Biofuels Obligation Scheme

Department of Communications, Climate Action & Environment

Gas Networks Ireland Response

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Part of ervia group

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1 Introduction

Gas Networks Ireland (GNI) welcomes the opportunity to respond to the Department of Communications, Climate Action & Environment (the Department) Biofuels Obligation Scheme consultation.

GNI is supportive of the introduction of an advanced biofuel obligation, and also believes that Compressed Natural Gas (CNG) should be subject to a full biofuel obligation. Ireland has a huge opportunity to benefit from indigenous biomethane production which can be used as a direct substitute for natural gas in CNG vehicles with no technical limitations.

To see GNI's ambition in terms of CNG and biomethane injection points please refer to the Q17 response below.

GNI owns, operates, builds and maintains the gas network in Ireland and ensures the safe and reliable delivery of gas to its customers. The company is responsible for transporting natural gas through 14,390km of pipeline networks. The gas network supplies energy to over 700,000 customers, including businesses, domestic users and power stations. GNI believes that gas and the gas network are integral to Ireland's energy system and future.

2 Consultation Questions

Question 1 (a): Do you consider these blending levels to be a suitable balance of feasibility and ambition?

Yes, GNI supports the proposed blending levels to further decarbonise liquid fuels.

Question 1 (b): Do you consider the approach to increasing the biofuel obligation rate appropriate?

Yes, GNI considers the approach appropriate.

Question 2 (a): What do you view as the technical and consumer challenges associated with a blending level of 10% by volume in petrol on average?

No response.

Question 2 (b): What do you view as the technical and consumer challenges associated with a blending level of 12% by volume in diesel on average?

No response.

Question 2 (c): What types of biofuel would you expect to be used to meet these increased blending levels?

GNI supports sustainably produced indigenous biofuels to meet the obligation. Locally produced biofuels should have a lower carbon footprint relative to imported biofuels that are transported long distances to Ireland.

Question 2 (d): Are such fuels available in sufficient quantities to meet the needs of the Irish market?

No response.

Question 2 (e): What actions are needed (outside of the Biofuels Obligation Scheme) to support the increase in blending levels (e.g. consumer communication)?

No response.

Question 2 (f): What is the expected cost to consumers associated with increasing the blending levels?

GNI does not have specific projections for costs to consumers related to the increased blending levels. However, GNI would like to highlight that blending natural gas with biomethane for CNG is not subject to the technical compatibility issues that apply to diesel/petrol and can support up to 100% biomethane.

Question 3 (a): Do you consider the move to an energy-based obligation appropriate?

Yes, using an energy based obligation is equitable and has the advantage of allowing clear comparison between different types of fuels.

Question 4 (a): Do you consider the timing of changes to the Biofuels Obligation Scheme appropriate?

Yes introducing the changes in 2022 should allow sufficient time for production markets to be developed and for fuel suppliers to source biofuel. The introduction of a target and funding model for biomethane will support an indigenous biomethane market.

Question 5 (a): Do you consider the approach to introducing an advanced biofuel obligation appropriate?

Yes, GNI is supportive of the proposed approach but an indigenous biomethane market needs to be in place with sufficient indigenous supply prior to the introduction of an obligation. Indigenous biomethane would improve energy security of supply and have wider economic benefits as detailed in the SEAI report[1] "Assessment of Cost and Benefits of Biogas and Biomethane in Ireland".

The introduction of an advanced biofuel obligation should drive innovation in the biofuels sector, increasing competition in the industry and likely lowering fuel prices for consumers.

GNI has recently proposed to DCCAE that the Government commit to an interim target of 3TWh of biomethane grid injection by 2026 in the National Energy and Climate Plan (NECP) and implements a biomethane support scheme in response to Action 130 in the Climate Action Plan (CAP). The 3TWh biomethane target by 2026 is consistent with a trajectory to 11TWh of biomethane within a ten year period from when biomethane supports are put in place.

A 3TWh supply of biomethane would provide energy to circa 6000 heavy goods vehicles (HGV's) or 272k residential properties per annum[2].

Question 5 (b): What biofuels do you envisage contributing to meeting this obligation?

Indigenously produced biomethane could meet this obligation in the near term. In the longer term hydrogen could be used to meet part of this obligation.

Question 6 (a): Do you consider the approach to include both the road and rail transport as obligated parties appropriate?

Yes, it makes sense to align the approach with the Renewable Energy Directive.

[1] SEAI Report: https://www.seai.ie/publications/Assessment-of-Cost-and-Benefits-of-Biogas-and-Biomethane-in-Ireland.pdf

[2] Assuming annual energy usage of 500,000KWh per HGV and 11,000KWh per residential property per annum.

Question 7 (a): Do you consider the approach to exempting certain fuels from the obligation to be appropriate?

