

Draft Wicklow County Development Plan 2021-2027

Wicklow County Council

Gas Networks Ireland Response

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Online Submission





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Introduction

Gas Networks Ireland (GNI) welcomes the opportunity to respond to the 'Draft Wicklow County Development Plan 2021-2027' consultation. GNI would like to draw the Council's attention to two initiatives i.e. renewable gas production via anaerobic digestion (AD) and compressed natural gas (CNG) in transport. Both of these initiatives could be of benefit to Wicklow from an economic and environmental perspective. 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 over 14,500km 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.

Consultation Response

Chapter 12 Sustainable Transport

Transport emissions are a key issue to be addressed in Ireland. Heavy Goods Vehicles (HGVs) are responsible for a disproportionate amount of transport emissions. They comprised 4%¹ of registered vehicles nationally in 2018, however, SEAI estimates indicate that they produced 14% of total transport emissions. The decarbonisation of HGVs is particularly challenging as electricity is currently not a viable alternative to diesel. CNG is a potential option with reduced carbon emissions relative to diesel. When the injection of renewable gas is increased on the gas network, and utilised by CNG vehicles as bio-CNG, carbon neutral transport can be achieved. GNI would welcome the inclusion of an additional section in Chapter 12 Sustainable Transport of the Draft Wicklow County Development Plan 2021-2027 about CNG in transport as outlined below:

"Compressed Natural Gas (CNG)

CNG is natural gas that has been compressed to fit into a vehicle's tank and is particularly suitable for use in commercial vehicles. The development of CNG Infrastructure will enable fuel switching from diesel to CNG for heavy goods vehicles (HGVs) and buses. CNG is an established technology that is used in many countries around the world. CNG contains virtually no particulate matter (PM) and has low emission levels of nitrogen oxides (NOx)². CNG vehicles can be run on 100% biomethane. Biomethane is a renewable and carbon neutral fuel, produced via AD plants from existing waste streams and a variety of sustainable biomass sources, including grass, animal waste, crop residues and food waste. Infrastructure development for CNG is already underway in Ireland, with 14 fast fill CNG stations being installed across the Core TEN-T road network via a project called the Causeway Study³ that is supported by the European Commission through the CEF Transport Fund⁴ and the Commission for Regulation of Utilities (CRU). The Council will support the use of gas in transport by a presumption in favour of applications for CNG refuelling infrastructure, provided planning and environmental criteria are satisfied."

The development of CNG in transport supports 'The National Policy Framework: Alternative Fuels Infrastructure for Transport in Ireland⁵' which sets out a target of 70 CNG fuelling stations by 2025.

¹ In calculating this figure SEAI include all goods vehicles over 2 tonnes.

² https://www.ngva.eu/policy-priorities/air-quality/

³ Causeway Study: https://www.gasnetworks.ie/business/natural-gas-in-transport/the-causeway-project/

⁴ CEF Transport Fund: https://ec.europa.eu/inea/en/connecting-europe-facility/cef-transport

⁵ National Policy Framework Alternative Fuels Infrastructure For Transport In Ireland https://assets.gov.ie/26377/3075c29a37b84b10acae95da89d756ea.PDF

The Climate Action Plan has an action to develop the CNG fuelling network to support the uptake of CNG vehicles (Action 76) which is supported by the Causeway Study. The Interim Climate Actions 2021 document, which was published in March 2021, has an action (Action 123) to commission three CNG fuelling stations and to progress the remaining stations planned for the network by Q4 2021. In addition, the Regional Spatial and Economic Strategy (RSES) for the Eastern and Midlands Region⁶ highlights the decarbonisation of transport as an objective and calls for modal shift to be supported by increased availability of low carbon fuels such as CNG. The RSES also highlights the use of CNG powered commercial vehicles as a means of addressing air pollution emissions.

Section 15 Waste and Environmental Issues

GNI welcomes the inclusion of CPO 15.4 which is about facilitating the development of waste-toenergy facilities, particularly the use of landfill gas and biological waste, and the fact that Wicklow County Council recognises that waste disposal and damaging emissions to the environment are one of the most problematic areas of environmental management. Agriculture is a necessary part of Irish life, but farms produce waste and that waste must be managed and minimised where possible. The recently published EU Strategy⁷ to reduce methane emissions explicitly identifies the role that AD can play in reducing emissions from agriculture. The EU methane emissions strategy highlights that EU agriculture is the biggest contributor to man-made methane emissions, accounting for 53% of all emissions, followed by 26% from waste and 19% from energy. Within agriculture itself, most of these emissions come from livestock with enteric fermentation accounting for around 80% of all methane emissions, and close to 20% coming from manure management. AD plants can utilise a wide variety of feedstocks ranging from food wastes, to animal slurries and specifically grown energy crops such as grass silage. These feedstocks are broken down to produce biogas, which can be upgraded to biomethane. This biomethane can then be injected into the gas network at appropriate points and transported to all gas consumers. Anaerobic digestion is a way of minimising wastes and contributing to the circular economy with the production of renewable gas and digestate/bio-fertiliser.

Chapter 16 Information Communications and Energy

GNI welcomes the inclusion of bioenergy objective CPO 16.9 which is about facilitating the development of projects that convert biomass to gas or electricity. Anaerobic digestion can be used as a key element in Ireland's move towards a more sustainable economy. Biomethane produced by anaerobic digestion (AD) is a renewable and carbon neutral fuel that can be used in heat, transport and electricity production. It is identical in function to natural gas so the existing gas network can be used, and gas customers do not need to change their boilers or gas-powered appliances. There is significant potential for biomethane production from sources including grass, animal waste, crop residue, food and other waste streams. The production of indigenous biomethane in Ireland, not only enhances security of supply but will provide significant benefits to the local agriculture sector and economy in the region. The AD process captures greenhouse gases and therefore, agricultural sector emissions are reduced that would otherwise be released to the atmosphere. By supporting the development of anaerobic digestion plants, Wicklow can help to reduce its carbon emissions.

Conclusion

GNI asks that Wicklow County Council considers the above comments and would welcome the opportunity to discuss this response in more detail.

⁶ https://emra.ie/dubh/wp-content/uploads/2020/05/EMRA_RSES_1.4.5web.pdf

⁷ https://ec.europa.eu/energy/sites/ener/files/eu_methane_strategy.pdf