



**Liquid Gas Ireland Submission  
to the Department of Environment, Climate and  
Communications Consultation on Ireland's current Long –  
term Strategy for Greenhouse Gas Emissions Reductions  
June 2023**

**\*This document follows the format of the questions set out in the consultation document**

## About you

**Name:** Liquid Gas Ireland (LGI)

LGI is the association representing companies operating in the LPG and BioLPG industry in Ireland. Members include LPG and BioLPG producers, distributors, equipment manufacturers, and service providers. Our mission is to ensure that policy makers continue to recognise LPG and BioLPG as the clean, versatile, and alternative lower carbon energy of choice for off-grid energy users in the residential, commercial, industrial, agriculture, leisure, and transport sectors in Ireland. Liquid Gas Ireland is committed to working with consumers, stakeholders, and policymakers to support Ireland's goal to tackle air quality, drive decarbonisation and achieve net zero emissions by 2050.

LGI fully supports the Department's policy measure, via the current Long-Term Strategy on Greenhouse Gas Emissions Reductions, which sets out indicative pathways, beyond 2030, towards achieving carbon neutrality for Ireland by 2050.

**Email:** [info@lgi.ie](mailto:info@lgi.ie)

**Web:** [www.lgi.ie](http://www.lgi.ie)

### Question 1: Following on from the 2019 consultation, is there anything new or incremental you think should be included in Ireland's Long-term Strategy?

The 2019 strategy set a target for Ireland to achieve a long-term national objective of reducing greenhouse gas emissions by at least 80% by 2050 compared to 1990 levels. To build upon the 2019 strategy and further enhance Ireland's long-term strategy for greenhouse gas emissions reductions, Liquid Gas Ireland are of the view that the following 4 new or incremental elements should be considered:

#### 1. The role of LPG and BioLPG in assisting Ireland's long-term strategy for reducing Greenhouse Gas Emissions

In Ireland, greenhouse gas emissions are rising. They are rising at the fastest rate of any EU country, by 12.3% year on year. The Environmental Protection Agency (EPA) recent analysis on greenhouse gas emissions, highlights the pressing need for industries to intensify their efforts in meeting their climate action commitments.<sup>1</sup> In this context, both LPG and BioLPG emerge as viable solutions with substantial potential to support the decarbonisation journey of various sectors, contributing to an overall reduction in GHG emissions.

LPG is a clean-burning, smoke-free fuel that cuts carbon emissions from heating oil by 11% and 33% less carbon than coal. BioLPG is a chemically indistinct but renewable version of LPG, made from sustainably sourced renewable vegetable oils, wastes, and residues.<sup>2</sup> BioLPG can be blended up to 100% and can continue to make a significant contribution to Ireland's GHG emissions reductions and decarbonisation goals to 2030 and beyond.

These fuels can play a crucial role in addressing the energy requirements of rural Ireland. Embracing the utilisation of LPG and BioLPG as a fundamental component of Ireland's policy approach, is vital to fully achieving the country's emissions targets. In addition, LPG emits fewer greenhouse gas emissions compared to other fossil fuels such as coal and oil when used for heating, cooking, and transportation.

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<sup>1</sup> [EPA 2023 – Ireland's Greenhouse Gas Emissions Projections](#)

<sup>2</sup> [SEAI Conversion Factors – SEAI Statistics](#)

To leverage the potential of LPG and BioLPG in emissions reductions, the Irish Government can consider policies and measures such as financial incentives, grants, and regulatory frameworks that encourage their adoption. Continued collaboration with industry stakeholders is crucial in this regard in order to identify barriers to adoption, help drive innovation, improve infrastructure, and ensure the availability and accessibility of LPG and BioLPG. Particularly in rural Ireland, where scale and accessibility already exist.

Furthermore, the liquid gas sector's development product, rDME can be blended into LPG and BioLPG. It can be produced in a variety of manners and from numerous feedstocks, with the potential of reduced carbon emissions. The sector is constantly innovating when given the correct incentives and time. rDME is evidence of this.

Our sector has demonstrated significant progress in feedstock development since the introduction of BioLPG to the Irish market in 2018 and would like to see the Government investing in further research to support Ireland's climate ambitions.

