Non-paper - Technological Neutrality and Industrial Security in the Decarbonization of Road Transport in Europe

A new industrial and R&D perspective, complementing electrification, to accelerate the green transition by leveraging two European strengths: internal combustion engines and sustainable fuels.

The transition towards more sustainable mobility is a shared priority. The key challenge is to ensure that this transition is managed through a technologically neutral approach that safeguards Europe's industrial capacity, prevents new strategic dependencies on external supply chains, and strengthens the Union's resilience in a complex geopolitical context.

In this regard, it is essential to maintain an approach that is both technologically neutral and consistent with environmental objectives, moving beyond an assessment limited to tailpipe emissions and allowing the use of internal combustion engines where they contribute to emission reductions and deliver climate performance comparable to or better than electric vehicles.

To ensure that emission reductions are real, comparable and verifiable, this approach should be based on clear, harmonized and enforceable Monitoring, Reporting and Verification (MRV) criteria and lifecycle rules, including traceability and anti-double-counting provisions.

The objective is to support European industry and promote workable solutions without undermining the effectiveness of emission-reduction efforts in the transport sector.

Flexibility and ambition can coexist.

Such an approach is consistent with the Treaties and established Union practice. In line with Article 114 TFEU, a CO_2 standards regime enabling multiple technological solutions strengthens the internal market, prevents national fragmentation, and ensures a level playing field. Similarly, EU environmental policy prioritizes overall outcomes, in line with Article 192 TFEU.

Providing flexibility does not alter environmental objectives but enhances the ability to achieve them in an economically and industrially efficient manner.

Risk of Structural Penalization of Renewable Fuels

The proposed revision of the CO_2 standards for cars largely maintains the current tailpipe-based framework.

As a consequence, even after 2035, battery electric vehicles remain the only fully compliant technology, while alternative solutions remain limited in scope.

This overall approach favors industrial systems already strongly oriented towards electrification and may disadvantage European production models integrating traditional automotive value chains with renewable sustainable fuels, even where climate performance is comparable or better.

There is a risk that the transition may not fully valorize the contribution of all low-emission solutions, with potential impacts on competitiveness, skilled employment, industrial capacity, and innovation.

Moreover, the combination of stringent quantitative limits and regulatory uncertainty may fail to create adequate economic conditions for new investments in renewable fuels such as e-fuels and biofuels.

At the same time, any recognition of fuel-related flexibilities should be designed in a way that avoids creating new distortions and should remain coherent with RED III and the Union Database

framework, including by ensuring robust traceability and avoiding unintended pressure on limited volumes of RFNBOs, advanced biofuels or biogas that are also needed in hard-to-abate sectors.

Legal Framework and Recital 11 of Regulation (EU) 2023/851

A climate-law-consistent approach was introduced in 2023 through Recital 11 of Regulation (EU) 2023/851, which envisaged a category of internal combustion engine vehicles that could be registered beyond 2035 provided they run exclusively on CO_2-neutral fuels.

This approach is not reflected in the current proposal, while fully respecting the Union's climate objectives, with possible implications in relation to the mandate of the European Climate Law (Regulation (EU) 2021/1119), which assigns a role to zero-emission, low-emission and renewable fuels in the decarbonization of road transport beyond 2030.

This is particularly relevant given that the impact assessment had examined both a fuel-crediting mechanism and the option of recognizing vehicles exclusively powered by eligible fuels.

Energy Security, Liquid Fuel Logistics and Critical Infrastructure

A pathway strongly centered on a single technology could affect existing liquid-fuel infrastructure and logistics.

A decline in demand could undermine supply chains required for hard-to-electrify sectors and lead to the dismantling of strategic industrial assets.

From an energy-security perspective, reduced technological diversity may increase dependence on a single energy vector.

Maintaining a diversified portfolio of low-emission solutions — electricity, hydrogen, and sustainable liquid fuels — instead strengthens resilience and reduces geopolitical risk exposure.

Under critical operating conditions, sustainable liquid fuels may also contribute to the continuity of essential services with considerably lower emissions (at least 70%).

Ensuring Regulatory Alignment with Market Realities and Infrastructure Deployment

Recent developments in the European automotive market highlight the need to ensure that the regulatory trajectory remains closely aligned with actual market uptake and infrastructure deployment across Member States.

