gasnetworks.ie



Our strategy 2022-2035



Table of contents

| CEO introduction | |
|---|--|
| Who we are? | |
| Our purpose | |
| Our vision | |
| Our strategic direction and network evolution | |
| Our strategic ambitions and initiatives | |
| Renewable gases biomethane, hydrogen | |
| Security of supply | |
| | |

CEO introduction

I am delighted to share with you a highlevel summary of Gas Networks Ireland's strategy.



Gas Networks Ireland is a business with a clear purpose in **'Keeping Ireland's energy moving'** and an exciting and challenging vision **'To be at the heart of Ireland's energy future'**. Consequently, our strategy is that of a business focused on both "performing" to meet the current energy demands of our consumers and stakeholders and "transforming" our assets and services to meet their future energy needs.

We manage a modern, world-class national gas network providing vital services to Irish homes, businesses and industry, and our organisation has a strong history of delivering for the people of Ireland. The gas network's contribution to Ireland is immense, not only in terms of the scale of energy transported, one third of Ireland's primary energy needs in 2021, but also in playing a vital role in providing resilience to the Irish energy system by supporting Ireland's intermittent wind and solar electricity supplies.

Our external environment is changing rapidly. International energy policy and geopolitical developments are heavily influencing Irish energy decarbonisation, security, affordability and demand and have highlighted the crucial role our network plays in Ireland's energy system. Essentially our strategy is focused on investing to meet current and future gas demands consistent with Ireland's climate action policy. Our strategy seeks to ensure Ireland's gas network is repurposed to increasingly transport and store renewable gases, biomethane and hydrogen, to help deliver Ireland's decarbonisation plans. Our vision involves playing a key role in achieving Ireland's net zero carbon ambitions and doing so in the least cost and least disruptive manner whilst maintaining overall energy system resilience and enhancing energy system security of supply. We must ensure that our network continues to perform for Ireland while at the same time transforming it to carry and store renewable gases. We propose to deliver this through six strategic ambitions which are outlined later in the document.

Our network is already transporting biomethane, but we need to promote and support large scale biomethane production across Ireland, and we are expanding our infrastructure to handle increased volumes. Repurposing the network for hydrogen will happen over the coming years but work has already commenced to enable the network to be ready for the prospect of hydrogen blend through the gas interconnectors with Scotland later this decade and for domestic green hydrogen production in Ireland.

Fortunately, our strategy builds on our past. We have done this before. Ireland's gas network was repurposed in the 1980s, from town gas, which consisted of a hydrogen blend, to natural gas, and our experience and expertise will enable us to do this again, from natural gas to renewable gases, biomethane and hydrogen. We have started the work needed on our network to make the necessary change and our organisation will continue performing while transforming for the people of Ireland. We will engage and work with all our customers and stakeholders in developing and delivering this transformation.

Cathal Marley

Chief Executive Officer

Who we are?

ANNUAL DATE

Gas Networks Ireland are the experts in gas transportation in Ireland.

We own, operate and maintain one of the safest, most reliable and most modern gas transportation networks in the world. Ireland's state-owned gas network consists of 14,664 km of gas pipelines including 2 sub-sea interconnectors with Scotland. We also provide dark fibre broadband infrastructure through our business, Aurora Telecom.



The gas network is performing at the heart of Ireland's energy system and plays a critical role in Ireland's economy, ensuring that over 720,000 homes and businesses receive a safe, affordable and secure supply of natural gas, 24 hours a day, 365 days a year.

Transporting about one third of Ireland's annual Total Primary Energy (TPER), the network meets significant portions of our electricity generation, industrial / commercial and residential energy demands. Gas steps in to generate electricity when intermittent renewable energy sources (wind and solar) are not available and gas is particularly important for many Irish industries that require high-heat for their processes.



The gas network is at the heart of Ireland's energy system



32% of total primary energy



46% of total power generation



33%

of I&C

energy



19% of total domestic energy

(

The gas network is transforming to play a pivotal role in realising EU and Irish energy and climate action ambitions.

The gas network will evolve playing its part to transition Ireland to a net zero carbon integrated energy system. Decarbonising the gas network and increasing integration and interoperability between the gas and electricity systems will enable Ireland to achieve net zero by 2050 in the most cost effective and least disruptive way while enhancing energy security and diversity. In the future our network will always be available to transport renewable gases (biomethane and hydrogen) to complement intermittent renewable electricity and, as Ireland's energy system integrates, our network will provide for scale storage and efficient transportation of green hydrogen.

