

Biomethane Energy Report – potential for decarbonising Ireland's gas supplies



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The Gas Network plays a critical role in Ireland's Energy System today



+720,000
Customers connected



Future proofed
One of most modern networks in Europe



Flexible
A secure, instantly available energy source which has made renewable deployment possible









14,664km
of gas pipeline could wrap around Ireland's coastline 4 times



Resilient network
Proven ability to meet demand in harshest weather conditions, ensuring security of supply



Diversity
Supplying energy for power generation, heat and transport

-  Existing Pipelines
-  Pipelines Owned by Others
-  Interconnection Points
-  Entry Point
-  Renewable Gas Entry Point
-  Decommissioned Entry Point



The future – decarbonising our gas network and key sectors



Sectors

Electricity

Industry

Agriculture

Intensive Heat Users

Transport



Technology

Biomethane

Hydrogen

BioCNG for Transport

Speed of biomethane development (Denmark)



Electricity: 25 years

1988

- 1% Electricity from Wind & Solar

2013

- 38% Electricity from Wind & Solar



Gas: 8 years

2015

- 1% Gas consumption from Biomethane

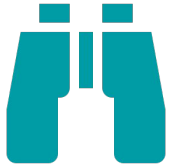
2023

- 38% Gas consumption from Biomethane

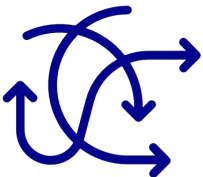
Purpose of the Request for Information on Biomethane Production



The identification of new and feasible biomethane production projects to supply biomethane to the Irish gas network.



This information was used to assess the future infrastructure requirements for biomethane integration into the gas network by comparing the current gas network infrastructure to the mapping of biomethane production potential from the RFI.

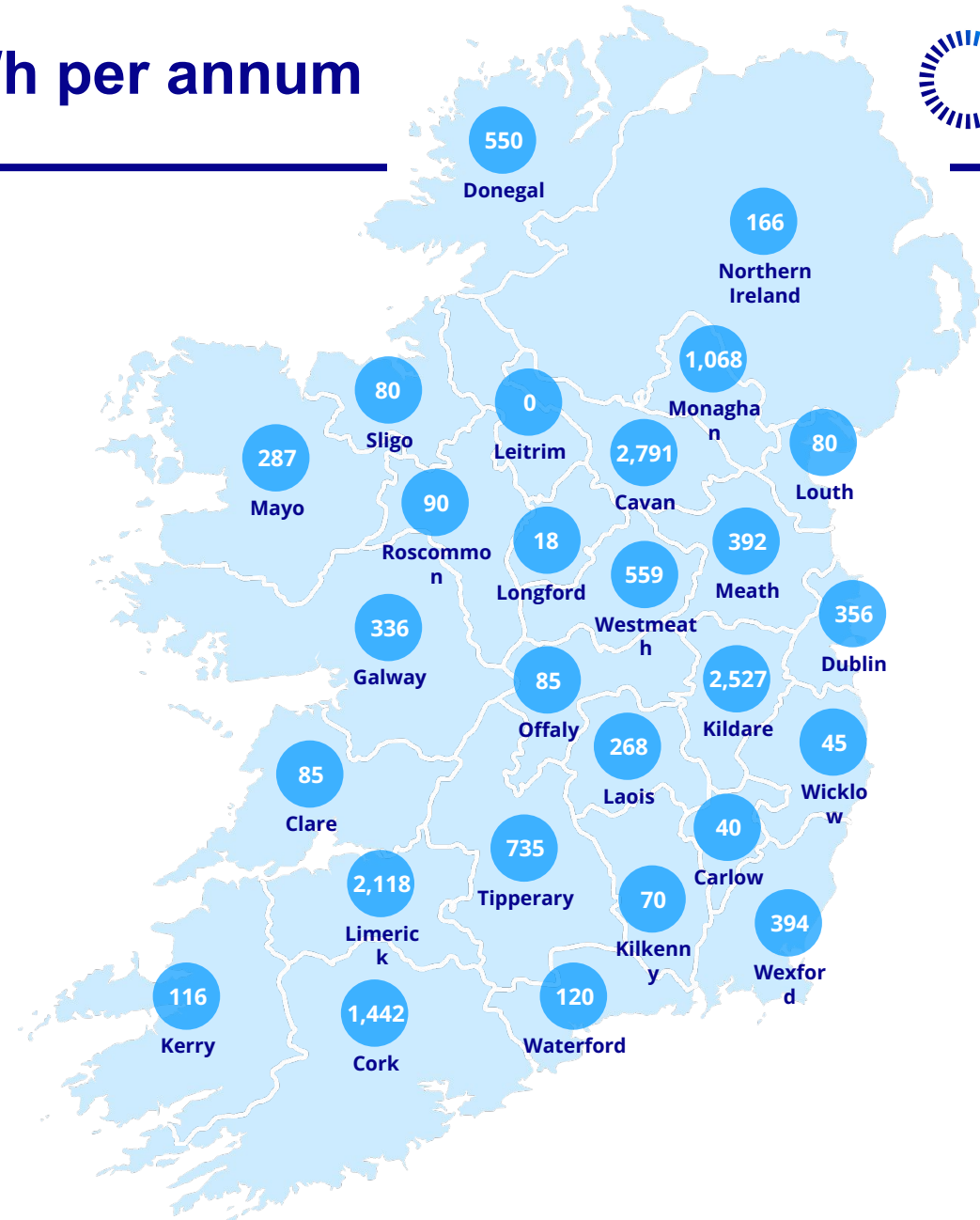


The Biomethane Energy was published by Gas Networks Ireland on the basis of the responses received to this RFI.



Biomethane Production Potential GWh per annum

County	GWh	County	GWh
Carlow	40	Louth	80
Cavan	2,791	Mayo	287
Clare	85	Meath	392
Cork	1,442	Monaghan	1,068
Donegal	550	Northern Ireland	166
Dublin	356	Offaly	85
Galway	336	Roscommon	90
Kerry	116	Sligo	80
Kildare	2,527	Tipperary	735
Kilkenny	70	Waterford	120
Laois	268	Westmeath	559
Leitrim	0	Wexford	394
Limerick	2,118	Wicklow	45
Longford	18		
Grand total			14,818



Annual Production in GWh per annum

Grid Access - Connection Infrastructure Investment €586m



Distribution

72 Projects
9,487 GWh
(64%)

Connection Cost
€413m
(incl. reverse compression)



Transmission

6 Projects
1,981 GWh
(13%)

Connection Cost
€23m



Central Grid Injection

98 Projects
3,351 GWh
(23%)

Connection Cost
€149m

We are ready for Biomethane



2018 Connection Policy



2019 Modified code of operations



2020 Green Cert System



2020 First renewable gas entry point in Kildare



RFI issued to biomethane producers 2022



First direct connected plant contracted 2023



Biomethane Energy Report published 2023



1st Green Certs imported into Ireland 2023



Standard design for direct connections 2024

Our focus is evolving our network and delivering cleaner energy for Ireland



Decarbonisation of the gas network and increased integration with electricity is necessary to achieve net zero by 2050.

Using the gas network and renewable gases to reduce emissions will also enhance energy security and diversity.

Gas Networks Ireland is working to decarbonise Ireland's gas network in line with Irish and European policy.

The gas network remains integral of Ireland's energy mix providing flexibility and security.



Gas
Networks
Ireland

Thank you