

Liquid Gas Ireland – Climate Action Plan Submission

1. In Ireland's Greenhouse Gas Emissions Projections 2025-2030, the EPA now projects for the first time that we are close to meeting our first carbon budget, following a consistent trend of improving projections for that budget over recent years. In your view, which policies and measures have been the most successful in reducing Ireland's GHG emissions?

The policies and measures that have been most successful in reducing Ireland's greenhouse gas emissions are those that have accelerated renewable electricity generation and supported the transition away from fossil fuel heating.

Most notably, the EPA's Greenhouse Gas Emissions Projections 2025-2030 forecast a 55% reduction in electricity sector emissions under the With Existing Measures (WEM) scenario. This highlights the success of policies that have driven investment in wind and solar energy, grid decarbonisation and renewable energy infrastructure.

The EPA also projects a 13% reduction in residential emissions, largely driven by home energy efficiency improvements and the uptake of heat pumps. These measures have been instrumental in reducing household reliance on fossil fuels.

These are positive trends and demonstrate the impact of ambitious climate policy. However, they also highlight the need for a balanced and pragmatic approach to decarbonisation. While heat pumps are an effective solution for many homes, almost one fifth of Ireland's housing stock is likely to remain unsuitable for heat pump installation, even after practical energy efficiency upgrades¹. This is particularly relevant in Ireland, where many rural and off gas grid households continue to rely on home heating oil.

For these homes, switching from oil to LPG can deliver immediate emissions reductions, while renewable ready LPG boilers provide a straightforward pathway to BioLPG, which is already available in Ireland and can be integrated into existing systems as renewable fuel supply grows.

The need for a broader approach is also reflected in the EPA's projection of a 7% increase in emissions from the Commercial and Public Services sector, driven in part by the slower uptake of low carbon heating technologies and limited biomethane availability. While biomethane will play an important role, its benefits will be largely confined to the natural gas network. Renewable fuels such as BioLPG should therefore be supported alongside electrification as part of a mixed technology approach for off gas grid homes and businesses.

Meeting our carbon budgets will require more than one pathway. A pragmatic, technology neutral approach that combines electrification with renewable fuels will ensure every home and business can participate in the energy transition, while reducing emissions in a way that is both affordable and achievable.

2. Among the measures identified in Climate Action Plan 2024 and Climate Action Plan 2025, which do you consider the highest priority to close the gap to 2030?

¹ National Heat Study: Low Carbon Heating & Cooling Technologies - Options, Costs, Performance & Suitability Report, [SEAI](#)

Closing the remaining gap to 2030 will require a greater focus on measures that can deliver emissions reductions in the near term. The priority should be to accelerate the implementation of practical, affordable and accessible solutions that can be deployed quickly across homes, businesses, industry and transport, particularly in rural areas and communities off the natural gas grid.

LGI believes a mixed technology approach must be central to this effort. A mixed technology approach recognises that different sectors, buildings and communities face different decarbonisation challenges, and that no single solution will be suitable in every circumstance. It means supporting a range of complementary lower carbon technologies, allowing the most appropriate solution to be deployed based on emissions reduction potential, affordability, technical feasibility and the ability to deliver at scale.

While heat pumps will play an important role in decarbonising Ireland's building stock, they should not be the only solution supported by Government. A broader range of lower carbon and renewable technologies, including renewable ready gas boilers, LPG, BioLPG and in the future, renewable dimethyl ether (rDME), can complement electrification by providing practical alternatives where heat pumps are not yet the most suitable or cost effective option.

BioLPG and rDME have an important role to play in decarbonising off gas grid homes and businesses. As drop in or blendable renewable fuels, they can be used through existing LPG infrastructure, enabling immediate emissions reductions without the need for major capital investment or disruptive deep retrofits. They also support energy security, consumer choice and a more affordable transition for rural communities.

Focusing on solutions that are technology neutral, cost effective and capable of rapid deployment will reduce emissions more quickly while supporting affordability, energy security and a Just Transition for households and businesses across Ireland.

