

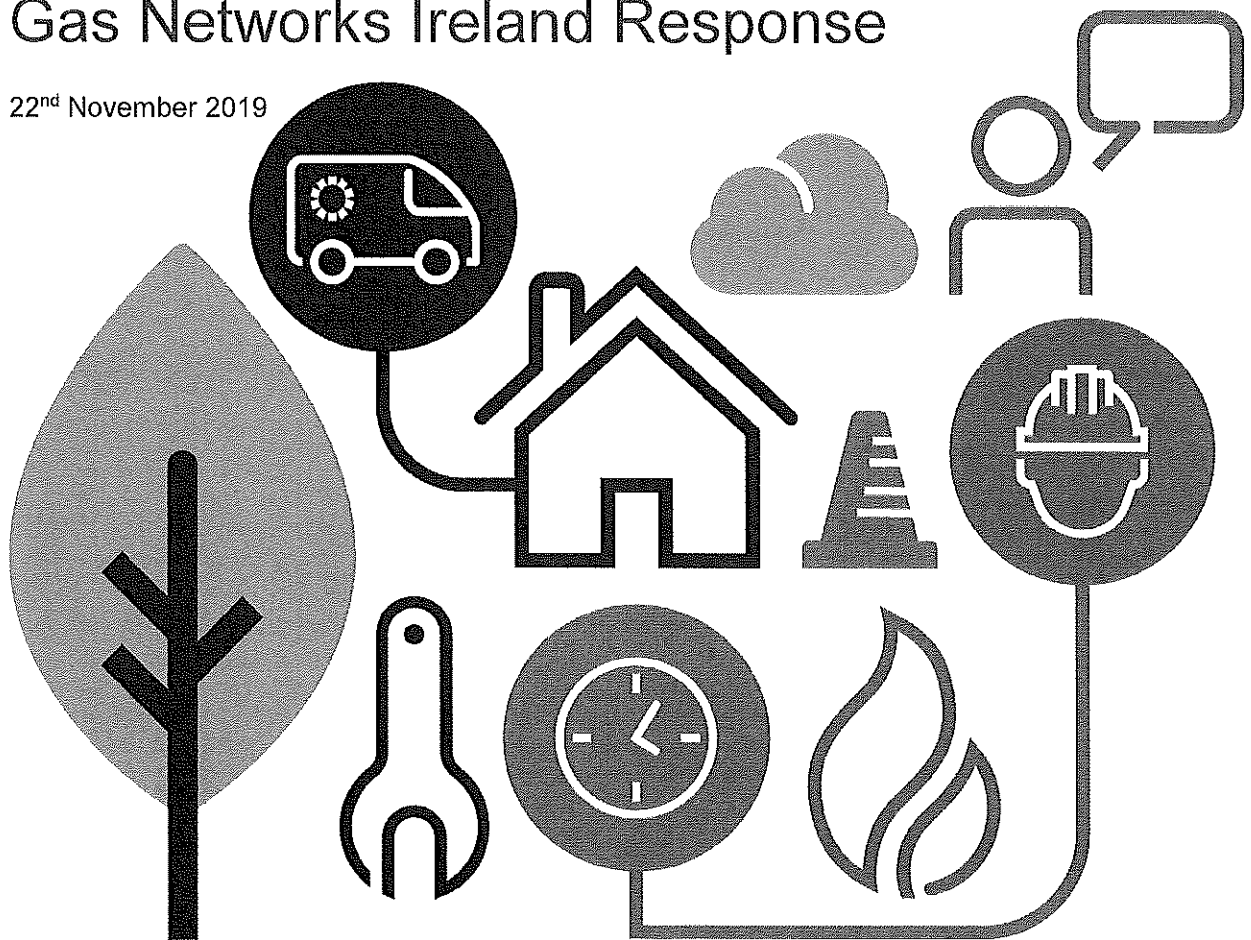
CDP20



Longford County Development Plan 2021-2027 Longford County Council

Gas Networks Ireland Response

22nd November 2019



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1 Executive Summary

Gas Networks Ireland (GNI) welcomes the opportunity to respond to the Longford County Council 'Longford County Development Plan 2021-2027' consultation.