The pace of demand for zero-emission vehicles continues to be influenced by structural factors such as the availability, adequacy of charging infrastructure and electricity prices. In particular, the light commercial vehicle segment faces specific operational constraints and a slower rollout of dedicated charging solutions, which directly affects the feasibility and timing of fleet renewal.

Furthermore, due consideration should be given to small-volume manufacturers, whose limited production scale and investment capacity may require tailored and proportionate compliance pathways within the existing regulatory framework.

In this context, maintaining overall climate ambition requires providing manufacturers with sufficient regulatory flexibility and timely review mechanisms, allowing for an evidence-based assessment of target alignment with market realities while ensuring investment certainty and a smooth transition across all vehicle categories.

Conclusions and Way Forward

The objective is not lower climate ambition, but more to ensure greater flexibility in the instruments used to achieve the Union's agreed targets.

Reconciling climate goals with sustainability, industrial and energy security, and strategic autonomy is possible through a technologically neutral regulatory framework open to measurable emission-reduction solutions.

The Commission proposal contains elements that could benefit from further reflection in light of the European Climate Law mandate and related industrial and strategic implications.

In order to:

- ensure a technologically neutral transition towards sustainable mobility;
- safeguard the European industrial value chain;
- stimulate innovation and protect early movers;
- preserve the logistics infrastructure for liquid fuels;
- strengthen energy security through diversification of energy carriers;
- provide manufacturers with flexibility and clear short-term signals to achieve their targets;
- provide enhanced flexibility for the vans market, reflecting its specific operational and infrastructure constraints;

the proposal aims to support:

- a direct role for sustainable fuels, including e-fuels and biofuels, in transport decarbonization since immediately and beyond 2035 with credible enforcement mechanisms;
- a shift from a purely tailpipe-based assessment towards criteria consistent with overall emissions neutrality;
- the introduction of a dedicated category for vehicles exclusively running on CO_2-neutral fuels[1], in line with Recital 11 of Regulation (EU) 2023/851 , to be recognised as zero-emission vehicles (0 g CO_2/km);
- the advancement of the fuel credits mechanism to the date of entry into force of the Regulation and removal of the 3% cap accompanied by requirements and safeguards against fraud or double counting;
- the extension of the Super-credits mechanism to small vehicles exclusively running on CO_2-neutral fuels and Made in the EU, in line with the provisions proposed for small electric vehicles Made in the EU, and to vans without distorting the market;
- anticipating the review of the Regulation to 2030;
- extending the averaging mechanism from a three-year to a five-year compliance period for cars and vans, specifically considering the period 2028-2032 for cars and the period 2025-2029 and 2030-2034 for vans;

[1] All fuels defined by the Renewable Energy Directive (EU) 2018/2001, provided that they meet the sustainability criteria of that Directive and its delegated acts, where the same amount of CO_2 from biomass, ambient air or recycled carbon sources is bound in fuel production as is released during combustion in the use phase. These fuels include renewable and/or synthetic fuels such as biofuel, biogas, biomass fuel, renewable liquid and gaseous transport fuels of non-biological origin (RFNBOs), and recycled carbon fuels (RCFs).

- a further lowering of the vans-related targets to a more realistic level;
- the introduction of enhanced flexibility for small-volume manufacturers;
- freezing the Utility Factor (UF) applicable to Plug-in Hybrid Electric Vehicles PHEVs and Range-Extender Electric Vechicles REEVs;
- without pre-empting the discussion on the inclusion and conditions of the steel credits mechanism, the inclusion of aluminum in any material-based flexibility mechanism;
- the exclusion of emissions associated with non-ZEV vehicles used for public safety, rescue, emergency response and crisis-management purposes from the scope of the Regulation and from reporting obligations;
- maintaining reporting obligations based on existing national and EU data systems and sources, to avoid unnecessary additional administrative burdens for Member States.

Such an approach would reconcile climate ambition, technological neutrality, and the protection of Union's industrial base while safeguarding energy security, infrastructure resilience, and the continuity of essential services.

In order to ensure consistency with the broader policy direction and avoid unintended regulatory inconsistencies, this approach should also be reflected coherently across the automotive package, including in the Automotive Omnibus and the proposal on Clean Corporate Fleets.