3. In the key sectoral areas identified (Electricity, Transport, Industry, Buildings, Agriculture and Land Use), what additional actions to those already in CAP 24 and CAP 25 could, in your view, accelerate delivery in these areas?

Electricity

LGI recognises that electrification will play a central role in achieving Ireland's climate targets and that expanding renewable electricity generation is essential to delivering a net zero energy system. However, the quickest way to close the remaining gap to 2030 is through a mixed technology approach that also recognises the practical and financial challenges of electrifying rural and off gas grid homes and businesses.

The Climate Action Plan should therefore support complementary lower carbon technologies alongside electrification, including renewable ready gas heating systems and renewable liquid gases such as BioLPG and renewable dimethyl ether (rDME). Switching from solid fuels, such as oil or coal, to LPG, can deliver immediate emissions reductions while also improving local air quality. Renewable ready gas boilers can be installed initially, providing consumers with an immediate lower carbon heating solution while enabling a straightforward transition to renewable liquid gases as supplies become more widely available.

BioLPG and rDME provide the next step in this transition. As drop in renewable fuels, they can be used through existing LPG infrastructure and renewable ready heating systems without requiring significant additional capital investment or disruptive changes to properties. This

enables emissions to be reduced progressively over time while supporting energy security, affordability and consumer choice.

A mixed technology approach would help bridge the gap between climate ambition and delivery by providing realistic decarbonisation pathways for rural communities, while maintaining energy security, affordability and consumer choice during the transition to a fully renewable energy system.

Transport

LGI acknowledges that electrification will play a central role in decarbonising Ireland's transport sector. However, many heavy duty commercial vehicles, agricultural machinery and other hard to electrify transport applications will continue to require renewable fuel solutions for the foreseeable future.

The Climate Action Plan should therefore strengthen and expand the Renewable Transport Fuel Obligation (RTFO) to provide greater support for advanced renewable fuels, including BioLPG and renewable dimethyl ether (rDME). Increasing RTFO incentives for renewable gaseous fuels, alongside measures to support indigenous renewable fuel production, would provide greater market certainty, stimulate investment and accelerate emissions reductions in sectors where electrification is not yet a practical or cost effective option.

Supporting a broader range of renewable transport fuels through a technology neutral policy framework will help reduce emissions more quickly while improving energy security, strengthening supply resilience and supporting the transition to a lower carbon transport system.

Industry

LGI supports a mixed technology approach that enables businesses to transition from higher carbon fuels to lower carbon alternatives such as LPG, BioLPG and renewable dimethyl ether (rDME). While electrification will play an important role in decarbonising industry, many industrial processes, particularly in rural and off gas grid locations, require reliable high temperature heat and a continuous energy supply that cannot always be delivered easily or cost effectively through electrification.

These practical limitations are particularly relevant for rural businesses with high temperature process heat requirements. For example, Abbey Machinery in County Tipperary operates paint and powder coating ovens at temperatures above 200°C. The company reports that replacing its liquid gas system with an equivalent electric solution would have required a major transformer and cabling upgrade, alongside higher operating costs.² This illustrates why industrial decarbonisation policy must consider the total infrastructure and operating costs associated with fuel switching, rather than assessing the heating appliance in isolation.

Liquid gas is already widely used across sectors including manufacturing, hospitality and agriculture because of its high energy output, lower emissions and suitability for process heating applications. Supporting businesses to replace oil, coal and heavy fuel oil systems with renewable ready gas technologies, through targeted grants, capital allowances and renewable heat incentives, would enable them to reduce emissions while maintaining operational efficiency. It would also strengthen energy security, protect industrial

² Delivering Net Zero for Rural Ireland: Abbey Machinery, [Liquid Gas Ireland](#)

competitiveness and provide a practical pathway towards the increased use of renewable liquid gases as supply expands.

