



Gas
Networks
Ireland

RENEWABLE GAS

Biomethane

Biomethane Producers

Connecting to Ireland's Gas Network



Section 1

Ireland's gas network

Owned and operated by Gas Networks Ireland, the gas network plays a critical role in providing a cleaner, competitive, and secure energy supply for Ireland. The gas network is of strategic importance to Ireland and continues to facilitate job creation and economic growth. Flexible, reliable, and resilient, it delivers a safe and secure supply of gas to over 720,000 customers, 365 days a year, powers almost half of the country's electricity and supports the deployment of renewable electricity generation.

Transforming the gas network

Under the Government's Climate Action Plan, Ireland has a target to produce 5.7 TWh of biomethane by 2030. This is equivalent to approximately 10% of Ireland's current natural gas demand and would require around 150 to 200 large-scale anaerobic digestion (AD) facilities to be built by 2030.

By gradually replacing natural gas with renewable gases such as biomethane and green hydrogen, Gas Networks Ireland is striving to deliver a net-zero carbon gas network by 2050 and to reduce emissions across several key sectors, including those that are traditionally difficult to decarbonise, such as transport, agriculture, industry, heating, and power generation.

Biomethane progress

Gas Networks Ireland is already supporting Ireland's journey to a cleaner energy future by beginning to replace natural gas with renewable gases such as biomethane. Biomethane injection to the gas network began in 2019, via the country's first renewable gas injection point in Cush, Co. Kildare. Gas Networks Ireland is developing a central grid injection facility in Mitchelstown, Co. Cork which will support the growth of new biomethane production facilities in the locality. Gas Networks Ireland is also in the process of connecting new and existing AD plants directly to the gas network at various locations across the country.



Section 2

Connecting to the gas network

Gas Networks Ireland and the gas network have a significant role to play in achieving Ireland's zero emission targets and facilitating Ireland's transition to a net-zero energy system. Biomethane has been identified as a potentially pivotal industry for decarbonising the national gas network, and the development of new AD facilities is essential to make this happen.



Direct or virtual connection

At Gas Networks Ireland, our role is to facilitate the connection of new AD facilities to the gas network, by direct injection to the grid or virtual pipeline to a central grid injection facility. For more information on direct injection and virtual pipelines, visit: www.gasnetworks.ie/biomethane.

Renewable gas entry point

Direct connections of existing and new AD facilities located on or close to the gas network can be facilitated through a renewable gas entry point (RGEF). A renewable gas entry point is delivered via a biomethane network entry facility (BNEF) unit. This unit is the connection between the AD Plant and the gas network.

Contained within the BNEF unit, is a range of instruments and equipment which ensure that the biomethane is compliant with all required standards and regulations before it enters the gas network.

A BNEF unit can measure 3m wide by 8m long and is typically located within an enclosed site of roughly 17m by 9.5m.



The BNEF unit incorporates equipment such as:



Gas analysis
metering equipment



Pressure regulation /
pressure reduction system



Sampling equipment



Diverter valve and
remotely operated
entry valve



Odorant injection system



Telemetry unit



Section 3

Connection process (incorporating reverse grid compression interim process)

Start the journey of connecting your AD facility to the gas network using the 6 stages listed below and become part of Ireland's gas infrastructure.

1

Stage 1 – Initial enquiry

Producer completes and submits an Initial Enquiry Form to Gas Networks Ireland to begin the process.

- Gas Networks Ireland will conduct a high-level feasibility study.
- Initial high level project estimations of potential cost and delivery timelines will be issued.
- The relevant information in relation to connecting to the gas network is available at www.gasnetworks.ie/biomethane-producers.
- Gas Networks Ireland will complete a high-level network capacity modelling exercise to determine the feasibility of the connection and allow the Producer to progress a formal application.

2

Stage 2 – Formal application

If the results of the high-level feasibility study are positive, the Producer can decide to progress to the Formal Application stage. A Connection Application Form can then be completed and submitted. The following criteria must be met to be eligible to submit a valid application

- A valid Planning application reference must be available (Planning applied for or granted).
- Application Fee of €10,000 ex. VAT is required with formal application. Please note this application fee is non-refundable.

