The decarbonisation challenge

The European Union has set the ambitious task of achieving climate neutrality by 2050, with the intermediary goals of reducing CO₂ emissions by 55% by 2030 and 90% by 2040, while achieving a 42.5 % renewable energy target by 2030.

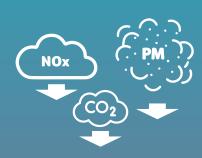


Europe faces the complex and challenging task of decarbonisation, which will require the deployment of various low-carbon solutions. Around 25 million tonnes of liquid gases are currently used in transport, heating, and industrial applications in Europe, and replacing conventional liquid gases with renewable alternatives is crucial. This shift must be further supported to provide different options for hard-to-abate sectors and communities that are difficult to decarbonise, such as rural and off-grid areas, islands, and outermost regions, as they also strive to achieve their climate and energy objectives.

The key benefits of liquid gases



Provide energy solutions to all European citizens, including in off-grid rural areas.



Can lower particulate matter, CO₂ and NOx emissions today.



Offer a reliable and secure energy source for Europe, thanks to its diversified supply chain.

THE CARBON FOOTPRINT OF KEY SECTORS OF THE EUROPEAN ECONOMY



BUILDINGS

Buildings are responsible for more than 36% of the EU's greenhouse gas emissions and 40% of the EU's final energy consumption¹.



TRANSPORT

The EU's transport sector is responsible for about 25% of the EU's green-house gas emissions².



INDUSTRY

Emissions from the EU's manufacturing sector are estimated to be around 22% of total greenhouse gas emissions³.

THE LIQUID GAS INDUSTRY'S RENEWABLE COMMITMENT

Renewable liquid gases are a reality today. They are produced in Europe in increasing amounts through a variety of production pathways. With the right support from national governments and the European Union, the European production capacity of renewable liquid gases can surpass demand by 2050.

The liquid gas industry is committed to ensuring that, by 2050, the demand for liquid gas can entirely be supplied by renewable liquid gases, such as renewable LPG (propane/ butane), and renewable and recycled carbon DME (Dimethyl ether).

To support the EU's climate neutrality goals and ensure a just energy transition, the industry is prepared to substantially boost the supply of renewable liquid gases. However, it will crucial to obtain political support for the uptake of these renewable alternatives.

WHAT ARE RENEWABLE GASES?

Renewable liquid gases, such as renewable propane, renewable butane and renewable and recycled carbon DME, are drop-in solutions that can be produced from a wide range of sustainable feedstocks such as plant and animal waste materials, municipal waste, vegetable oils and biogas. They can be used in existing liquid gas infrastructure and appliances as is.



HEATING: PRIORITISING A JUST TRANSITION FOR RURAL AREAS

Rural areas are home to 137 million EU citizens, but their specific needs are often overlooked by EU legislation, which instead focuses on urban and suburban dwellers. Liquid gases can aid these communities to transition to net-zero energy, by providing a lower-carbon solution alongside progressive renovation.

Key objectives of our industry

1

Ensure recognition of renewable liquid gases' importance as a cost-effective, low-carbon alternative for a just energy transition.

7

Encourage the replacement of the overwhelming number of single-family homes operating coal-fired heating systems with highly efficient liquid gas appliances to improve the air quality of rural areas.

3

Make the transition accessible for all by giving consumers the right to choose the most efficient and appropriate technologies for their specific needs.

4

Encourage the roll-out of renewable liquid gases through a clear legislative framework recognising the strategic role of renewable liquid gases in heating.



IKANSPUKI: DKIVING FUKWAKD SUSTAINABLE DEGAKBUNISATIUI

Liquid gas in transport, also known as Autogas, is the fuel of choice for over **8.5 million vehicles in the EU** today, making it the number one alternative fuel in the EU. Europe has a strong manufacturing base for new and retrofitted Autogas vehicles.

Key objectives of our industry

1.

Critically reassess, on a life cycle assessment basis, the emission targets for cars and vans and heavy-duty vehicles. 2

immediate CO₂ reduction opportunities of Autogas vehicles, whether through new vehicle offerings or retrofits, or by offering renewable liquid gases as a drop-in solution to the existing Autogas fleet.

Bring recognition to the

3

Equipment Manufacturers (OEMs) in expanding their Autogas vehicle offering.

Support Original

4

fleet by promoting Autogas conversions and strive to extend the market to new segments

Address the ageing legacy

5.

Put Autogas on an equal footing with other fuel sources by continuing to support existing Autogas refuelling stations that are immediately ready for renewable liquid gases.

6

to all European consumers by making sustainable alternative transport solutions available and affordable, especially for citizens in rural areas.

Bring a just transition



INDUSTRY: CREATING A VERSATILE AND COMPETITIVE INDUSTRIAL SECTOR

Liquid gases are integral to energy intensive industries such as steel, ceramic, and textiles production. It is

also an energy source with untapped potential to reduce emissions in areas where hydrogen or other renewable synthetic gases are unavailable.

Sustain renewable and conventional liquid

conventional liquid gases as a viable, cost-efficient, and immediately available alternative in energy-intensive industries such as steel, ceramics, and textiles.

Enable a socially fair energy transition tha

1 https://www.consilium.europa.eu/en/infographics/fit-for-55-making-buildings-in-the-eu-greener/

2 https://www.eea.europa.eu/en/topics/in-depth/transport-and-mobility

energy transition that enhances the competitiveness of the EU economy while providing synergies with other environmental challenges, as envisioned by the Clean Planet for All communication. Ensure that legislation meets the needs of

meets the needs of European farmers, who rely on liquid gases for pig and chick rearing, grain and fruit drying, and thermal desiccation.

Redu

Reduce dependence on external raw materials by transitioning towards renewable and conventional liquid gases in industrial applications.

Support an **industrial**

plan that is technology-neutral and acknowledges the bioenergy industry as a strategic technology.

DOWNLOAD OUR FULL 8-POINT MANIFESTO!

 $3 \ https://joint-research-centre.ec.europa.eu/jrc-news-and-updates/greenhouse-gas-emissions-manufacturing-what-difference-across-countries-2023-09-29_en$