Buildings

Older, hard to heat homes in rural off gas grid areas face significant practical and financial barriers to deep retrofitting and full electrification. While heat pumps will play an important role, they should be complemented by renewable ready gas heating technologies using LPG, BioLPG and, in the future, renewable dimethyl ether (rDME). Government support schemes should be expanded to recognise a wider range of lower carbon technologies that can deliver meaningful emissions reductions at a lower upfront cost while accelerating the transition away from higher carbon heating fuels.

For many off gas grid households, switching from solid fuels to LPG offers an immediate opportunity to reduce emissions, allowing the property owner to improve energy efficiency and carbon emissions over a period of time that suits their building type and budget. Switching from coal to LPG can reduce carbon emissions by approximately 33%, switching from peat briquettes by 36%, and switching from kerosene heating oil by 11%. As renewable liquid gases become increasingly available, these savings can increase significantly, with BioLPG capable of delivering lifecycle greenhouse gas emissions reductions of up to 90%, depending on feedstock.³

Renewable ready gas boilers provide a future proof solution by enabling a seamless transition from LPG to BioLPG as renewable fuel supplies expand, without the need to replace existing heating systems. This staged approach allows households to reduce emissions immediately while supporting the long term transition to renewable heating.

A technology neutral policy framework that supports both electrification and renewable liquid gas solutions would accelerate emissions reductions across the built environment, improve air quality and increase participation in retrofit programmes by providing practical, affordable choices for consumers. In doing so, it would help ensure that rural and off gas grid communities are not left behind in Ireland's transition to net zero.

Agriculture

Agriculture faces particular decarbonisation challenges due to its reliance on dependable, high temperature heat and hot water for everyday operations. Liquid gas already plays a vital role in modern agriculture, providing reliable heating for greenhouses, powering agricultural heating systems and delivering a cost effective solution for producing hot water. It is also widely used in applications such as grain drying and dairy operations, where a consistent and secure supply is essential.

The Government should expand support for renewable ready gas technologies and encourage the gradual transition from higher carbon fuels to lower carbon LPG and renewable BioLPG solutions. This would provide a practical and affordable pathway to decarbonisation without compromising productivity or requiring significant changes to existing infrastructure.

In parallel, greater supports should be provided in the longer term for the development of indigenous renewable fuels, including BioLPG and rDME, using agricultural residues, waste streams and biomethane derived feedstocks. Such measures would broaden the range of decarbonisation options available to the sector, support rural economic development and help

³ Delivering Net Zero for Rural Ireland – Pathways to Renewable Liquid Gas, [Liquid Gas Ireland](#)

deliver a fair and practical transition for agricultural businesses while contributing to Ireland's climate targets.

Liquid Gas Ireland's report 'Delivering Net Zero for Rural Ireland – Pathways to Renewable Liquid Gas', identifies a significant long term opportunity to develop indigenous renewable liquid gas production. Commissioned independent analysis estimates that Ireland could produce more than 100,000 tonnes of renewable liquid gas annually by 2050 potentially meeting more than 60% of current liquid gas demand, subject to appropriate policy support. Three potential routes are identified: rDME coproduction from anaerobic digestion, BioLPG produced as a byproduct of HVO and Sustainable Aviation Fuel production, and purpose built facilities using advanced gasification.⁴ The next Climate Action Plan should recognise this opportunity within an integrated waste, agriculture, bioenergy and rural development strategy.

Land Use

Accelerating delivery in the Land Use sector will require a stronger focus on developing a circular bioeconomy that converts agricultural and municipal waste streams into renewable fuels. Ireland has significant untapped potential in organic waste resources, including agricultural residues, manure, municipal solid waste and other sustainable feedstocks, which could be used to produce renewable gases and renewable liquid fuels such as biomethane, BioLPG and renewable dimethyl ether (rDME). Harnessing these resources would reduce emissions from agriculture and waste management while creating additional value for rural communities, strengthening energy security and supporting Ireland's wider decarbonisation objectives.

