# Network For Sustainable Mobility – Call for Evidence for an impact assessment for the Revision of the Regulation setting $CO_2$ emission standards for new cars and vans

**About the Network for Sustainable Mobility.**

The Network for Sustainable Mobility is a voluntary and informal gathering of stakeholders along the value chain representing the transport, engineering, fuel manufacturing and energy sectors supporting the role of sustainable renewable fuels in a climate-neutral road transport system.

The **Network for Sustainable Mobility** envisions a climate-neutral transport system that leverages all breakthrough technologies to fast-track the reduction of emissions in an affordable and competitive manner, encourages investments in decarbonisation solutions, and promotes a truly technology-neutral policy framework where both vehicle and fuel innovations are advanced as solutions to accelerate climate action.

The revision of the $CO_2$ emission performance standards for light-duty vehicles Regulation offers the opportunity to reassess the pathway to decarbonise the sector and ensure that all sustainable solutions are valued as a complement to electrification. It is now time to address the systemic challenges affecting the road transport value chain. All technologies able to reduce GHG emissions should be recognised and allowed to fairly contribute to decarbonisation efforts, including renewable and low-carbon fuels, hydrogen, as well as vehicle technologies like Plug-in Hybrids (PHEVs), Range Extender Electric Vehicles (REEVs), and highly efficient internal-combustion-engine vehicles. At the same time, to ensure a level playing field the emission savings profile of all technologies under consideration shall be evaluated by the same rules. As electromobility ensures zero-emissions in the use phase, then also emissions from renewable and low-carbon fuels for the purpose of the $CO_2$ Regulation shall be considered neutral, as either originally absorbed by the biomass during its growth, or recycled, as enshrined in the Renewable Energy Directive.

Therefore, **we believe the impact assessment accompanying the Revision of the $CO_2$ Standards for cars should model the economic, social and environmental benefits** of the introduction of the following provisions in the Regulation:

1. A technology-neutral definition of **$CO_2$ neutral fuels** based on the Renewable Energy Directive ((EU) 2023/2413) to be included in both light-duty and heavy-duty $CO_2$ standards:

*"$CO_2$ neutral fuels means all fuels defined by the Renewable Energy Directive (EU) 2018/2001, provided that they meet the sustainability criteria of that Directive and associated delegated acts, where the same amount of $CO_2$ from biomass, ambient air or recycled carbon sources is bound in the fuel production as is released during combustion in the use phase. Those fuels shall include renewable and/or synthetic fuels, such as biofuel, biogas, biomass fuel, renewable liquid and gaseous transport fuel of non-biological origin (RFNBO) or a recycled carbon fuel (RCF)"*

2. A **Carbon Correction Factor (CCF)** to reflect the share of **$CO_2$ neutral fuels** already available.

It is rightly outdated to consider all liquid and gaseous fuels as 100% fossil fuels if an increasing amount of sustainable renewable fuels is available in the market due to legislation such as the Renewable Energy Directive. To consider the GHG benefits of the share of $CO_2$ Neutral Fuels available, a Carbon Correction Factor should be introduced. This would represent the real $CO_2$ emissions of fuels and a first important step to a more holistic climate policy in the European mobility sector.

3. A new vehicle category exclusively powered by **$CO_2$ neutral fuels**, leveraging all potential monitoring methodologies, such as digital solutions and mass-balancing approaches.

These vehicles, operating solely on $CO_2$ neutral fuels, should be eligible for a zero-emission status. This designation would ensure that carbon neutral fuels are given the same regulatory and market recognition as electric vehicles while maintaining consumer choice, competitiveness and technological diversity. The monitoring and verification processes for these fuels could rely on union-wide methodologies and mass balance approaches. In this regard, the report[1] of the **Working Group on Monitoring Methodologies** presents a comprehensive assessment of 11 methodologies for monitoring the use of $CO_2$ neutral fuels in road transport.

The European Commission's proposal for an Implementing Regulation as regards the emission type approval procedures for light passenger and commercial vehicles running exclusively on $CO_2$ neutral fuels, defines $CO_2$ neutral fuels as only Renewable Fuels of Non-Biological Origin (RFNBOs) ensuring a 100% GHG emission savings, based on a "Well-to-Wheel" approach. This wrongly excludes sustainable biofuels, the only renewable fuel currently available at scale that can be used across the vast majority of existing fleets, without requiring additional infrastructure investment.

The current $CO_2$ standards Regulations (LDVs and HDVs) are based on a "tailpipe approach", where emissions are considered only in the use phase of the vehicle. Therefore, the proposed definition by the Commission creates a distortion between $CO_2$ neutral fuels being evaluated on a Well-to-Wheel basis while other technologies, such as electric vehicles, remain under the "tailpipe approach".

The technical evidence is exactly the opposite: looking at all technologies through a Well-to-Wheel perspective, renewable fuels eligible under the Renewable Energy Directive demonstrate very competitive GHG performance, with values ranging from *33 $gCO_2/MJ$* down to *28.2 $gCO_2/MJ$* for RED-compliant biofuels, e-fuels, and RFNBOs. Recent statistics from the EEA[2] reveal even more encouraging data, for biodiesel (*25.1 g CO2/MJ*, excluding ILUC), biomethane (23.9 *g CO2/MJ*, excluding ILUC), bioethanol (*20.8 g CO2/MJ*, excluding ILUC), and HVO (*10.1 g CO2/MJ*, excluding ILUC). Also, renewable liquid gases, such as bioLPG and renewable DME, can reduce GHG emissions by over 80%, depending on the feedstock and production pathway[3]. On the other hand, in a WTW approach only pure renewable electricity theoretically brings 100% GHG reduction. Taking instead the 2023 average EU grid carbon intensity of electricity (207.1 $gCO_2/kWh$), this would result in *58 $gCO_2/MJ$* (EEA source), i.e. higher than any RED-compliant fuel.

The NSM believes in the complementarity of solutions. The current approach and targets of the $CO_2$ standards Regulation don't need to be changed as long as GHG emissions counting is harmonised across the European legislative framework.

The methodologies calculating GHG emissions in EU legislation assume emissions at the fuel in use to be neutral, as per the carbon neutrality principle, well supported by landmark EU legislation such as ETS I and II, where operators don't need to surrender emission allowances as a result of biofuels, RFNBOs, RCF and synthetic low-carbon fuels combustion, as well as the RED, where emissions are compensated (credits arising respectively from photosynthesis and $CO_2$ capture).

Sustainable fuels remain complementary to electrification in a resilient pathway towards the EU's climate objectives. Their recognition would ensure investment certainty across the entire value chain, accelerating the scale-up of net-zero solutions.

We stand ready to partner with the EU Commission and turn this ambition into action to provide efficient and affordable solutions for Europe's consumers.

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[1] Monitoring the use of $CO_2$ neutral fuels in road transport, a cross-sectoral industry assessment, WGMM, 2024.
[2] Greenhouse gas intensities of transport fuels in the EU in 2022 - Monitoring under the Fuel Quality Directive, EEA, 2024.
[3] Liquid Gas Europe: outlook for renewable liquid gas in Europe.