastructure deployment
- Ensure access to affordable charging to all drivers – most drivers in multi-family building do not have access to home charging that is on average twice cheaper than public charging
- Create favourable conditions to install private charging points in multi-family building. The Energy Performance of Buildings Directive (EPBD) is targeting only new buildings or deep renovations
    - Limit building co-owners associations to oppose cabling only for proven safety reasons
    - Member states to support the development and funding of pre-cabling and define deadlines and targets of pre-cabling
- Create the conditions for affordable public charging
    - Price cap for public chargers benefiting from public subsidies
    - Ensure competitiveness of electricity versus fossil fuel, including with fiscal measures
- Member states must comply with ratio of kW installed/total EV fleet, and ensure coverage of remaining blind spots on core TEN-T routes and clear signage of charging stations
- Increase the power level required for stations on core TEN-T routes by 2027 (1,000kW minimum versus 600kW, with at least a 300kW charger versus 150kW)

5. **Design policies for affordable ZEV access**

Promote affordable zero-emission vehicles across all market segments through financial incentives, tax benefits, and social leasing programmes to reduce purchase barriers, particularly for lower-income households. This should not be confused with sweeping mandates as they alone will do nothing to the enabling conditions.

6. **Corporate fleets: focus on incentives, not binding targets or reporting**

The corporate fleet market for passenger cars and vans is diverse and varies by member state. It includes several subcategories such as company-owned fleets, leased fleets, and short-term rentals. One-size-fits-all rules would add burden without fixing adoption. Work on enabling conditions, infrastructure, and total cost of ownership.

- Ensure continuation of the **fiscal and non-fiscal incentives** promoting zero-emission mobility. Propose guidance for member states covering predictable fiscal/non-fiscal incentives, depreciation/tax rules, and dedicated measures for LCVs.
- Tighten the **Clean Vehicle Directive**'s use by member states to accelerate electrification of public sector corporate fleets and support overall fleet renewal.

7. **Launch EU-wide scrappage and fleet renewal programmes focused on ZEVs**

These programmes could be potentially financed by the EU budget. Link voluntary social leasing for cars and targeted van incentives to the scrappage scheme. The system should follow a harmonised logic and could include a variety of design options:

- A harmonised and sustainable approach across the EU (as a minimum contribution level) but up to member states to define an upper limit of the incentive
- Incentivise OEMs via a CO2 bonus in proportion to the avoided mileage (in the EU itself or after export that is avoided through scrapping in the EU) of cars that are removed from the market under their responsibility
- Fix minimum acceptable level for the scrapping part (at a level of Euro 3 or 4) and minimum level of the national contribution
- To be defined for certain number of years, duration at least until 2030
- It should be allowed to use newly established ETS2 revenues for those national systems to finance the scheme
- Minimum contribution of the OEMs at the level of the scrapping part on a voluntary basis

8. **Improve total costs of ownership calculations**

- Revise AFIR to raise charger density and home/depot requirements.
- Update EPBD to accelerate private/workplace charging and "right-to-plug", including multi-family homes.
- Cut electricity prices for public charging; zero tolls/taxes for BEVs at national level.
- Encourage smart charging with time-of-use tariffs and V2G; enforce roaming/interoperable payments.
- Allow a system like "bring your own charging contract" to each station for better price transparency.

9. Local content requirements for batteries (applies to LDVs and HDVs)

Retaining a strong manufacturing base in Europe and growing robust domestic battery value chain in the EU are a matter of EU's strategic autonomy and resilience. However, the current and projected production capacity in the EU suggests that becoming fully self-sufficient is likely to take decades of investments and consistent policy support[7]. Any local content requirement policy must therefore be in line with the real-time ramp-up of battery production in the EU.

The policy measures to build a robust battery value chain should focus on both supply and demand.

- **Supply measures:**
  - Consistent CAPEX/OPEX support to upstream and downstream investments to build a robust battery ecosystem including mining, refining, (p)CAM, and recycling; targeted funding and partnerships with Asian players for technology transfer
  - Reducing industrial electricity prices
  - Easier permitting for battery manufacturing sites/recycling facilities
  - Joint work on procuring critical raw materials (CRM) in the context of the Critical Raw Materials Act
- **Demand measures:**
  - In core and critical strategic areas of industrial production, including public procurement, targeted European preference schemes are justified
  - Focus on incentives, not targets

If local content requirements (LCRs) are to be introduced, they should be based on the following principles:

