Natural and renewable gas: Joint call to accelerate the deployment of refuelling infrastructure

Brussels, 21 January 2020 - Natural gas and biomethane are technically the same fuel. Compressed Natural Gas (CNG) and Liquified Natural Gas (LNG) are concrete alternatives for both personal mobility and freight transport. Due to its characteristics, natural gas leads to an immediate reduction of CO₂ emissions at the exhaust. The use of natural gas blended with biomethane comes with a significant potential of reduction of carbon emissions. On a Well-to-Wheel basis, using biomethane means to reduce from 80% up to 95% GHG emissions compared to Natural gas. And when using biomethane issued from liquid manure the overall emission balance is even negative (-69,9 gCO₂/MJ according to JEC WtW Study version4)\(^1\).

To trigger a successful energy transition leading to a full carbon neutrality in 2050 the mobility sector needs a comprehensive approach where alternative fuels such as gas can play an important role to the necessary decarbonisation process and is complementary to the electrification process. The progressive incorporation of renewables in both grids and pipelines will ensure the highest carbon reduction from the transport sector. As Natural Gas Vehicles – NGVs – and the refuelling infrastructure technologies are 100% compatible with renewable gas, they provide flexibility and the capability to fast accelerate the reduction of GHG emissions, ensuring affordability and good environmental performance without any additional costs for the system.

By 2030, the gmobility market has a growth potential 10 times higher than today, reaching a fleet of 13 million units. One out of three new urban buses & coaches could be fuelled by natural gas. Freight transport, relying both on CNG and LNG, is projected to reach a quarter of trucks’ new registrations in 2030, offering a real alternative to conventional diesel especially for long-distance missions.

A considerable amount of renewable gas is already available and fully in line with the strictest sustainability criteria of the Renewable Energy Directive. The production of renewable gas will increase drastically: for 2030, a conservative estimation shows a production potential close to 45 bcm, largely overcoming the entire gas fuel demand of about 30 bcm corresponding to the 13-million-unit NGVs fleet.

This would significantly contribute to the European decarbonisation path on transport: A 30% share of renewable gas will provide a GHG emissions reduction of more than 45% compared to conventional fuels on a Well-to-Wheel basis.

Moreover, not only new registered vehicles, but also the current CNG/LNG fleet will benefit from a wider use of renewable fuels, further accelerating the decarbonisation process.

To reach these ambitious objectives, the signatories call on the European Union to:

- **Expand natural gas infrastructure to evenly cover the whole EU territory** – As the number of CNG and LNG stations is growing steadily, Europe’s fuelling network has to be expanded to evenly cover the whole EU territory. Gas fuelling stations require little additional infrastructure and can

\(^1\)https://publications.jrc.ec.europa.eu/repository/bitstream/JRC85329/wtw_report_v4a%20march%202014_final.pdf
be implemented in multi-fuel stations, operating in self-service mode. To speed up the implementation of the Alternative Fuels Infrastructure Directive, it is crucial in this sense. By maintaining a technology neutral approach in the scope, the Directive will be in line with the EU’s decarbonisation goal.

- **Support the integration and use of a growing rate of renewable gas in the market** – To recognise the potential of renewable gas in the gas market legislation, by creating the right conditions to underpin future production dedicated to the mobility sector. It is fundamental to give a clear positive message to both vehicle manufacturers and renewable gas producers, to maintain the focus on investments and progressively release from the dependency from public supports by creating a real market.

- **Maintain support for R&I activities through EU funding schemes** – Progress in optimizing technologies for fully dedicated CNG and LNG engines are still possible also looking to the further integration into electrified powertrain architectures. The same for the several biomethane production pathways, when looking to the scalability of the processes and also to the potential in further increase the GHG saving performance and to further support the development of the circular economy approach.