The Climate Action Plan should therefore support investment in anaerobic digestion, gasification and other advanced waste to fuel technologies, alongside research, innovation and the development of indigenous renewable fuel production. In the near term, imported sustainable biofuels will continue to play an important role in supporting Ireland's decarbonisation efforts. However, over the longer term, Government policy should prioritise the development of domestic production capacity, enabling Ireland to utilise its own waste and residue feedstocks.

Supporting advanced renewable fuels will also help minimise indirect land use change (ILUC) risks by reducing dependence on crop based biofuels and encouraging greater use of circular, waste based resources. A clear long term policy framework that supports indigenous production will provide investment certainty, accelerate the growth of Ireland's circular bioeconomy, and deliver lasting environmental, economic and energy security benefits.

4. In addition to the priority areas you have already identified in previous questions, which other areas should this update to the Climate Action Plan focus on?

The updated plan should place greater emphasis on developing the policy and regulatory framework needed to support renewable liquid gases as part of Ireland's wider energy transition. Ireland should ensure that its approach aligns with emerging European renewable fuel supply chains, while also supporting the development of future indigenous production capacity.

This includes recognising the role of renewable liquid gases within Ireland's decarbonisation pathway, providing long term investment certainty and creating the conditions needed to

⁴ Delivering Net Zero for Rural Ireland – Pathways to Renewable Liquid Gas, [Liquid Gas Ireland](#)

support innovation and market development. While access to European markets will be important in the near term, Ireland should also seek to develop domestic opportunities for renewable liquid gas production in the medium to long term.

5. The Joint Oireachtas Committee on Climate, Environment and Energy published a Report on Barriers to Achieving Climate Targets (2026-30) in February. Do you agree with the findings of this Report? What other barriers to achieving the climate targets, if any, would you identify? How best can the identified barriers be addressed?

Liquid Gas Ireland broadly agrees with the barriers identified by the Joint Oireachtas Committee. Delays in implementation, planning and permitting, infrastructure constraints, skills shortages and the need for greater policy certainty all continue to impede progress.

The updated Climate Action Plan should ensure greater alignment across renewable heat policy. Renewable liquid gases such as BioLPG are already recognised as renewable fuels within the Renewable Heat Obligation framework, yet their role is not reflected to the same extent within Ireland's wider climate and energy policy architecture. This creates unnecessary policy inconsistency and investment uncertainty. Where a renewable fuel is recognised by Government as contributing to renewable heat targets, it should also be recognised within the Climate Action Plan as a tool to support decarbonisation, particularly for rural and off gas grid consumers.

The principal barrier to achieving Ireland's climate targets is ensuring that households and businesses have access to practical, affordable pathways to decarbonisation.

Current support schemes remain heavily focused on a limited range of technologies and do not adequately reflect the differing circumstances facing rural and off gas grid communities. Many households continue to rely on higher emitting fuels but face significant financial and practical barriers to deep retrofits and full electrification.

This challenge is particularly evident in rural Ireland. While the SEAI National Heat Study ('Low Carbon Heating & Cooling Technologies - Options, Costs, Performance & Suitability' report, February 2022) concluded that heat pumps are technically suitable in 78% of existing residential buildings, increasing to 82% following appropriate fabric energy efficiency measures, it also recognises that high upfront costs remain a significant barrier to consumer uptake.⁵ Furthermore, the assessment assumes that heat emitters are upgraded where required to achieve appropriate flow temperatures and that installations are undertaken in accordance with best practice. In reality, many homeowners may also require insulation upgrades, improved ventilation, radiator replacements or heating distribution system upgrades before a heat pump can operate efficiently. The challenge is therefore not solely one of technical suitability, but also of affordability and deliverability.

Government policy should therefore adopt a more technology neutral approach that supports a broader range of lower carbon solutions. This should include facilitating immediate fuel switching to lower carbon LPG through renewable ready heating systems, providing an affordable transition pathway to BioLPG and other renewable liquid gases as domestic supply develops.