GNI is involved in two initiatives which can benefit County Longford from both an economic and environmental perspective: (i) Development of renewable gas¹ injection infrastructure and (ii) Development of Compressed Natural Gas (CNG²) infrastructure for gas in transport. GNI has provided suggested text below that the County Development plan could include to support these two initiatives. For more information on CNG and renewable gas please see details in section three and four below. GNI has provided answers to consultation questions where appropriate.

GNI would welcome the opportunity to discuss this response in more detail and can provide further information on any of the topics discussed, if required.

2 Consultation Questions

2.1 Transport and Movement (6.0)

What other measures do you think could support the reduction in CO2 emissions?

CNG fuelled Heavy Goods Vehicles (HGVs) and buses would support a reduction in carbon emissions relative to diesel. If these vehicles were to use bio-CNG carbon neutral transport could be achieved. See section four below for more detail on CNG.

GNI suggests that the Transportation and Movement section of the new County Development Plan includes a section with wording supporting CNG infrastructure as follows:

"Compressed Natural Gas Infrastructure

The development of CNG Infrastructure would enable fuel switching from diesel to CNG for heavy goods vehicles (HGVs) and buses. This would lead to a significant reduction in carbon emissions along with air quality benefits for vehicles where currently electricity is not a viable alternative to diesel.

There will be a presumption in favour of applications for CNG infrastructure provided planning and environmental criteria are satisfied."

2.2 Rural Development (8.0)

What policies do you think should be included in the Plan to support rural diversification and industry?

Policies supporting the establishment of anaerobic digestion (AD) plants to produce renewable gas would bring employment and revenue to rural communities. Please see the renewable gas section below for more details.

¹ <https://www.gasnetworks.ie/corporate/company/our-commitment/environment/renewable-gas/>

² Compressed Natural Gas (CNG) is a fuel used in the transport sector which reduces transport emissions.

2.3 Climate Change and Energy (13.0)

How to do you suggest we transition to a low carbon and climate resilient society?

Careful consideration should be given to any spending to transition to a low carbon and climate resilient society. Funds should be spent on the least cost method to transition ensuring the best value for Ireland. Any technologies being considered should be subject to full life cycle assessments.

What types of renewable energy should be pursued in County Longford and in what areas e.g. solar farms, wind farms?

In addition to wind and solar, the development of anaerobic digestion plants to produce renewable gas should be pursued. The renewable gas section below outlines the benefits of renewable gas.

GNI suggests that the Climate Change and Energy section of the new County Development Plan includes a section with wording supporting renewable gas as follows:

“Renewable Gas

There is potential to produce renewable gas from AD of organic wastes and residues of the agriculture sector and also from domestic/commercial food waste.

Renewable gas is carbon neutral and identical in function to natural gas so the existing network can be used and gas customers do not need to change their boilers or gas powered appliances.

There will be a presumption in favour of applications for anaerobic digestion plants provided planning and environmental criteria are satisfied.”

3 Renewable Gas

Renewable gas, produced through AD, is a carbon neutral³ and sustainable source of fuel that can be injected into the gas network and used in the same way as natural gas. The development of renewable gas production in Longford would have significant benefits for the region:

- **Benefits to Agriculture:** Production of renewable gas in AD plants located in rural areas will provide additional revenue sources for these communities, from the sale of feedstocks for the AD plants, bio-fertiliser and renewable gas. The SEAI estimate that stimulating a renewable gas industry in Ireland could contribute directly to over 5000 jobs during plant construction and over 3000 jobs in plant operations⁴. With ongoing uncertainty regarding agricultural exports to the UK, post Brexit supplementary income streams for farming are important. Also agricultural sector emissions are reduced as the AD process captures greenhouse gases that would otherwise be released to the atmosphere.
- **Carbon neutral fuel source:** As stated above renewable gas is carbon neutral and also supports the circular economy.

