

# Submission - Public Consultation on the development of new Solid Fuel Regulations for Ireland

**April 2021** 



## Calor Gas

A champion for change in rural Ireland



#### Introduction

Calor welcomes the opportunity to respond to the Department of the Environment, Climate and Communications' public consultation on the development of new Solid Fuel Regulations for Ireland.

Calor also welcomes the proposal to develop legislation to regulate the broader use of solid fuels in the residential sector and the commitment in the Programme for Government to develop a Clean Air Strategy for Ireland.

The company welcomes the acknowledgement by DECC that all sources of air pollution arising from the residential sector need to be tackled and that choices made in heating Ireland's homes can impact on health and that of families, and the communities in which we live.

Calor also notes from DECC that research indicates that the contribution of peat and wood to levels of particulate matter in the air around us can be considerable and the importance of considering the health benefits to be achieved by extending regulations to other residential solid fuels.

Ireland needs a strong vision for a regional approach to delivering on air quality targets. This must include a clear commitment to cleaner, lower carbon alternatives to solid fuel burning for home heating. Communities off the natural gas grid need support to make the change.

Calor, as a member of Liquid Gas Ireland, can support the Government's low carbon and clean air strategy through the supply of LPG and BioLPG. LPG is a clean burning, smoke free fuel that supports cleaner air quality and can play a role in improving the health of rural communities across Ireland.

We look forward to engaging with Government and energy sector stakeholders in the coming weeks and months on the development of Ireland's Clean Air Strategy and the role that LPG and BioLPG can play.

#### About Calor Ireland

Calor supplies and distributes LPG (Liquefied Petroleum Gas) and BioLPG in Ireland, allowing homes and businesses, located off the natural gas network, to avail of the benefits of lower carbon and renewable gas. Calor launched Liquefied Natural Gas (LNG) for the commercial and industrial sectors in 2020.

Calor employs 284 staff in 6 sites located throughout the island of Ireland serving circa 50,000 bulk customers across residential and industrial commercial sectors. Additionally, we serve c. 400,000-cylinder users and other customers, north and south.

Calor is a part of the SHV Energy Group, the world's largest distributor of LPG. SHV Energy operates in more than 20 countries – in Europe, under brands such as Primagaz, Calor Gas, Liquigas, Gaspol and Ipragaz. SHV is proud to serve 30 million customers across three continents. SHV firmly believes that its energy can create clean air and dramatically reduce carbon impact and is committed to working sustainably with communities, stakeholders and policymakers to advance energy, together.

#### **About LPG**

LPG is one of the cleanest fossil fuels. LPG is a by-product of oil and natural gas extraction. It can be supplied anywhere in Ireland and is the fuel of choice for homes and businesses in rural Ireland that are looking for a cleaner, more flexible fuel source. LPG is available in bulk tanks and cylinders storage, for domestic, commercial applications (such as heating, catering and manufacturing) and transport both in road (cars) and non-road (fork lift trucks) applications.



LPG contributes directly to climate and energy policy by reducing emissions from domestic, commercial, industrial and transport sectors, predominantly in rural areas where there is no alternative low carbon fuel.

The LPG products (butane and propane), both of which are petroleum or natural gas constituents, are sourced from the Whitegate refinery in county Cork (25%) but also from refineries at Milford Haven in the United Kingdom and elsewhere in Europe. Calor's Irish infrastructure includes sea terminals in Cork, Dublin and Belfast, with additional strategic storage sites in Claremorris and Sligo. These are supported by the largest LPG tanker fleet in Ireland. Combined with our logistics and automatic telemetry technology, Calor can ensure efficient, optimised fuel supply to rural energy users. For industrial and commercial sectors, Calor's engineering team are available to project manage each aspect of bulk LPG installation, from design and consultation through to delivery.

#### About BioLPG

BioLPG (biopropane) is the first renewable gas to be available to homes, businesses and transport on the island of Ireland. BioLPG is identical in appearance, performance and application to conventional LPG. It is made from a mix of sustainably-sourced renewable vegetable oils and waste materials. BioLPG is made in a manner which is consistent with best practice for sustainable land use in accordance with European guidance. Importantly, it is certified in this regard.

BioLPG is transported and stored in the same bulk tanks and cylinders and used in the same boilers and appliances as LPG. The transition from LPG to BioLPG is totally seamless, in the same way it was before for a company switching from electricity made from coal to electricity derived from green energy. There is just one important difference - the production process.

BioLPG contributes to Climate and Energy Policy by substantially reducing emissions, contributing to cleaner air and increasing the share of renewable heat and transport. This will help us achieve EU targets and avoid fines. BioLPG also enhances security of energy supply by creating a new energy source available to Irish businesses.

Produced by NESTE, a specialist in advanced biofuels, at a custom-built refinery in Rotterdam, feedstocks used in the production of Calor BioLPG are verified with International Sustainability and Carbon Certification and are RED II compliant. SHV Energy's R&D team are working on a range of production pathways for the development of BioLPG and renewable energy technologies.

#### About LNG

Liquefied Natural Gas (LNG) is natural gas which has been cooled to a cryogenic level, allowing it to be easily transported via road or ship in specially designed transport containers. This means it does not need a pipeline infrastructure to be in place. LNG is most commonly used by very large businesses and in heavy goods transport. LNG is cheaper than LPG and other fuel sources, making it an attractive option for large energy users. It is also a low carbon fuel source.

LNG meets the objectives of Ireland's climate and energy policy by offering a low carbon alternative for large energy users unable to use the National Gas Grid for location or capacity reasons. Switching an oil user to LNG will have a substantial impact on emissions. LNG also offers the opportunity to crack the highly challenging issue of transport emissions.

