

**Uimhir Thagarta Uathúil:** KCC-C55-303

Stádas: Submitted

Aighneacht: Low carbon and renewable gases

Comhairliúchán: Dáta a cuireadh isteach: 23.05.2022 - 20:24

Draft Kildare County Development Plan 2023 - 2029

## Hydrogen

Caibidil: Volume 1 - chapters » 7 - Energy &

Communications

Ábhair: energy

Gas Networks Ireland welcomes the inclusion of gas and the gas network in this chapter of the Draft Kildare County Development Plan 2023 – 2029, however, we would like to make two suggestions:

Údar: Gas Networks Ireland

1. As hydrogen has been identified as a key enabler of Ireland's and Europe's decarbonisation ambitions, Gas Networks Ireland suggests adding a short section on hydrogen under the first paragraph of section 7.16.

Hydrogen is a carbon free gas that can be produced from renewable electricity. While initially seen primarily as a decarbonisation solution for heavy goods vehicles and industry, because of its versatility, it is now recognised that hydrogen can play a key role in the decarbonisation of large swathes of the economy, power generation, transport, industry and heating. Hydrogen is also well suited to short-term and inter-seasonal storage, making it an attractive option to decarbonise energy systems and a driver of a cleaner energy future for Ireland.

Hydrogen can be blended with natural gas and biomethane or used in its purest form for zero carbon energy. Gas Networks Ireland, along with other leading bodies such as the European Commission, believe that hydrogen will play a critical role in decarbonising the gas network and is supportive of projects which aim to deliver hydrogen to energy customers for various end-uses, in a safe and secure manner. While there are different possible hydrogen supply chains, Gas Networks Ireland believes that the re-use and re-purposing of existing gas network infrastructure is a cost-effective gas transportation model.

Hydrogen in the gas network is not a new concept, as town gas (used in the gas network prior to introduction of natural gas from the 1970s) comprised up to 50% hydrogen.

Interest in hydrogen is growing worldwide with numerous projects underway to assess and demonstrate its production, transport and use. Hydrogen has been identified as a key enabler of Ireland's and Europe's decarbonisation ambitions with significant targets being set by the European Union in relation to hydrogen production.

Hydrogen offers Ireland a clean, versatile and indigenous energy source that can be stored until needed, enhancing Ireland's energy security and supply.

2. Gas Networks Ireland suggests small editorial changes in relation to objective EC 087:

Support and facilitate the production of renewable gases such as hydrogen, produced using renewable electricity, and biomethane, produced largely from agricultural organic matter and food waste, that can be injected into the national gas network, subject to appropriate environmental assessments.

**Documents Attached:** Níl