

## Eurogas position on CO<sub>2</sub> standards for heavy-duty vehicles

February 2023

Eurogas welcomes the European Commission's ambition on CO<sub>2</sub> emissions reductions from new heavy-duty vehicles (HDVs), in line with the European Union climate targets and the decarbonisation of the transport sector. Eurogas firmly believes that the upcoming Regulation on CO<sub>2</sub> standards for HDVs should ensure a level playing field among all viable technologies. This must account for the actual environmental footprint of the fuels through more complete lifecycle accounting of GHG emissions.

It is necessary to break silos when designing fuel and mobility policies. Vehicles manufacturers must be encouraged to invest in solutions that can immediately reduce CO<sub>2</sub> emissions and that can run on renewables. Compressed natural gas (CNG), liquified natural gas (LNG) and their bio- or electricity-based counterparts can deliver greenhouse gas (GHG) savings today, notably for the existing fleet and with the existing infrastructure.

### Recommendations

- **Short term: Define a carbon correction factor recognising the actual footprint and benefits of renewable and low-carbon fuels.**
- **Midterm: Develop a more complete lifecycle emissions accounting for HDVs and the fuels they use.**

### Why is it important to move beyond a tailpipe reporting of CO<sub>2</sub> emissions?

**CO<sub>2</sub> standards should ensure the fastest decarbonisation of HDVs by leveraging all viable technologies.**

Eurogas fully recognises the benefits unlocked by "zero emissions" technologies - provided the energy used for their production and use is low carbon. The European legislative framework should ensure a level playing field, enabling all decarbonisation pathways to contribute. We are advocating for an approach that accounts for the entire lifecycle of a given transport solution, not limited to the engine technology.

**Accounting for the environmental contribution of fuels is the core principle of the Renewable Energy Directive, the EU Emissions Trading System and the recent FuelEU maritime.** Not only considering the final use phase of energy could allow to accurately identify the decarbonisation potential of different technologies as:

1. It factors in the environmental credentials of fuels along with the potential GHG emissions benefits of certain fuels. Moreover, it avoids promoting fuels that have poor or no GHG benefits on a Well-to-Wheel basis but that may still fall under the zero emissions label.
2. It enables combustion engine technologies to contribute to the decarbonisation of transport. Combustion engine technologies still make up the largest share of the existing vehicle fleet. In the case of HDVs in particular, they will likely continue to be the prevailing technology – considering the lack of viable alternatives for this segment. This is especially the case in certain sub-segments among HDVs, for example, bigger HDVs which are necessary to accommodate local logistical conditions. Accounting for the environmental contribution of fuels can therefore accelerate the transition, by focusing on the deployment of renewable and low-carbon fuels and by leveraging existing infrastructures.

**A well-to-wheel approach is particularly helpful in the heavy-duty sector.** Heavy duty vehicles are hard to electrify as they require powerful engines able to cover long distances while carrying heavy loads while maintaining a certain total cost of operation demanded by fleet operators. The Regulation should transition toward a more complete life cycle accounting of the GHG emissions of the vehicles and the fuels they use.

While Eurogas acknowledges that this would represent a major change in the design of the Regulation, it should be underlined that:

- FuelEU Maritime has demonstrated that accounting for fuels' contribution in transport policies can be achieved.
- Accounting for the “full life-cycle CO<sub>2</sub> emissions of new heavy-duty vehicles that are placed on the Union market” is already a provision of the CO<sub>2</sub> standards for heavy duty vehicles currently in force (EU 2019/1242); in Art. 15 (5):

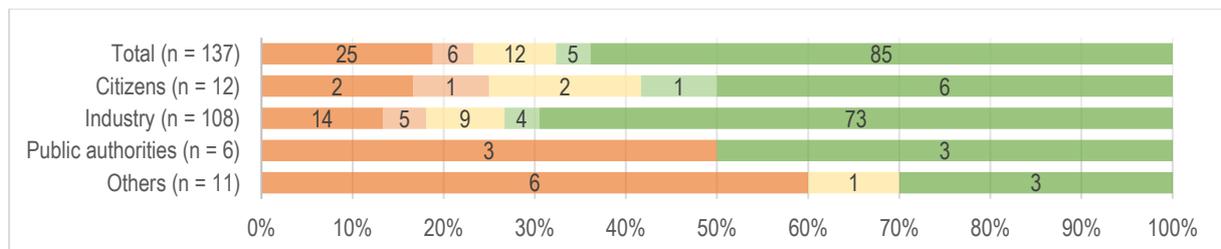
5. The Commission shall, not later than 2023, evaluate the possibility of developing a common Union methodology for the assessment, and the consistent data reporting, of the full life-cycle CO<sub>2</sub> emissions of new heavy-duty vehicles that are placed on the Union market. The Commission shall transmit that evaluation, including where appropriate proposals for follow-up measures, such as legislative proposals, to the European Parliament and to the Council.