³ Renewable Gas is considered a carbon-neutral fuel because it comes from organic sources that once absorbed carbon dioxide from the atmosphere during photosynthesis.

⁴ [SEAI, 2017 Assessment of Costs and Benefits of Biogas and Biomethane](#)

- **Least cost method to decarbonise domestic heat:** Ervia (GNI's parent company) commissioned KPMG to develop and evaluate potential scenarios for the decarbonisation of the one million Irish residential homes currently connected to, or within close proximity to the existing gas network. The study⁵ concluded that renewable gas is the lowest cost option to decarbonise the domestic heat sector and avoids the need for deep retrofits to convert properties to a BER rating required for electric heating to work effectively.
- **Utilises existing infrastructure:** The gas network is a significant piece of energy infrastructure, with €2.5bn invested in the network to date. Renewable gas is identical in function to natural gas so the existing network can be used and gas customers do not need to change their boilers or gas powered appliances.
- **Indigenous energy source:** Renewable gas, produced through AD in Ireland, provides both security of supply and diversity of supply benefits. Having an indigenous source of energy reduces the likelihood of disruption to supply due to issues in other countries.
- **Carbon neutral power generation:** When renewable gas is used to generate electricity carbon neutral electricity is produced.

Current active projects in the renewable gas area include the GRAZE Gas⁶ project which aims to develop a central renewable gas injection point in the Mitchelstown area. GNI has a target of 20% renewable gas on the network in a ten year period from when supports are available.

4 CNG

HGVs are responsible for a disproportionate amount of transport emissions. HGVs comprised 4% of registered vehicles nationally in 2017, however, SEAI estimates indicate that they produced 18% of total transport emissions. Decarbonisation of HGVs and buses is particularly challenging as electricity is currently not a viable alternative to diesel. CNG has the potential to address these transport emissions with significantly reduced carbon emissions relative to diesel. When the production of renewable gas is increased on the gas network, and this gas is utilised by CNG vehicles as bio-CNG, carbon neutral transport can be achieved.

In addition to reduced carbon emissions, CNG also provides improved air quality with 99% less particulate matter, 70% less Nitrogen Oxide, and 80% less Sulphur Dioxide relative to diesel.

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 Study⁷ that is supported by the European Commission through the CEF Transport Fund⁸ and by the Commission for Regulation of Utilities (CRU).

In December 2018 a new public CNG station opened in Dublin Port. This project helps support the 'National Policy Framework: Alternative Fuels Infrastructure for Transport in Ireland (2017 to 2030)', which sets out a target network of 70 CNG refuelling stations by 2025⁹. This document also forecasts Alternative Fuelled Vehicles for 2025 and 2030 i.e. 4,050 CNG commercial vehicles and 1,000 CNG buses in Ireland

⁵ KPMG, *Decarbonising Domestic Heating in Ireland*, June 2018

⁶ Graze Gas: <https://www.gasnetworks.ie/corporate/news/active-news-articles/major-step-forward-to-bring-renewable-gas-on-to-gas-network/>

⁷ <https://www.gasnetworks.ie/business/natural-gas-in-transport/the-causeway-project/>

⁸ CEF Transport Fund: <https://ec.europa.eu/inea/en/connecting-europe-facility/cef-transport>

⁹ *National Policy Framework: Alternative Fuels Infrastructure for Transport in Ireland (2017-2030)*

by 2025, growing to 6,050 CNG commercial vehicles and 1,500 CNG buses by 2030. Construction is currently underway on a new CNG station in Cashel, Co Tipperary.

Under the Causeway Study, GNI offered a publicly available fund to support the purchase of CNG vehicles by commercial operators. This fund was fully subscribed and is helping fleet operators to transition some of their fleet to CNG which provides fuel savings of up to 35% compared to diesel.