Our strategic framework

Our purpose Keeping Ireland's energy moving

Our vision To be at the heart of Ireland's energy future

Our transformation roadmap

| | 2022 | 2027 | |
|------------------------------|--|---|--|
| Network evolution | Reliable & preparing for gas diversity | Flexible & focused on enhanced security | |
| Networked decarbonisation | 99%+ natural gas | Biomethane growth & H ₂ readiness | |
| System integration | Occasional joint energy analysis | Integrated energy planning emerges | |

Our strategic ambitions and initiatives



Our strategic direction

Our new strategy sets out how we will continue to operate and maintain our gas network to ensure safe, reliable, affordable and secure supplies while preparing for a future in which networked gas enables an integrated energy system to achieve net zero.

| 2035 | 2050 |
|--|---|
| Network ready for grid diversity | Repurposed / reconfigured network |
| Scale renewables & near H ₂ blend limits | A net zero carbon gas network |
| Integrated energy projects emerge | Central to a 'coupled' energy system |



Our core business remains gas transmission and distribution system operators.



We will decarbonise the network while enhancing security and assuring delivery.



Systems integration is the future and we are committed to working with relevant stakeholders to deliver it.



We will invest to deliver, transform and realise a clean energy future.



Transport energy safely and securely today and enable the transition to a decarbonised future

| Key initiatives | under this | ambition |
|-----------------|------------|----------|
|-----------------|------------|----------|

| Gas network | Develop our network to meet demand and security of supply needs |
|---------------------|---|
| Connections | Deliver new gas-fired powered generation connections |
| Assets & safety | Achieve best in class management and culture |
| Renewable gases | Develop roadmaps, demonstration projects and roll-out programmes |
| Safety cases | Develop and deliver safety cases to facilitate renewable gases on our network |
| Energy modelling | To facilitate better decisions and network investment |



Deliver reliable and affordable energy solutions for our customers, collaborating to transport networked renewable gases at scale

| Renewable gases | Grow a pipeline of producers to enable the displacement of natural gas |
|---------------------------|--|
| Investment | Secure investments complementary to our core gas/energy roles |
| Customer affordability | Focus on charges/tariffs |
| Customer service | Develop and implement a strategy to deliver market-leading experience, to all segments |
| Customer engagement | Ensure customer readiness for changes to our network |



Collaborate with key stakeholders for a future in which networked gas enables an integrated energy system

| Policymakers | Influence policy makers of the potential of networked gas |
|---|--|
| Stakeholders | Collaborate with key energy stakeholders to realise the potential of networked gas |
| Regulators & government departments | Development of the regulatory and tariffing regime to facilitate renewable gases |
| Communications | Develop our communications to tell 'networked gas potential' |
| Consultations | Advocate for network / system resilience |



Operate in an innovative, efficient and sustainable manner

| Sustainable business | Deliver our sustainability strategy |
|-------------------------|--|
| Innovative business | Strengthen innovation and change capabilities to drive performance |
| Efficient business | A top quartile, efficient gas transporter |
| Digital development | Systems transformation, agility and security |
| Data development | For accessibility, reliability and improved insights |



Leverage our past and energise our people to deliver the future of our network

| Culture | Embed an inclusive culture, to motivate, engage and deliver high-performance |
|--------------|--|
| Wellbeing | Enhanced range of support programmes |
| Capabilities | Plan for future business skills needs |
| Talent | Strategy to attract and retain great talent |



Maintain financial strength to facilitate future development of a resilient and sustainable network

| Price controls | Secure outcomes for a sustainable business |
|-----------------------|---|
| Financing | Enhance ESG, financial, risk and governance metrics to access finance |
| Shareholder value | Deliver on our shareholder commitments |
| Scenario modelling | Support decision making and business planning |

Renewable gases



Biomethane

Ireland has the highest potential in Europe to produce biomethane (estimates range from 9.5TWH–13TWH which is substantial given our annual gas demand is about 57 TWH each year).¹

Biomethane produced at scale will provide an indigenous, renewable energy source for Ireland enhancing the country's security of supply. Our network is already accepting biomethane today and one of the great advantages of biomethane is that it enables homes and businesses to decarbonise without cost or disruption. Our focus is to collaborate with policymakers, producers, farmers and customers to develop a scale biomethane industry in Ireland.

Biomethane is produced using a process called Anaerobic Digestion (AD) which supports the reduction of carbon emissions and helps agriculture achieve its sectoral emissions targets. AD technology provides a way for Irish farmers to diversify and strengthen their income streams. Agriculturally produced, sustainable, carbon-neutral biomethane also exemplifies the principles of the circular economy. By recycling and re-using food and farm waste we can create cleaner energy – for electricity, heat and transport.