And the EC reporting to be delivered by 31 December 2022 (Art. 15 (3) (g)) should include:

- (g) an assessment of the possibility of developing a specific methodology to include the potential contribution to CO<sub>2</sub> emissions reductions of the use of synthetic and advanced alternative liquid and gaseous renewable fuels, including e-fuels, produced with renewable energy and meeting the sustainability and greenhouse gas emissions saving criteria referred to in Directive (EU) 2018/2001 of the European Parliament and of the Council (17);

## Support for a mechanism taking into account the contribution of renewable, sustainable and low carbon fuels

During the transition to a more complete and accurate reporting of vehicles' GHG footprint, a mechanism acknowledging the contribution of renewable, sustainable, and low-carbon fuels should be included in the CO<sub>2</sub> standards Regulation. As indicated by the public consultation organised by the EC in the context of the review of the Regulation<sup>1</sup>, such a proposal already met a high level of support (*from red = no agreement to dark green = highest agreement*):



Topic: “A mechanism should be introduced in the HDV regulation so that compliance assessment takes into account the contribution of renewable and low carbon fuels”.

Beyond the answers to the EC public consultation, and in the context of the discussion on the CO<sub>2</sub> standards for light duty vehicles, such a system was also supported by 223 associations, companies and scientists in May 2021<sup>2</sup>. More recently, in February 2023, more than 110 stakeholders and 90 scientists voiced their voice their support to consider sustainable and renewable fuels for compliance in the CO<sub>2</sub> Regulation for HDVs<sup>3</sup>.

<sup>1</sup> [EC Have your say - Reducing carbon emissions – review of emission standards for heavy-duty vehicles \(March 2022\)](#)

<sup>2</sup> [Call to include a voluntary crediting system for sustainable renewable fuels into the vehicle CO<sub>2</sub> regulations \(26 May 2021\)](#)

<sup>3</sup> [Open letter: Joint statement of the EU industry: CO<sub>2</sub> Regulation for Heavy-Duty Vehicles should recognise decarbonisation potential of sustainable and renewable fuels \(6 February 2023\)](#)

## Eurogas position and recommendations

Short term: Define a carbon correction factor recognising the actual footprint and benefits of renewable and low carbon fuels.

**Eurogas fully supports the introduction of a robust and transparent carbon correction factor for renewable and low-carbon fuels** as a transition toward a more complete lifecycle assessment of the GHG footprint of vehicles and the fuels they use. Such factor would help to bring additional volumes of renewable and low carbon fuels to the market, which in turn would decrease the CO<sub>2</sub> emissions of existing and new vehicles and contribute to the achievement of EU climate ambitions.

**The core principle of such a carbon correction factor should be to consider that a portion of the CO<sub>2</sub> emissions of a heavy-duty vehicle should be offset to reflect the current level of renewable and low-carbon fuels in the fuels mix.**

Such a system is already in place in Switzerland<sup>4</sup>, where a biogenic share of 20% in the gaseous fuels mix is recognised. Consequently, 20% of the CO<sub>2</sub> emissions of light-duty vehicles able to be fuelled with a blend of natural gas and biomethane are considered as being climate neutral.

**The EC should be empowered to design such a carbon correction factor through a Delegated Act to be published shortly following the entry into force of the CO<sub>2</sub> standards for heavy-duty vehicles Regulation. This carbon correction factor should:**

- Recognise all fuels in the scope of the Renewable Energy Directive and Gas and Hydrogen Package and ensure that their actual GHG footprint is being correctly taken into account.
- Reflect the national contribution of renewable and low-carbon gases. In parallel, the EC should assess how to avoid incentivising the displacement of vehicle registrations to Member States with higher incorporation of renewable and low carbon fuels.
- Rely on already available information from the EC SHARES database<sup>5</sup> to define the contribution of renewable and low carbon fuels.
- Be updated yearly to account for the continuously increasing contribution of these fuels, a timeline consistent with the related national reporting carried by Member States.

Midterm: Develop a more complete lifecycle emissions accounting for HDVs and the fuels they use.

The carbon correction factor is a short-term solution to address the shortcomings of a Tank-To-Wheel approach. It also represents a bridge towards a mid-term approach fully capturing the actual fuels' contribution in its core design. Eurogas is open to work with other stakeholders on a long-term solution taking into account the actual environmental footprint of the fuels through more complete lifecycle accounting of GHG emissions. For example, the possibility to include in the review clause of the Regulation **an obligation to transition to Well-to-Wheel accounting in the mid-term future by should be explored**. The methodology should build on the experience gained from the carbon correction factor to be applied during the transition.

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<sup>4</sup> Article 12a of the [Ordonnance sur les exigences relatives à l'efficacité énergétique d'installations, de véhicules et d'appareils fabriqués en série \(1 January 2023\)](#)

<sup>5</sup> [Eurostat SHARES Database](#)