LGI member companies are invested in the low-carbon and low emission future for the Irish economy and can assist in developing solutions to emission reductions. The liquid gas industry has committed to 100% renewable fuels by 2040 and so will support Ireland with its carbon reduction targets, and demand for renewable fuels – which is expected to increase<sup>3</sup>

## **2. Aligning with the Government's Clean Air Strategy**

There are an estimated 1,300 premature deaths in Ireland per year caused by fine particulate matter in our air. The Environmental Protection Agency's (EPA) Air Quality in Ireland 2020<sup>4</sup> Report noted that any movement towards cleaner home heating choices and less smoky solid fuel choices will result in a subsequent improvement in air quality.

By considering the use of clean burning fuels such as LPG and BioLPG, households and communities have the opportunity to actively contribute to the enhancement of local air quality. These fuels boast exceptionally low levels of airborne pollutants, including NO<sub>x</sub>, SO<sub>x</sub>, and PM.

By making the switch from high carbon solid fuels, consumer choice can have an immediate and long-lasting positive impact on the regional air quality in Ireland. This proactive measure aligns with the goals of the Government's Clean Air Strategy, ensuring that emission reduction targets outlined in the Sectoral Emission Ceilings are met.

## **3. Adopting a 'mixed technology' approach can assist in reducing Greenhouse Gas Emissions**

GHG emissions reductions across all sectors will benefit from a 'mixed technology' approach which offers a choice of heat decarbonisation solutions. This should include the lower carbon options provided through renewable ready gas boilers which will significantly benefit businesses in rural off grid areas. This switch is easy and affordable to make for consumers and businesses, not least as the scale and infrastructure already exists for rural homes and businesses.

The 'mixed technology' approach that supports both heat pumps and lower carbon options through liquid gas is a compelling one.

The heat pump only solution envisions most of Ireland's older households undergoing very extensive retrofitting in order to be effective. However, this approach does not consider the unique needs and economic and infrastructural challenges of rural Ireland. 500,000 homes, mostly in rural areas have no

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<sup>3</sup> <https://www.lgi.ie/about/a-greener-deal-for-rural-ireland/>

<sup>4</sup> [EPA – Air Quality in Ireland 2020](#)

connection to the natural gas distribution network. Two-thirds of these currently rely on oil boilers for heating.

Encouraging a 'mixed technology' approach to heating system upgrades involves incentivising a transition from oil boilers to lower-emission renewable ready gas boilers. This transition can be facilitated by using LPG, BioLPG, or a blend of both. These alternatives can help reduce carbon emissions compared to traditional oil boilers, promoting a more sustainable and environmentally friendly heating solution.

The narrow focused current approach on heat pumps, is LGI believes, an obstacle to sectoral emission ceilings being met. A 'mixed technology' approach allowing for the installation of a renewable ready gas boiler would undoubtedly contribute to reduction targets being met.

#### 4. Ensuring a Just Transition

The principles of a 'Just Transition' will be well served LGI believes, through the incentivisation for consumers to install renewable ready gas boilers and not just heat pumps. LPG boilers offer a long-term, cost-effective pathway to decarbonisation through the gradual introduction of BioLPG into the mix.

It should be noted that LPG and BioLPG can also be used seamlessly in cutting edge heating systems, such as hybrid heat pump installations. This 'mixed technology' approach can be operated in familiar ways for consumers and offers a more equitable option for rural consumers looking to meet climate change targets while reducing the financial burden of a deep retrofit.

LGI strongly argues in its policy document "*Liquid Gas – making the Just Transition more sustainable for rural Ireland*"<sup>5</sup> that the increased use of LPG, BioLPG and in time rDME, offers options and pathway reductions which help address the challenges brought by climate change and the increase in greenhouse gas emissions. Not only is this approach a better fit for off gas grid rural Ireland, but it is also a more cost effective one. LGI in its policy document sets out clearly how the installation of a renewable ready gas boiler and accompanying light retrofit, can be completed at a fraction of the cost of a heat pump and the necessary deep retrofit, while at the same time significantly lifting the BER rating<sup>6</sup>

This is also relevant for business including those who have invested significant capital expenditure over last decade in their transition away from oil. A mixed technology approach is a key measure to help reduce the risk that climate change poses for industry.

### Question 2: Does the current long – term strategy identify realistic emission reduction pathways beyond 2030, or are there alternative or complementary pathways worthy of further consideration?