GNI suggests that in the case of CNG a full obligation consistent with diesel be introduced in 2022 and advocates for indigenous biomethane to meet this commitment. Given the expected size of the CNG fleet this obligation will not require large volumes of biomethane in the near term and production should be able to meet demand.

With double counting of energy from waste it is likely that this obligation would be met by biomethane produced from waste. There are a number of existing waste to biogas producers in Ireland that are availing of REFIT (or have used the scheme in the past). These producers may consider upgrading this biogas to biomethane for grid injection in future.

Equally biomethane produced using a mix of animal slurries and organic substrates (consuming feedstocks from Annex IX of the recast Renewable Energy Directive), is eligible for double counting and could be used to meet the obligation.

Introducing this obligation should help provide a market for indigenous biomethane encouraging the development of the production sector.

CNG is a relatively new fuel to the market with vehicles costing slightly more than their diesel equivalents. GNI has previously provided funding to vehicle operators to assist with the purchase of CNG vehicles through a vehicle grant scheme under the Causeway Project and intends doing the same in the future under the Green Connect Project. This vehicle grant scheme intends to provide up to 20% of the price difference between a diesel and CNG vehicle. There is an opportunity for the government to contribute funding to the GNI scheme to make a higher percentage available to vehicle operators purchasing CNG vehicles.

Question 8 (b): Do you consider the approach to issuing energy credits appropriate?

Yes. The scheme should also be aligned with existing renewable energy certificate schemes. GNI is establishing an Irish Green Gas Certification Scheme operating on an energy basis. It should be possible to convert certificates from this scheme to be used for the biofuels obligation, doubling the value of energy credits where suitable feed stocks are used to produce the biomethane.

Question 9 (a): Do you consider the approach to applying multipliers to be appropriate?

Yes, GNI believes it is appropriate to apply multipliers.

Question 9 (b): Do you consider the approach to applying multipliers impacts the risk of fraud?

Yes, multipliers most likely increase the risk of fraud but are necessary to incentivise markets to produce energy from certain sources and should be implemented.

Question 10 (a): Do you consider the approach to biofuels produced from feedstocks that are considered a high risk (from indirect land use change perspective) appropriate?

Yes, it is appropriate to limit the production of biofuels from unsustainable sources such as palm oil.

Question 11 (a): Do you consider the approach to biofuels produced from food and feed crops appropriate?

Yes, GNI supports limiting the production of biofuels from food and feed crops to the proposed percentages.

In the case of biomethane GNI is in the process of setting up an Irish Green Gas Certification Scheme. Only biomethane that is certified by one of the existing three EU accredited voluntary schemes (ISCC / Red Cert / Better Biomass) will be accepted under the Irish scheme.

This will ensure that green certified biomethane produced in Ireland will at a minimum meet the sustainability criteria and greenhouse gas reduction values required under the recast EU Renewable Energy Directive.

Question 12 (a): What approach do you think should be adopted in relation to the 1.7% limit on biofuels produced from UCO and animal fats?

No response.

Question 12 (b): Do you consider it appropriate to seek the European Commission's approval for a higher limit and, if so, what evidence would you suggest be used to support such a request?

No response.

Question 13 (a): Do you consider the approach to carryover appropriate?

Yes, this approach should make the scheme simpler to administer.

Question 14 (a): Do you consider the approach to setting the level of compliance fee (or 'buy out charge') to be appropriate?

Yes. The scheme should also take account of instances where an advanced biofuel is not available to any fuel suppliers i.e. suppliers should not be unfairly penalised where the advanced biofuel is not available to purchase in the market.

Question 15 (a): Do you consider the approach to dealing with a potential supply disruption appropriate?

Yes, this flexibility is appropriate to avoid unfairly penalising obligated parties in a supply disruption scenario.

Question 16 (a): What is your opinion on the potential for an obligation scheme (similar to the Biofuels Obligation Scheme) in the heat sector?

Implementing a renewable energy obligation on the heat sector would be a positive step with the timing of introducing such a measure requiring careful consideration.

In the case of gas, GNI believes that the indigenous biomethane market would need to have reached a level of maturity before implementing a renewable energy obligation on the heat sector to ensure that a sufficient scale of indigenous biomethane is available to meet Ireland's renewable heat targets. GNI highlights the positive wider economic benefits of an indigenous biomethane industry as detailed in the SEAI report[3] "Assessment of Cost and Benefits of Biogas and Biomethane in Ireland".

As stated above GNI has recently proposed to DCCAE that the Government commit to an interim target of 3TWh of biomethane grid injection by 2026 in the National Energy and Climate Plan (NECP) and implements a biomethane support scheme in response to Action 130 in the Climate Action Plan (CAP). The 3TWh biomethane target by 2026 is consistent with a trajectory to 11TWh of biomethane within a ten year period from when biomethane supports are put in place. An interim target is proposed to allow an indigenous biomethane industry to become established and proven before committing to further targets.

