Position Paper

Zürich 5

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# Zürich 5 Coalition's position on the proposed Alternative Fuels Infrastructure Regulation (2021/0223)

The Zürich 5 Coalition (hereinafter 'the Coalition') is expressly committed to achieving the objectives of the Paris Agreement and supports the EU's ambition to become the first climate neutral continent by 2050 through the Fit for 55 Package. The Coalition however believes that **the package does not recognize the benefits of biomethane in decarbonizing EU mobility.**

The proposed Alternative Fuels Infrastructure Regulation ('AFIR') does not propose the appropriate measures to decarbonize the road transport sector adequately and realistically. While it ensures minimum coverage of refueling points for LNG until 2025 for heavy-duty-vehicles, it **completely ignores the further uptake of biomethane (compressed in cars and vans and liquid or compressed in heavy duty trucks)** in the road transport sector. The AFIR fully facilitates electrification and the uptake of hydrogen in the transport sector, ignoring the potential of advanced biofuels and biogas. The AFIR, in combination with other proposals within the Fit for 55 package, therefore does not recognize the important complementary role of biomethane in decarbonizing the road transport sector.

The Coalition therefore strongly urges the EU institutions to increase their efforts to stimulate the **uptake of biomethane**, as it is a **complementary and scalable[1] solution that can effectively facilitate a sustainable transition**: it can utilize the current rolling fleet[2] and existing fueling infrastructure, combined with modern recycling of waste, to make meaningful gains in reducing CO2 emissions. While full electrification and the further uptake of hydrogen are long-term viable options, they do not provide a concrete solution for the short to medium term: **biomethane can bridge the EU's decarbonization ambitions with the reality of the EU road transport sector** in both the passenger, light-duty and heavy-duty segments.

1 The biomethane sector alone will be able to reach 34 bcm of sustainable biomethane by 2030. The biogas and biomethane sectors combined can produce between an estimated 34-42 bcm (equivalent to 370 – 467 TWh) by 2030. Their joint potential for 2050 is estimated at 95 bcm (equivalent to 1,008 – 1,020 TWh). See European Biogas Association, EBA Annual Report 2020.

2 Consisting of over 1 billion passenger cars and trucks on the European continent.

## What is biomethane?

You can visit our website for more information

Biomethane is an energy source derived from (agricultural, industrial and household) waste processed via anaerobic digestion. It has an inherent link to the circular economy (since it is the best way to recycle organic waste, to produce valuable renewable gas and biofertilizers and to turn waste into resources) and has a positive impact on overall GHG emissions reduction. Biomethane is a complementary way to produce sustainable energy equal to wind, solar and hydroelectric power. When biomethane is used as a transport fuel it replaces fossil fuels such as natural gas, gasoline or diesel.

Biomethane is made from biogas by removing CO2 and other pollutants. This way, the methane-content is increased from ± 60% to 90% (or more, depending on which EU Member State). The result is a gas with the same energy density as fossil natural gas. During the second step, the biomethane is compressed to ± 250 bar (bio-CNG).

*For the newly proposed AFIR, the Coalition proposes the EU institutions to:*

### 1. Take a technology neutral approach in EU policy on transport emission reductions

A mere focus on electrification and hydrogen uptake does not provide a well-balanced solution to the challenges of the road transport sector.[3]

- **All alternatives to fossil fuels must be considered**. Comparing the most efficient and accessible low(/zero) carbon fuels from **well to wheel** will show that biomethane is one of the most sustainable fuels.

### 2. Ensure coherence between the different Fit for 55 proposals

The proposals in the Fit for 55 package impacting the road transport sector (the revisions of the RED III, the AFIR and the Regulation on emission performance standards for new cars and vans) are not properly aligned.

- The (slightly) higher targets for biogas and advanced biofuels in RED III should be reflected with **concrete drivers for the rollout of the appropriate infrastructure in the AFIR** to support their uptake. It is key that the alignment between the RED III and the AFIR on the definitions for renewable fuels (art. 2 of the AFIR), acknowledging bio-CNG and -LNG in this category, is kept.
- The Regulation on CO2 emission performance standards for new cars and vans, banning the internal combustion engine (ICE) from 2035, should foresee in a concrete framework to facilitate the further uptake of biomethane.
- Finally, the upcoming revision of the Regulation on CO2 emission performance standards for heavy duty vehicles should also recognize the added value of biomethane and facilitate the uptake of biomethane-fueled vehicles, similar to a different approach in the cars and vans legislation.