On receipt of a valid application then:

Gas Networks Ireland will complete detailed network analysis, which will inform the scope of the connection project. The Producer will receive a network analysis report. This will outline any constraint that may affect the project. This will also consider any potential re-enforcements to mitigate constraints and thereafter reverse compression where no lower cost reinforcement options are tenable. In sizing the reverse compression, Gas Networks Ireland will consider any additional formal applications seeking connection to the same distribution network (individually or multiple projects forming a cluster on the same distribution network) to ensure least regret investments are made. In the case of assessing multiple projects in a cluster:

- Individual reverse grid compression (RGC) applications will be assessed in their own right versus the criteria set out
- Where a project is seeking to connect to a network where Gas Networks Ireland has other pending formal applications (uncontracted) the 4GWh constraint threshold can be met by the applicant's individual constraint volume and the likely constraint levels from other pending applications
- Gas Networks Ireland may future proof the RGC to cater for the pending formal applications and previous uncontracted applications in the same distribution network once they have gained written confirmation that each developer intends to proceed with their project.
- Project will only progress if there is capacity in the Flexibility Pot.
- Projects must have paid the connection application fee (€10k), with the constrained volume being calculated on a combined basis.
- The First project through will be responsible for the reverse compression fee and meeting all other conditions, the same way as individual projects are treated and where the customer has made a formal request for RGC.
- Other projects in the group will progress and benefit from the capacity delivered.

Gas Networks Ireland will consider the aggregate constraint of the projects on the same distribution network, ie the combined projects meet the Reverse Compression constraint criteria set out below.

- A template Renewable Gas Connection Agreement will be issued to outline the contractual arrangements should the Producer progress with the connection.
- Gas Networks Ireland will conduct preliminary design, which will include connection route (network extension from the gas network to the site), onsite Biomethane Network Entry Facility (BNEF) unit considerations and indicative programme for delivery.
- Preliminary design informs the detailed estimate of costs to connect, which is issued to the Producer in the "Letter of Offer – Subject to Contract / Contract Denied."

If network constraints are identified during detailed network analysis, network configuration and optimisation options will be assessed to eliminate these constraints where possible. Where this assessment indicates that RGC would avoid more expensive network reinforcements and therefore is the most appropriate solution, please refer to Stage 2a. If no constraints are indicated, the Producer can proceed to Stage 3 "Execute Renewable Gas Entry Point Agreement".

2a

Stage 2a - RGC interim proposal (optional)

The applicant may request to avail of the Commission for Regulation of Utilities approved interim arrangement for Reverse Grid Compression (RGC) by completing the formal interim RGC request form.

Gas Networks Ireland will evaluate the Producer's request against pre-defined criteria (as outlined in the Appendix).

If Producer meets criteria :

Where a Producer project meets the criteria as set out in the criteria (see Appendix), a Letter of Offer will be issued which includes both the cost of connection and the RGC interim application fee.

*Note: If flexibility pot monies are not currently available, Gas Networks Ireland will place the project on a waiting list queue. Should another project that was quoted not fulfill the criteria in the required timelines and monies become available, then Gas Networks Ireland will offer the next applicant on a first come first served basis (based on Formal Application Date).

If Producer does not meet criteria:

Gas Networks Ireland will confirm that the applicant has not met the required criteria and will continue with the standard connection process without RGC cost being covered under the Flexibility Pot, ie funded by the Producer under the Connection Agreement appraisal methodology.

3

Stage 3 – Execute renewable gas entry point agreement

The Renewable Gas Connection Agreement must be executed within four months of issuance of the Letter of Offer.

Producer pays contribution including financial security and satisfies all contractual conditions precedent (within two months of contract execution). This allows the project to progress to the detailed design stage.