A new central grid injection (CGI) facility in Mitchelstown, Co. Cork is currently in development. This €30 million gas project (Green Renewable Agricultural Zero Emissions –"GRAZE") will receive and inject biomethane from up to 20 local farm-based producers. At maximum capacity, this first of many such facilities, will inject enough biomethane to meet the gas requirements of c. 64,000 homes.

¹ **Sources**: Devenish / KPMG report - https://www.gasnetworks.ie/biomethane-sustainabilityreport-2021.pdf] / European Biogas Association Report 2021 - https://www.europeanbiogas.eu/ eba-statistical-report-2021/



Hydrogen

The gas network will play an essential role in realising the Government's ambition to achieve a net zero emissions economy by 2050 and networked hydrogen at scale will ultimately be critical for this.

Gas Networks Ireland's expertise has enabled it to establish the Network Innovation Centre which is dedicated to hydrogen research, testing, trialling, training and collaboration to ensure our network is ready to transport both domestic and imported hydrogen safely as soon as it becomes available.

By developing a hydrogen industry here, Ireland has the potential to reduce reliance on imported energy. The national gas network can provide a consistent and secure source of demand for green hydrogen to help build and develop indigenous hydrogen production. The network also enables enhanced security of supply and provides a cost-efficient means of transporting hydrogen from where it is produced to end users. We also expect hydrogen blend to enter the Irish gas network via our gas interconnectors with Scotland before the end of this decade and we are working to ensure network readiness in advance of this.

Based on the work that Gas Networks Ireland has completed to date in our Network Innovation Centre in Dublin, the gas network is capable of transporting hydrogen blends in the near-term and can be adapted to ultimately transport 100% hydrogen in the longer-term.

Security of supply

As a small island nation on the edge of Europe, with no direct connection to the European energy system and only two sources of natural gas, Ireland is currently exposed to security of supply risks.



Each year on average 80% of Ireland's natural gas is imported through our gas interconnectors with Scotland and this dependency will only increase as the 20% currently supplied from the Corrib gas field is projected to deplete over the coming decade.

The 2022 international energy crisis and the energy disruption and uncertainties arising from it have highlighted Ireland's gas security and import dependency exposures. Ireland is increasingly dependent on a single gas entry point and is one of the only countries in Europe without access to any form of indigenous gas storage or facilities to receive gas other than by pipeline.

Gas Networks Ireland can play a major role in mitigating these security of supply risks over time. Our business has the capabilities to invest in, develop, operate and/or connect strategic gas facilities that could operate only when needed to, alleviate the impact of a potential gas supply disruption and provide additional supply during periods of peak gas demand. Such facilities could also support the development of an Irish green hydrogen production sector. By decarbonising the network with indigenously produced biomethane and hydrogen we can gradually reduce reliance on UK gas imports over time and completely in the long-term.

Sustainability

As a gas transporter, Gas Networks Ireland must pursue sustainability on two fronts – the sustainability of the gas we transport and the sustainability of our operations.

Our primary sustainability ambition is to repurpose our network to transport renewable gases at scale and help realise a net zero carbon future for Ireland. We aim to do that through an organisation operating sustainably and we are proud to be 1 of only 41 companies in Ireland to hold the Business Working Responsibly mark which is aligned to the ISO26000 standard for Social Responsibility.

We champion 6 of the United Nations Sustainable Development goals and use the Environment, Social and Governance (ESG) Framework to help structure and promote sustainability right across our organisation. Our new corporate strategy incorporates sustainability throughout our 6 strategic ambitions and our sustainability strategy under our 'Excellence in Operations' ambition prioritises areas in which we can make the most impact – emissions reduction, energy efficiency, biodiversity net gain and diversity and inclusion.

As a scale national business, Gas Networks Ireland impacts right across Irish society, but we understand our responsibilities. We recognise that sustainable business is good business, creating value for people and fundamental to carrying out business effectively. We are focused on contributing to the protection of the environment and positively impacting the communities in which we operate while supporting the health and wellbeing of our employees.



The main contact details for Gas Networks Ireland are:

General enquiries 1800 464 464

Lines open Monday to Friday 8am – 8pm and Saturday 9am – 5.30pm

24 Hour emergency service 1800 20 50 50

networksinfo@gasnetworks.ie

@GasNetIRL gasnetworks.ie