Calor LNG will be shipped, through a number of routes, from continental Europe. As one of Europe's leading energy companies, SHV has an established network of LNG supply points. This additional supply can enhance Ireland's energy security.



The adoption of LNG as a low carbon fuel opens the possibility to utilise renewable BioLNG in the future. BioLNG is biomethane which is liquefied in the same process as LNG, it emits negligible NOx or particulate matters when burned and reduces CO2 by up to 90%. Once LNG is established in Ireland, the transition will be seamless.

## Supporting the Transition from Solid Fuels

Calor notes the 2020 EPA Air Quality Report which highlights that the main source of the smaller and more dangerous particulate matter is solid fuel burning for home heating. Poor air quality causes premature deaths, with the European Environment Agency estimating that it caused 1,300 premature deaths in Ireland in 2017.

19% of Irish homes use solid fuel to heat their homes/water (peat 10%, coal 8% and wood 1%) (source: CSO). Most of these homes are in rural Ireland, with no access to the natural gas network. If peat and coal are to be banned by 2022/2023, these households need a clean and cost-similar alternative. Most of these homes are not new builds, making an investment in a heat pump solution prohibitively expensive for those households who relied on peat/coal/wood in the past.

That makes access to LPG and BioLPG more imperative in rural Ireland as a low-cost alternative to polluting solid fuels.

Calor also notes that Minister Eamon Ryan is due to publish an updated 'Strategy to Combat Energy Poverty' later this year. The proportion of households in or at risk of energy poverty in 2020 is 17.5% according to the ESRI. With a ban on the burning of low-cost solid fuel, this Strategy will need to look beyond high-cost investment by households, to cleaner/similar cost alternatives.

In our sector's Vision 2040, Liquid Gas Ireland sets out how our industry can contribute to Ireland's 'Green New Deal', including the ambitious goal to reach net zero emissions by 2050, and to the Government's Clean Air Strategy.

Calor and Liquid Gas Ireland members are committed to working with Ireland's policymakers to develop a long-term supportive policy framework to achieve 'net zero' and address barriers to decarbonisation and cleaner air in the off-grid heat and transport sectors.

## Calor's Key Policy Recommendations

Calor strongly advocates for the alignment of climate and clean air quality in policy development. EPA figures released in February 2019 indicate that poor air quality is now responsible for 3 premature deaths per week in Ireland, 1100 in a year.

Calor advocates for an assessment not only of the impact low carbon technologies will have on Ireland's climate policy but importantly, on Ireland's air quality. BioLPG emits approximately 99% less particulate emissions than peat or oil. It also emits substantially less particulates than biomass.

It is crucial that the Government brings both urban and rural communities on the decarbonisation journey, providing them with technology choices that meet their unique needs through secure, clean, efficient, and reliable lower-carbon fuels.

When DECC considers the needs of those affected by any ban on solid fuels, Calor supports a number of sectoral policy recommendations:

 There is little to no enforcement of the current Low Smoke Zones in Ireland with only 6 fines issued in 2019 in relation to breaches of the regulations for offences relating to the marketing, sale and distribution of prohibited fuels in low-smoke zones (source: EPA).



- A nationwide ban on the sale, distribution and burning of smoky coal is the only measure that will bring about the CO2 emissions savings and air quality improvements sought in this area, so it should be supported.
- Once the ban is implemented, alternative cost-effective heating fuel will be required, and this will be required by heating season 2022/2023.
- The Government must consider what low-carbon heating options are capable of providing immediate, clean and cost-effective heat and energy without significant retrofit costs.
- Policy makers need to ensure that as it starts to move households and businesses away from solid fuels, it does not encourage a switch to carbon intensive fuels such as kerosene, instead it needs to encourage off grid homes to use low carbon heating technologies such as LPG, or risk meeting net zero targets.
- LPG is the lowest carbon conventional energy source available to off-grid homes in Ireland and it enables immediate air quality improvements.
- For off-grid domestic consumers, an active choice on how to decarbonise heat and increase the energy efficiency is their homes is needed.
- As consideration is given to how homes are made more energy efficient, the Government cannot adopt a one-size-fits all approach that ignores the realities faced by off-grid homeowners.
- For many older, often more rural homes, their method of construction and lack of insulation can make retrofitting electrified technology very expensive or practically challenging, without achieving real heating benefits.
- LPG and BioLPG offer viable routes to decarbonise the heating of homes in the case where electrified heat pumps cannot be retrofitted or provide consistent heating. Its costeffectiveness also makes it viable.
- As part of this, biomass should not be positioned as the sole alternative fuel for off-grid
  areas; not only are there higher upfront costs for the homeowner, but the use of certain
  wood products also poses a challenge in addressing air quality.
- Ireland does not have a national testing regime / capability in Ireland for solid fuel emissions standards. In a solid fuel regulation environment, the State Laboratory should be tasked with testing emissions from low smoke solid fuel to ensure compliance.
- Calor advocates for financial incentives as a tool to encourage households to take responsibility for their fuel use.
- For example, the Welsh Government has recently proposed a boiler scrappage scheme applying to solid fuelsi, something that we support (and indeed could be extended to the scrappage of oil boiler (and tank) systems).
- Another incentive is for LPG Hybrid Heat Pumps and standalone BioLPG boilers to be included in the Government's future subsidy schemes (such as the SSRH) for both domestic and non-domestic buildings.
- In addition, the production of BioLPG, alongside biomethane, should also be supported, to help encourage an indigenous production market in Ireland.



### **Contact Details**

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To find out more about Calor, please visit www.calorgas.ie



#### References

 $<sup>^</sup>i \, https://gov.wales/sites/default/files/consultations/2021-01/reducing-emissions-from-domestic-burning-of-solid-fuels.pdf$