

Public Consultation on the redesign of Ireland's Energy Efficiency Obligation Scheme (EEOS)

Date 30th April 2021

Introduction

The Renewable Gas Forum of Ireland (RGFI) is a not-for-profit industry forum which represents the interests of all parties in the renewable gas industry across the island of Ireland, North and South. RGFI has taken responsibility for the promotion and dissemination of knowledge of the benefits that renewable gas presents for Ireland. RGFI is working with its members and policy makers to identify opportunities and deliver real solutions to meeting Ireland's decarbonisation and climate challenges for the benefit of society as a whole.

Ireland is currently facing many challenges, none more than meeting the EU 2030 targets for decarbonisation and renewable energy production, now that the 2020 targets have been missed. There is no time to lose in our endeavours to meet 2030 targets and achieve the levels of sustainability and competitiveness required for Ireland Inc. to maintain its attractiveness for Foreign Direct Investments and assist our indigenous industries to remain competitive in global markets.

Renewable Gas offers a significant opportunity for rural Ireland. With the support of local communities and the agri sector, Ireland can play its part in addressing Climate Change, putting the environment front and centre through sustainable best practices and efficient management of natural resources. Future employment throughout rural Ireland can be secured by producing renewable gas from feedstocks such as slurries, excess grass and rotation crops.

The European Commission has shown Ireland as having the largest potential to produce Biomethane in Europe, estimating that 11% of current natural gas demand substitution is achievable by 2030.

The pillar industries in Ireland of agri food, drinks, biopharma, beverages and biomedical have mandatory targets to become carbon neutral by 2030. These industries have identified the absolute necessity to be sustainable and competitive in the global markets, maintaining the interest of the global consumer to purchase Irish produce. Achieving these targets is heavily reliant on the establishment of a Renewable Gas industry in Ireland.

The full supply chain of the Renewable Gas industry in Ireland is ready and willing to deliver on 11% Renewable Gas biomethane penetration by 2030. The economic, environmental and health benefits of supporting a Renewable Gas industry has been proven to provide a net positive benefits for Irish society as a whole.

Renewable Gas offers the lowest cost (1/3rd the cost of the alternatives) and least disruptive solution for Renewable Heat, delivering 90% efficiencies through autonomous use on site with CHP and condensing boilers.

At this point the Renewable Gas industry of Ireland needs the Government to declare policy support for biomethane, from across multiple departments, in the interest of Ireland Inc. Communities and Industries in Ireland are ready to play their part in the step change required to make Ireland a sustainable, competitive and global leader in renewable energy.



We appreciate the opportunity to participate in the public consultations on the Energy Efficiency Obligation Scheme (EEOS) and acknowledge the need to ensure energy efficiency in playing a role in emissions reduction.

The Department of Environment and Climate Change have an energy policy that has three core objectives: sustainability, security of supply and competitiveness. These objectives apply across the energy sectors of electricity, heat and transport. The objective is to ensure a secure, competitive and sustainable energy system which supports the transition to a low carbon economy while minimising cost.

The EU Commission in the Energy System Integration Strategy promotes the energy system integration, with the coordinated planning and operation of the energy system as a whole, across multiple energy carriers, infrastructures and consumption sectors – is the pathway towards an effective, affordable and deep decarbonisation of the European economy in line with the Paris Agreement and the UN's 2030 Agenda for Sustainable Development.

The Commissions recovery plan presented on 27th may 2020 highlights the need to better integrate the energy system, as part of its efforts to unlock investment in key clean technologies and value chains and increase economy-wide resilience. In addition, the EU sustainable finance taxonomy will guide investment in these activities to ensure they are in line with our long term ambitions. An integrated energy system will minimise the costs of transition towards climate neutrality for consumers and open new opportunities for reducing their energy bills and active participation in the market.

This Strategy sets out a vision on how to accelerate the transition towards a more integrated energy system, one that supports a climate neutral economy at the least cost across all sectors – while strengthening energy security, protecting health and the environment, and promoting growth, innovation and global industrial leadership.

Energy Consumers First

Clear and easily accessible information is essential to enable citizens to change energy consumption patterns and switch to solutions that support an integrated energy system. Customers – citizens and business alike – should be informed on their rights, on the technology options available to them and their associated carbon and environmental footprint, so they can make an informed decision on choices and truly drive decarbonisation. It is important that vulnerable households are not left behind and energy poverty is addressed, in line with the European pillar of Social Rights (principle 20) that guarantees the access to essential services, including energy.

Being able to fulfil the Government objectives of sustainability, security of supply and competitiveness should be a priority for all available renewable heat technologies, placing the department in a position to provide policy support and potentially funding supports for the roll out to consumers to select the best solution for their specific renewable heat needs.

In light of recent decision by the Supreme Court, Government and by default the renewable heat industry should be in a position to be able to stand over the proposed renewable heat technologies with reliability and warranty, supported by a full cost benefit analysis in line with public spending code.

The Navigant Report Gas for Climate the optimal role for gas in a net zero energy system with gas used per sector and resulting in energy system cost savings in the optimised gas scenario. RGFI as an industry forum seeks to benchmark the production costs of biomethane against



European average cost of biomethane production in order to be competitive, an important principle in putting the consumer first.

The EU Commission's Clean Energy package, adopted in 2018, provides a basis for better integration across infrastructure, energy carriers and sectors; however, regulatory and practical barriers remain. Without robust policy action, the energy system of 2030 will be more akin to that of 2020 than a reflection of what is needed to achieve climate neutrality by 2050.