### 3. Revise the proposed approach for LNG and include targets for bio-CNG infrastructure

While the AFIR still ensures minimum coverage of refueling points for LNG for heavy-duty vehicles until 2025, it completely ignores the further uptake of (bio-) CNG and LNG infrastructure for the wider road transport sector.

As opposed to (green) hydrogen and electric charging points, **bio-CNG is readily available and distributable through existing infrastructure.**[4] For example, several Member States already ensure a significant share of biomethane in vehicle-gas such as Denmark (100%), Sweden (94%), the Netherlands (90%), Finland (59%) and Germany (50%).[5] For comparison, **significant fleet renewal towards EVs and hydrogen-based vehicles**, given the average age of a passenger car (11,5 years) and the size of the rolling fleet in the EU (almost 250 million passenger cars, 28 million vans, and 6 million medium and heavy-duty vehicles)[6], **is not a feasible**

3 Driving on bio-CNG provides CO2 savings of up to 97% compared to gasoline vehicles. In some cases, when slurry is used as waste to create bio-CNG, using it results in negative CO2 emissions.

4 4,000 CNG and 400 LNG-filling stations in Europe already (NGVA, Stations map).

5 Gustafsson, M., Svensson, N., Eklund, M., & Fredriksson Moller, B. (2021). Well-to-wheel climate performance of gas and electric vehicles in Europe. Transportation Research Part D, 97.

6 Vehicles in use report, ACEA (2021).

**short-medium term strategy**.

Specifically for **heavy-duty transport**, while its application is far more feasible than for light-duty transport, the horizon for broad uptake of hydrogen is still too far away.

- The AFIR should also **include targets for bio-CNG (and bio-LNG) infrastructure** (along the TEN-T core and comprehensive network). Coupled with higher targets for advanced biofuels and biogas in the RED III, these provisions should ensure that the infrastructure is primarily used for the distribution of bio-CNG and -LNG as biogas.
- Specifically, for heavy-duty transport, the AFIR should include how minimum coverage can be ensured by including specific targets for bio-LNG, as well as extending the horizon to 2035.

## Proposals for amendments

| Article | Proposed amendment |
|---|---|
| - | **Article 8**<br>*Targets for CNG refuelling infrastructure of road vehicles*<br><br>1. Member States shall ensure until 2035 a minimum coverage of publicly accessible refuelling points for CNG are put in place, along the TEN-T core network and the comprehensive network in order to allow bio-CNG light-duty and heavy-duty motor vehicles to circulate throughout the Union. To that end, Member States shall ensure that:<br><br>(a) along the TEN-T core network, publicly accessible refuelling points are deployed in each direction of travel with a maximum distance of 150 km in-between them by 31 December 2025.<br><br>2. Neighbouring Member States shall ensure that the maximum distance referred to in point (a) is not exceeded for cross-border sections of the TEN-T core and the TEN-T comprehensive network. |
| **Article 8**<br>*LNG infrastructure for road transport vehicles*<br><br>Member States shall ensure until 1 January 2025 that an appropriate number of publicly accessible refuelling points for LNG are put in place, at least along the TEN-T core network, in order to allow LNG heavy-duty motor vehicles to circulate throughout the Union, where there is demand, unless the costs are disproportionate to the benefits, including environmental benefits. | **Article 9**<br>*Targets for LNG refuelling infrastructure of road vehicles*<br><br>1. Member States shall ensure until 2035 a minimum coverage of publicly accessible refuelling points for LNG are put in place, along the TEN-T core network and the comprehensive network, in order to allow bio-LNG heavy-duty motor vehicles to circulate throughout the Union. To that end, Member States shall ensure that:<br><br>(a) along the TEN-T core network, publicly accessible refuelling points dedicated to heavy-duty vehicles and meeting the following requirements are deployed in each direction of travel with a maximum distance of 400 km in-between them by 31 December 2025:<br><br>(i) by 31 December 2025, each recharging pool shall offer a power output of at least 5000 t capacity.<br><br>2. Neighbouring Member States shall ensure that the maximum distance referred to in point (a) is not exceeded for cross-border sections of the TEN-T core and the TEN-T comprehensive network. |

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