⁵ National Heat Study: Low Carbon Heating & Cooling Technologies - Options, Costs, Performance & Suitability Report, [SEAI](#)

To ensure these lower carbon options remain accessible, Government must also ensure that the costs of decarbonisation are shared fairly.⁶ The Climate and Nature Fund should be used to offset the additional costs associated with the Renewable Heat Obligation and the transition to renewable liquid gases, helping to keep lower carbon heating affordable and preventing unintended increases in energy poverty. Renewable ready gas boilers and hybrid heating systems should be recognised as part of a mixed technology approach to heat decarbonisation, particularly where lower carbon alternatives are not yet technically or economically viable. Targeted supports should also be made available to rural SMEs and off gas grid businesses to maintain competitiveness during the transition.

Alongside these immediate consumer focused measures, greater investment is needed to accelerate indigenous renewable fuel production. This includes funding for research, innovation and demonstration projects, support for anaerobic digestion and advanced fuel technologies, and measures that encourage the future coproduction of renewable liquid gases such as BioLPG and renewable dimethyl ether (rDME). Long term policy certainty will be essential to attract investment and build domestic production capacity.

Addressing these barriers will require a technology neutral approach that combines immediate support for fuel switching with long term investment in indigenous renewable fuel production. By providing practical financial supports, protecting consumers from unintended policy costs and creating a stable investment framework, Government can accelerate emissions reductions while supporting affordability, energy security and a Just Transition.

6. The principles of a Just Transition (evidence base and structured; skills and opportunity; fair sharing of costs; social dialogue and lived experience) are explained by the Just Transition Commission. What are your views on how these principles can be incorporated into the next CAP or climate action more generally?

The next Climate Action Plan must recognise that the pathway to decarbonisation will differ across Ireland. A Just Transition requires a fair, evidence based approach that reflects the needs of rural communities and those living off the natural gas grid.

Climate policy should use data on building types, location, existing heating systems and infrastructure to identify the most appropriate low carbon solutions, rather than relying on a single technology pathway. Many rural homes and businesses face higher costs and fewer decarbonisation options, particularly where deep retrofit and heat pump installation are not practical or affordable.

The next Climate Action Plan should adopt a mixed technology approach that provides parity of support for all viable low carbon heating solutions, including renewable liquid gas. This would ensure households and businesses can transition away from oil, coal and peat in a way that is affordable, practical and tailored to local circumstances.

A Just Transition means ensuring no household or community is disadvantaged because of geography, income, building type or infrastructure constraints. Supporting a range of low carbon technologies will help deliver emissions reductions while protecting affordability, consumer choice and energy security, particularly in rural Ireland.

⁶ Budget 2027: Energy Transition Priorities for Rural Off Grid Homes and Businesses, [Liquid Gas Ireland](#)

7. The National Adaptation Framework and the Sectoral Adaptation Plans have been published. To what extent should further climate change adaptation measures be included in the next CAP?

While the National Adaptation Framework and Sectoral Adaptation Plans provide an important framework for managing climate risks and reducing Ireland's vulnerability to the impacts of climate change, the next Climate Action Plan should ensure that climate adaptation is more closely integrated with decarbonisation, energy security, affordability and rural resilience.

This is particularly important for rural and off gas grid communities, which are more exposed to climate related disruption and often have fewer practical alternatives when energy systems are affected by severe weather events. The Climate Action Plan should therefore strengthen measures that improve the resilience of homes, businesses and farms located off the natural gas grid, while ensuring these communities have access to the financial and technical supports needed to adapt.

Adaptation measures should also be aligned with retrofit, energy efficiency and fuel switching policies. A mixed technology approach would allow households and businesses to adopt the most appropriate low carbon solutions for their circumstances, recognising that older and harder to heat properties may require different pathways to decarbonisation. Supporting a diverse energy mix, including renewable liquid gases, can improve resilience while reducing emissions and avoiding an over reliance on a single technology or energy source.

Finally, adaptation policy should be informed by local evidence and the experiences of rural communities, farmers and businesses. Greater engagement with these stakeholders will help ensure that adaptation measures are practical, targeted and capable of strengthening resilience while supporting a fair and effective transition to a low carbon economy.