This strategy sets out a vision on how to accelerate the transition towards a more integrated energy system, one that supports a climate neutral economy at the least cost across sector – while strengthening energy security, protecting health and the environment, and promoting growth, innovation and global industrial leadership.

Consultation Response

It is the opinion of Renewable Gas Forum Ireland that the while Article 7 (2) of the Energy Efficiency Directive provides for flexibility in how the target is calculated. It is also important to note that RGFI expects to see objective and non-discriminatory manner in assessing all renewable heat technologies and emphasis on the lowest cost solution to applying the most appropriate technology.

While the production of biomethane from AD is more expensive than its natural gas alternative, it is a mature, proven and well-established technology and if optimised and utilised for the right purposes, can represent the lowest cost solution, or in some instances, the only solution for decarbonising heat demand for some of the most challenging carbon emission points in Ireland.

While biomethane can be used to decarbonise a wide range of sectors, such as electricity, heat and transport, given that demand for its use is likely to exceed production volume, it is important that it is targeted at the sector where it has the most impact.

KPMG research and third-party studies indicate that the optimum deployment of biomethane is in the displacement of fossil fuels where limited other cost-effective decarbonisation options exist including domestic heating (9% of Ireland's GHG emissions) and industry (9% of Ireland's GHG emissions).

Based on consultation with industry, gas consumers and the agricultural community, there is strong appetite for the establishment of an indigenous biomethane industry in Ireland.

With nearly two thirds of farming enterprises in Ireland either uneconomic or at a break-even level, there is significant demand for alternative and diversified farming opportunities. In particular, uneconomic beef and tillage farmers have expressed appetite to diversify their land into high yielding crop production (e.g. grass silage), however currently don't have sufficient confidence of a long-term market for this increased output. Such farmers recognise that a robust AD biomethane industry would provide the security and certainty of demand they require, while assisting in the decarbonisation of the wider agricultural sector.

Particulars

- 1. We support "energy efficiency first" as a sector and measures that support rural energy consumers to reduce energy consumption and implement cost effective Energy Efficiency measures
- 2. The proposed EEOS scheme involves <u>substantial</u> obligation increases for our sector but in addition, the <u>removal of our ability to meet our obligation</u> (gas boiler ban)
- 3. In addition, the <u>calculation methodology proposed</u>, switching from primary energy to final energy, results in an <u>unfair advantage for the electrification sector</u> with a significantly reduced obligation, to the detriment of the rural gas (liquid fuel) consumers.



- 4. With the increased burden and effectively the subsidisation of the electricity market and urban consumers, rural consumers are being put at a distinct disadvantage.
- 5. As a result, energy costs will increase and affordable energy efficiency measures like the upgrade to highly efficient gas boilers suitable for homes and businesses located beyond the natural gas grid have been removed.
- 6. Our sector <u>will effectively be forced to promote expensive 'deep retrofit' solutions</u> to older rural homes and the <u>resulting disconnect with our consumer base on the role of lower carbon gas and renewable gas to heat and fuel homes and businesses.</u>

RGFI opinion is that the following would be designated bodies to include all CHP users, ETS heat sector, network operators, shippers & suppliers and independent heat users, all cement production, all ETS and non ETS heat consumers should be captured. End users groups to include heat and CHP usage in the ETS and non ETS sectors.

Renewable Heat Plan - scenario

RESH_Max: this scenario represents a radical ambition for the transformation of the heating sector, leveraging a much larger share of the accessible renewable resource potential to further decarbonise it. It builds on the RESH_7% scenario and assumes that district heating is deployed in all high density areas and meets 35% of the residential and tertiary heat demand. District heating sources its heat from high temperature sources (70%, surplus heat and deep geothermal), and from low temperature surplus heat sources in combination with heat pumps (25%, from data centres, grey water and rivers), and some biomass (5%) 25. RESH_Max also provides for a very ambitious renewable gas supply, in line with the RGFI projections for 2030 which includes tripling the use of BioLPG for rural heat and in industrial applications. This scenario represents a forceful response to the climate emergency and is a step further in achieving net zero carbon status at national level by 2050.

The report provides a breakdown of energy related CO2 emissions across all the scenarios and indicate that 6 million tonnes of CO2 have been avoided with scenario RESH_7%, and 9 million with scenario RESH_Max, compared to 2018 levels. That's a 48% and 67% reductions of emissions in the heating sector respectively, 17% and 24% reductions in energy related emissions, or 10% and 15% reductions in overall national greenhouse gas emissions. These CO2 emission reductions have been achieved despite a projected 14% growth in heat demand between 2018 and 2030. The displacement of coal, peat and oil in heating also means significant improvements in air quality, in particular in urban areas.

Renewable gas in heat demand can play a key role in meeting the Programme for Government target of annual 7% GHG reduction, and put Ireland on a strong footing to achieve zero carbon status by 2050. From the point of view of CO2 emission reduction, the marginal cost of further decarbonising the national heat supply between the RESH_7% scenario is €86/tCO2, and €66/tCO2 with RESH_Max (see Figure 13). The lower marginal cost of CO2 reductions with the RESH_Max scenario can be explained by a combination of economies of scale as the renewable heat sector becomes the dominant player in the national heat supply.

Conclusion

The increased targets in emissions reduction will require all renewable technologies to be included and renewable gas has a key role to play, we recommend RESH_Max is promoted to achieve the emissions savings outlined above. Focus on consumer first, informed choices and selecting the renewable technology most appropriate and economically viable. Decarbonisation of heat through the primary energy of renewable gases to achieve efficiencies, scalability, and most economically beneficial.