[3] SEAI Report https://www.seai.ie/publications/Assessment-of-Cost-and-Benefits-of-Biogas-and-Biomethane-in-Ireland.pdf

GNI is proposing that ring-fenced carbon tax revenues from natural gas in the non-ETS sector are used to fund the biomethane support scheme until 2026. GNI proposes that a review be undertaken in 2024/2025 to assess the impact of the initial phase of biomethane supports and to plot the next phase to 2030 and beyond and it is at this point that a heat obligation could be considered and introduced.

Introducing an obligation prematurely would hamper the development of an indigenous biomethane industry, with biomethane certificates being sourced internationally to address supplier obligations. In this case wider economic benefits of biomethane would accrue to other countries instead of Ireland. Additionally, the security of supply benefits from indigenous biomethane production would be foregone if obligations are met through renewable certificates from other countries.

If a decision is made in the near term to implement a heat obligation for gas, priority needs to be given to supporting indigenous production to ensure gas suppliers can access renewable gas within Ireland at competitive rates rather than rely on international certification schemes.

Question 16 (b): What do you see as the technical barriers to introducing such a scheme?

The availability of biofuels could be an issue. A binding signal would need to be given to the market well in advance of the year in which the obligation becomes a requirement to allow producers time to develop infrastructure and produce biofuels.

In terms of biomethane there is no technical barrier or limitation to introducing the gas to the existing network as biomethane is identical in function to natural gas and end users do not need to change their equipment.

Question 16 (c): If a heat obligation scheme was to be introduced, what level of obligation (e.g. in percentage or energy terms) would be appropriate?

GNI suggests that the indigenous biomethane market will need to have reached a level of maturity before implementing the heat obligation scheme to ensure that indigenous biomethane is available to meet Ireland's renewable heat targets hence the recommendation above of a review in 2024/2025.

Per Article 23 of the recast Renewable Energy Directive , 'Mainstreaming renewable energy in heating and cooling', sets out that each Member State shall endeavour to increase the share of renewable energy in the sector by an indicative 1.3% as the minimum annual average calculated for the periods 2021 to 2025 and 2026 to 2030. In the production growth profile GNI submitted to DCCAE the earliest year where renewable gas will exceed the minimum 1.3% annual increment of heat is 2023 when the biomethane volume in the network is forecast to be 726GWh.

Question 17: In addition to the specific questions asked in this consultation, your input is invited in relation to the development of the Biofuels Obligation Scheme for the period 2021 to 2030 including the implementation of the elements relating to renewable transport fuels in the recast Renewable Energy Directive.

GNI is supporting renewable energy use in transport through the development of compressed natural gas (CNG) infrastructure and biomethane injection points. GNI is currently working to develop new biomethane injection points on the gas network with a target of 20% biomethane on the network in the next decade. The first biomethane was introduced through an injection point in August 2019. Biomethane, produced through anaerobic digestion (AD), is a carbon neutral[4] and sustainable source of fuel that can be injected into the gas network and used in the same way as natural gas. When biomethane is utilised by CNG vehicles as bio-CNG, carbon neutral transport can be achieved.

[4] Renewable Gas is considered a carbon-neutral fuel because it comes from organic sources that once absorbed carbon dioxide from the atmosphere during photosynthesis.

Current active projects in the biomethane area include the GRAZE Gas Project[5] which aims to develop a central biomethane injection point in the Mitchelstown area.

The rollout of a network of CNG refuelling facilities has commenced with 14 fast fill CNG stations being installed across the Core TEN-T road network via a project called the Causeway Study[6] that is supported by the European Commission through the CEF Transport Fund[7] and the Commission for Regulation of Utilities (CRU). In December 2018 a new public CNG station opened in Dublin Port. A second public CNG station is currently under construction in Cashel, Tipperary.

Following the completion of planned CNG stations under the Causeway Study a further 21 public refuelling facilities will be built under a project named Green Connect. This is in full compliance with the National Policy Framework[8] (NPF) to support the deployment of alternative fuels in Ireland that was published by Ireland's Department of Transport, Tourism and Sport (DTTAS) in 2017. Green Connect will also include CNG mobile refuelling units for backup, additional renewable gas injection facilities and a CNG vehicle grant scheme to encourage fleet operators to switch to CNG vehicles. In 2018, GNI received approval for €11.6m of EU funding under the CEF Transport Fund for the Green Connect project.

[5] GRAZE Gas: https://www.gasnetworks.ie/corporate/news/active-news-articles/major-step-forward-to-bring-renewable-gas-on-to-gas-network/
[6] Causeway Project: https://www.gasnetworks.ie/business/natural-gas-in-transport/the-causeway-project/
[7] CEF Transport Fund: https://ec.europa.eu/inea/en/connecting-europe-facility/cef-transport
[8] NPF Alternative Fuels Infrastructure: https://www.gov.ie/en/publication/dca438-national-policy-framework/