

Issues Paper - Public Consultation Offaly County Development Plan 2021 - 2027

Gas Networks Ireland Response
26th September 2019



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1 Executive Summary

- Gas Networks Ireland (GNI) welcomes the opportunity to respond to the Offaly County Council (the Council) consultation on the Offaly County Development Plan 2021-2027.
- GNI asks that the Council considers the role that renewable gas¹ and Compressed Natural Gas (CNG²) can play in bringing economic growth and environmental benefits to County Offaly and includes both technologies in the Offaly County Development Plan 2021 – 2027.
- Transportation of energy through gas pipelines is the most efficient mode to transport energy and GNI supports the expansion of the gas network to new areas or new towns in line with the CRU approved Connections Policy³ for gas which ensures that any further expansion of the network is completed in an economically viable manner.
- GNI would welcome the opportunity to discuss this response in more detail and can provide further information on any of the topics discussed below, if required.

2 Response to Consultation Questions

GNI has reviewed the consultation document and has provided the comments below for the Councils consideration.

2.1 Climate Action & Energy

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

As part of the journey to decarbonisation GNI recommends that the Council embrace renewable gas and CNG in addition to other renewables and methods of decarbonisation.

CNG vehicles provide an alternative to diesel vehicles for buses and heavy goods vehicles (HGVs) where electricity is not currently a viable alternative. 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 Study⁴.

If renewable gas is utilised by CNG vehicles as bio-CNG, carbon neutral transport can be achieved.

GNI suggests that full Life Cycle Assessments (LCAs) are completed before decisions on decarbonisation technologies are made to ensure the least cost method is selected.

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.

³ Gas Networks Ireland Connections Policy: <https://www.gasnetworks.ie/business/get-connected/commercial-connection-costs/Gas-Networks-Ireland-Connections-Policy-Document-Revision-5.0.pdf>

⁴ <https://www.gasnetworks.ie/business/natural-gas-in-transport/the-causeway-project/>

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

In addition to wind and solar GNI suggests that the Council considers the production of renewable gas from anaerobic digestion (AD) of organic wastes and residues by the agricultural sector. Renewable gas is a carbon neutral and sustainable source of fuel that can be injected into the gas network and used in the same way as natural gas.

There is significant potential to reduce agricultural carbon emissions through the production of renewable gas. This reduction can be attributed to the following actions:

- **Avoided methane emissions from animal slurry:** Slurry naturally emits methane. By sending it to AD plants, methane can be successfully captured and emissions avoided. This methane is then used in the production of renewable gas.
- **Production of digestate (high potency bio-fertiliser):** There are carbon emissions associated with the production and transportation of chemical fertiliser products. Replacing chemical fertilisers with digestate (a naturally occurring by-product of the AD process) will result in avoided emissions for the agricultural sector. Additionally, as this digestate is of a high quality, its application to land can result in higher levels of carbon being sequestered into the soil, with the land becoming a carbon sink.
- **Utilisation of agricultural wastes and catch/rotation cropping:** The re-use of agricultural waste streams within the farm and catch cropping during periods of no rotation results in reduced emissions through better resource management and promoting the sequestration of carbon into the soil.

There are a number of additional benefits to using renewable gas:

- **Carbon neutral fuel source:** Renewable gas is carbon neutral and also supports the circular economy.
- **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.
- **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.

Current active projects in the renewable gas area include the GRAZE Gas Project⁶ which aims to develop a central renewable gas injection point in the Mitchelstown area. In addition, GNI has plans to develop central grid injection facilities for renewable gas injection in other parts of Ireland as well.

⁵ <https://www.ervia.ie/decarbonising-domestic-he/KPMG-Irish-Gas-Pathways-Report.pdf>

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

2.2 Rural Areas

How do you suggest we strengthen our rural economies and communities?

Locating AD plants in Offaly would provide additional revenue sources for rural communities, from the sale of feedstocks for the AD plants, bio-fertiliser and renewable gas. The SEAI⁷ estimates that stimulating a renewable gas industry in Ireland could contribute directly to over 5000 jobs during plant construction and over 3000 jobs in plant operations. With ongoing uncertainty regarding agricultural exports to the UK, post Brexit supplementary income streams for farming are important.

⁷ [SEAI, 2017 Assessment of Costs and Benefits of Biogas and Biomethane](#)