As BioLPG can be used in existing LPG infrastructure, it increases the speed and realistic emission reduction pathway at which renewable fuels can be used by homeowners and industry all over Ireland without the need for burdensome capital investment. LPG and BioLPG offer sensible and accessible solutions for industries moving to carbon neutrality. There is huge potential to accelerate the transition to carbon neutral for these industries in rural areas and off the natural gas network.

LGI believes Indigenous HVO production also offers a realistic emission reduction pathway beyond 2030. HVO production is increasing in Europe, driven by the revised EU-RED and renewable transport fuel targets. The Irish market is likely to be dependent on imports in the short-medium term without investment in domestic production but there is significant potential, however, for investment in indigenous production facilities in Ireland. Ireland is an ideal location for the development of sustainable

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<sup>5</sup> [Liquid Gas – making the Just Transition more sustainable for rural Ireland](#)

<sup>6</sup> LGI demonstrates that a BER rating can be lifted from a D1 to B1 at a cost of €11,331

feedstocks which could in time lead to the production of rDME. The outcome of the National Biomethane Strategy currently in preparation, as well as Government research on feedstocks has the potential for significant developments in Ireland.

**Question 3: Noting that the transition to climate neutrality requires systemic change and that it is critical to consider the factors that may contribute to or hinder progress of such a transition, are there enabling conditions to support the transition that you think require greater focus, if so, what are they?**

Local Authorities<sup>7</sup> have a key part to play in addressing carbon emissions. Significant analysis has been done on the local authority development plans of the country's 31 city and county councils to consider how the plans have integrated measures to tackle climate change in their respective areas.

The importance of local authorities in addressing carbon emissions and tackling climate change is widely recognised and they have a crucial role to play in implementing measures to reduce greenhouse gas emissions. This includes integrating climate mitigation strategies into their development plans. While progress has been significant across the various regions, there is scope for more progress. The implementation of evidence-based and realistic climate mitigation measures into their development plans should be followed and these should be informed by just transition considerations.

In addition, LGI believes that overall 'Just Transition' considerations can be best reflected by local authorities in the provision of social housing. Supports and targets should be adopted at a local level to encourage a 'mixed technology' approach to upgrading heating systems in older homes, especially in rural off grid areas.

This should involve incentivising a switch from oil boilers to lower emission renewable ready gas boilers, using LPG, BioLPG or a blend of both. By incorporating these measures into their development plans, local authorities can contribute to a just transition by addressing climate change while considering the social and economic aspects of their communities.

**Question 4: Are there any other comments or observations that you wish to make regarding Ireland's Long-term Strategy?**

We urge the Department of Environment, Climate and Communications and all functions of Government to work closely with the biofuel industry in assessing all future policy options to mitigate increases in GHG emissions.

With the aim of offering further solutions, Liquid Gas Ireland set out the following 3 comments / observations regarding Ireland's long-term strategy in reducing GHG emissions;

**1. Transitioning heavy-duty vehicles**

LPG and BioLPG can be used as alternative fuels for heavy-duty vehicles, including trucks and buses.

Converting these vehicles to run on LPG or BioLPG can significantly reduce emissions of nitrogen oxides (NOx), particulate matter, and greenhouse gases compared to conventional diesel engines. The government can incentivize the adoption of LPG and BioLPG in the transportation sector to accelerate the transition to cleaner fuels.

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<sup>7</sup> [Local Authority Development Plans on Climate Change](#)

## **2. The development of the SEAI's Heat Policy Statement**

The awaited SEAI Heat Policy Statement should contain within its policy proposals, the merits of LPG and BioLPG in reducing GHG emissions in order to expand the scope and focus beyond the narrow set of options currently being put forward.

Likewise, the roadmap to phase out the use of fossil fuel in all buildings which is due under the Climate Action Plan later this year, must take into account the role of renewable ready gas boilers. This will ultimately help homes and businesses decarbonise and greatly assist in reducing GHG emissions.

## **3. National Climate Stakeholder Forum**

Liquid Gas Ireland would encourage all functions of the Government to continue to engage with the biofuel industry on matters pertaining to GHG emission reduction targets as part of ongoing policy considerations arising from the National Climate Stakeholder Forum.

### **Contact Details**

For further updates, you can find us on:

Email: [info@lgi.ie](mailto:info@lgi.ie)

Twitter: [@LiquidGasIE](https://twitter.com/LiquidGasIE)

LinkedIn: [Liquid Gas Ireland](https://www.linkedin.com/company/liquid-gas-ireland)