Producer must demonstrate planning permission approval at this stage. (No Judicial Review processes ongoing and time limit for leave to appeal has passed)

Projects proceeding utilising the Reverse Compression Flexibility Pot:

Will be required to complete the payment of the Reverse Compression fee (€370k) in addition to the meeting the other RGC criteria as specified in the appendix

4

Stage 4 – Detailed design

It is at this stage that the project is handed over from the Business Development Team to the Delivery Team.

- Connection undergoes detailed design process (if required this will also include Reverse Compression elements).
- Procurement of connection infrastructure materials commences by Gas Networks Ireland.
- Gas Networks Ireland seeks all relevant statutory approvals in advance of construction commencing (including Safety Case, Section 39a, wayleaves etc)

5

Stage 5 – Construction

Onsite works commence adhering to safety and regulatory requirements.

- Gas Networks Ireland construct the network extension and BNEF in coordination with the Producer's construction programme. If applicable, Gas Networks Ireland will also deliver the Reverse Compression deep reinforcements.
Note that these may be located on separate sites to the Producer projects and delivery programmes may differ depending on the extent of reinforcements required. The assets will form part of the Gas Networks Ireland network.
- The Connected Systems Agreement is executed by Gas Networks Ireland and the Producer.

6

Stage 6 – Commissioning

Upon completion of the project construction, commissioning commences which will designate the connection as a renewable gas entry point pursuant to the Gas Networks Ireland Code of Operations. If applicable, separate commissioning of the Reverse Compression units will take place.

- Gas Networks Ireland undertake pipeline testing and coordinates with the producer on commissioning of the connection.
- The Producer nominates a gas shipper at the entry point to manage the injection of biomethane.
- Reconciliation of project costs is completed by Gas Networks Ireland to compare the initial estimated costs with the actual construction costs incurred.

Section 4

Charging methodology

Gas Networks Ireland's Connections Policy, approved by the Commission for Regulation of Utilities (CRU), sets out the charging methodology for all new customers connecting to the gas network.

Connection costs

Section 6 of the Gas Networks Ireland Connections Policy states for renewable gas connections, whether they are connected to the transmission or distribution network, the customer contribution in relation to a connection includes two components:

- **A standard contribution (30%).** All renewable gas connections will be required to make a standard contribution of 30% of the estimated costs for the injection facility. This includes full pipeline and ancillary equipment capital costs attributable to meeting the requirements of the facility in question, and the present value of any attributable downstream (deep) reinforcement costs.
- **A supplemental "economic test" contribution.** The supplemental economic test contribution will consider the present value of the full connection cost estimate (as defined above plus operating costs, and less the standard 30% contribution) against the present value of the tariff revenue attributable over ten years to the facility.

Renewable gas entry point agreement key principles

- Initial contribution payable upon execution (min 30% of estimated costs based on economic appraisal of project).
- BNEF site to be transferred to Gas Networks Ireland for a nominal sum.
- Estimated costs reconciled with actual costs upon construction completion.
- Discounted capital cost (maximum 70%) is recovered by Gas Networks Ireland through minimum volumes of biomethane being injected into the grid for up to 10 years post commissioning of connection.
- Customer required to execute a Connected Systems Agreement in advance of commissioning the BNEF unit. Important Conditions precedent to contract:
- Developer board minutes confirming authority of person executing the contract and resolution from the board to execute the agreement.
- Provision of a tax clearance certificate
- Provision of insurance details (Public Liability of €6.5m and Employer's Liability of €13m, unlimited in the aggregate)
- Provision of financial security (as per CRU approved Gas Networks Ireland Financial Security Policy) with options as per the following:
 - An approved credit rating of the connecting party as outlined in the published Gas Networks Ireland Financial Security Policy
 - Deposit Agreement
 - Bank Letter of Credit
 - Charged Account
 - Qualifying Guarantee

Appendix:

Assessment criteria for consideration for funding from flexibility pot for reverse compression:

1. The developer must have made a formal application to connect to the gas network (including the provision of the application fee of €10k ex VAT).
2. Gas Networks Ireland would allocate the funding on a first come first served basis based on the date of a valid application being achieved (complete application being received and payment of the application fee) to ensure no discrimination (positive or negative) is implied as part of the interim arrangements. A list of applicants that apply after all funds are provisionally allocated will be maintained by Gas Networks Ireland. This is to ensure that if allocated projects don't proceed that the next eligible project can be allocated the funding.
3. The project supports the Governments published National Biomethane Strategy.
4. The project seeking to qualify should not be connected or already contracted to connect to the gas network. For the avoidance of doubt, additional capacity for existing AD plants could qualify to apply for the funding where they are seeking an additional new connection.
5. The implementation of RGC would avoid more expensive network reinforcements while informing additional learnings on the implementation of RGC and which Gas Networks Ireland modelling team determine optimises the operation of the gas network; where significant anaerobic digestion facility development growth has been formally applied for by producers in the same area, Gas Networks Ireland shall consider least regret investment decisions to implement future proofed reverse compression solutions.
6. The project has an indicated minimum annual constraint volume of gas of 4GWh's per annum.
7. Sufficient unallocated monies (as monitored by Gas Networks Ireland) must remain in the flexibility pot to meet the project requirements.

Conditions to be met before Gas Networks Ireland will advance the RGC project

1. Gas Networks Ireland will have issued a connection offer to the developer confirming the details pertaining to the site connection in addition to confirming the proposed project meets its criteria.
2. In advance of a RGC project proceeding a developer will be required to submit a fee of €370k (in line with CRU approved interim arrangements).
3. A connection agreement must be signed within the validity of the offer to connect to the gas network (4 months validity from the date of offer issuance) and all contractual conditions precedent satisfied for Gas Networks Ireland (by the conditions precedent longstop date; 2 months after the execution date).
4. Producer must demonstrate planning permission approval at this stage. (No Judicial Review processes ongoing and time limit for leave to appeal has passed)

Dispute and complaints process:

Under the terms of the Natural Gas Distribution Licence, Gas Networks Ireland publishes a Complaint Handling Procedure as agreed with the Commission for Regulation of Utilities (CRU). This outlines how Gas Networks Ireland handles customer complaints and is available through this link.

The process involves a number of different steps as follows:

1

Step one

Contact us through one of the following channels with details of your complaint:

- Call our Customer Care Team 1800 464 464 (Monday to Friday 8am - 8pm and Saturday 9am - 5.30pm)
- Write to Customer Care, Gas Networks Ireland, Networks Services Centre, St. Margaret's Road, Finglas, Dublin 11, D11 Y895
- Email us at networksinfo@gasnetworks.ie

2

Step two

We will contact you by telephone within 24 hours to acknowledge receipt of your complaint. We will provide you with a unique reference number for your complaint.

3

Step three

Your complaint will be allocated to the relevant department to conduct an investigation into your complaint. We resolve the majority of complaints within 10 working days. If your complaint requires a site visit and remedial work, the time-frame to resolve it is 30 working days.

4

Step four

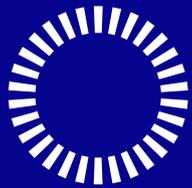
We will contact you on the fourth working day to confirm that the complaint is being handled to your satisfaction.

5

Step five

Once your complaint has been resolved, we will contact you to ensure that you are satisfied with the outcome. You may choose to contact the CRU if a satisfactory resolution cannot be reached. You will find downloads of the customer complaint handling procedures below.

Email us at networksinfo@gasnetworks.ie



Gas
Networks
Ireland

The main contact details for
Gas Networks Ireland are:

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General Enquiries

1800 464 464

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

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24 Hour Emergency Service

1800 20 50 50

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networksinfo@gasnetworks.ie

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@GasNetIRL

gasnetworks.ie
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Contact your dedicated account manager or our
Businesslink team to discuss your energy needs.

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Phone

1800 411 511

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Lines open Monday to Friday 9am – 17.30pm

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businesslink@gasnetworks.ie
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