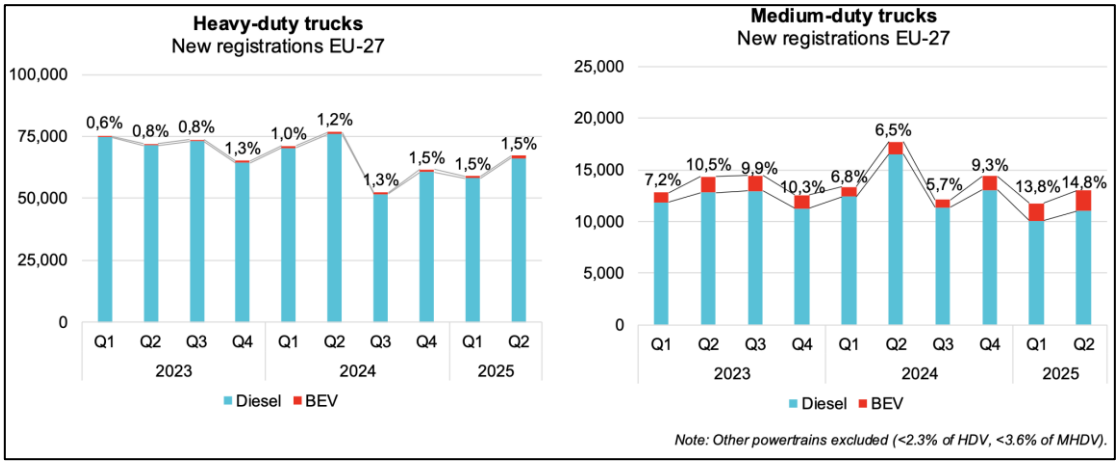
- **Legislative coherence and realism**: align new local content requirements with existing rules (notably the Batteries Regulation); clearly define value-chain stages in scope; keep reporting lean; align any targets with real-time ramp-up of battery production in the EU
- **Phase in requirements gradually** and segment by segment (passenger cars, vans, trucks, buses), with differentiated treatment for long-lifecycle heavy-duty vehicles and early focus on buses where public procurement can create scale

[7] In 2024, Europe had a total battery production capacity of 343GWh. Assuming that by 2035 all cars and vans produced (excluding those exported outside Europe) will be zero-emission, the target for European EV battery production capacity is set at 1,125GWh. But even this target is an underestimation of total required production capacity because it does not consider the needs of the heavy-duty segment

- **Safeguard trade and partnerships**: respect WTO/FTA commitments, consider reciprocity or inclusion of FTA and Customs Union partners in “Made in Europe” definitions to preserve global market access. It will also be impossible for Europe to develop a viable battery value chain without partnerships with foreign firms and regions with the expertise and capacity to manufacture batteries. Therefore, if considering LCRs, a careful balance must be struck to safeguard both global market access and strategic autonomy

4. REVISION OF THE CO2 REGULATION FOR HEAVY-DUTY VEHICLE TRANSPORT

- Commercial road transport is a B2B market. Transport operators will transition to zero-emission vehicles (ZEVs) if they can seamlessly operate them and have predictably robust business cases that clearly favour ZEVs.
- Despite the significant and ongoing efforts of many stakeholders, including truck and bus manufacturers, **most of the essential enabling conditions are not in place today and will require years to address**, such as the lack of adequate grid connections, critical legislation (eg Weights and Dimensions Directive) is pending, while important instruments that support robust business cases (eg competitive charging prices, dedicated incentives, Eurovignette, ETS2, ETD) face delays or mounting political pressure.
- Vehicle manufacturers have less than five years left for a tenfold jump from 3.6% (H1 2025) to at least 35% market share for zero-emission vehicles needed to meet the 2030 CO2 reduction targets set for our industry. **Our industry is at risk of incurring excessive non-compliance penalties for circumstances beyond our control.**



- The success of the climate neutrality transition does not depend on vehicle manufacturers alone. Yet **we are the only actors exposed to disproportionate non-compliance penalties despite being most ready to deliver.**
- While we remain committed to doing our part, **short-term action is needed to resolve this undue burden.**
  - We need an **accelerated review of the HDV CO2 regulation** for vehicle manufacturers that better recognises the interdependencies in the transport and logistics industry. This cannot wait until 2027.

- We need an **urgent assessment and regular monitoring of the state of the most critical enabling conditions** for the climate neutrality transition of heavy-duty road transport.
- We urgently need **short-term action to prevent non-compliance penalties caused by factors beyond manufacturers' control**, protecting the industry's global competitiveness while safeguarding the achievability of the decarbonisation targets. Imposing unjustified penalties would not only undermine European manufacturers' global competitiveness but also jeopardise their investments in critical future technologies (eg autonomous driving and digitalisation).

STATE OF THE ENABLING CONDITIONS FOR HEAVY-DUTY VEHICLES

See the ACEA report "Decarbonising heavy-duty road transport – State of the enabling conditions":
http://www.acea.auto/files/Decarbonising_heavy_duty_road_transport_State_of_the_enabling_conditions.pdf

ABOUT THE EU AUTOMOBILE INDUSTRY

- 13.6 million Europeans work in the auto industry (directly and indirectly), accounting for 6.9% of all EU jobs
- 8.1% of EU manufacturing jobs – some 2.5 million – are in the automotive sector
- Motor vehicles are responsible for €414.7 billion of tax revenue for governments across key European markets
- The automobile industry generates a trade surplus of €93.9 billion for the European Union
- The turnover generated by the auto industry represents over 8% of the EU's GDP
- Investing €84.6 billion in R&D per year, automotive is Europe's largest private contributor to innovation, accounting for 33% of the EU total

ACEA REPRESENTS EUROPE'S 16 MAJOR CAR, VAN, TRUCK AND BUS MANUFACTURERS

ACEA
European Automobile
Manufacturers' Association
+32 2 732 55 50
info@acea.auto
www.acea.auto

x.com/ACEA_auto

linkedin.com/company/acea

youtube.com/c/ACEAauto