Gas Networks Ireland

Code Modification Forum

Minutes of Hybrid Meeting– 01 April 2025

1 Introduction

The Transporter opened the meeting and referred to a fourteen item Agenda and the accompanying Slide Deck.

2 Standing Items

2.1 Approval of minutes of previous meeting

Draft Minutes of CMF meeting of 12/02/2025 were issued on the 03/05/2025. The Transporter noted that they received no objection on the minutes. There were no comments at the meeting and the Minutes were adopted.

2.2 Review of Action Items

Action item C575 will remain open, while Action Items C575 and C5602 were closed out. Action items C603 – C606 were subsequently opened by the Transporter.

2.3 GNI Scheduled Maintenance Update

Kevin O'Keefe, Southern Regional Operations Manager at the Transporter, presented on Planned Maintenance, referring to Slide 7. Mr. O'Keefe confirmed that the Transporter does not plan to undertake any maintenance activities during this gas year which will interfere with gas flows. Mr. O'Keefe provided details of significant works due to be undertaken this year and early 2026 which listed on Slide 7. A Shipper Representative requested and the Transporter agreed that when GNI would, in the future, be making a presentation at the Forum in relation to planned maintenance activities that the presentation would include a location map detailing the maintenance sites.

3 Biomethane Update

3.1 Business Rules for the Mitchelstown CGI

Stephen O'Riordan, Wholesale Market Manager at the Transporter, provided an update on the Mitchelstown CGI, referring to Slides 21-23. In response, the Regulator stated that they are planning on consulting on Biomethane Policy in Q2 of this year. The consultation will be covering; Financial Security, Economic Test, and CGI Proposals. Proposals on Reverse Compression are being developed by the Transporter and a consultation on those proposals is likely at a later date.

Following a question from a Power Generation representative, Mr. O'Riordan stated that the Transporter's current commissioning timelines are challenging but GNI will provide further updates as the project progresses.

An industry representative asked the Transporter if they would provide an update on the Biomethane for Shrinkage proposal at the next CMF meeting. The Transporter agreed to undertake this as an Action Item. Action Item C605 was opened by the Transporter.

4 Code Modification Proposals

4.1 A111 – Amendment to Code of Operations to increase oxygen limit for biomethane entry points on transmission network.

Yvette Jones, Project Manager at the Transporter presented an update on Code Modification Proposal A111, referring to Slide 9.

The Regulator indicated it was reviewing the Modification Proposal but was unable to finalise its 'review until the ancillary Safety Case has been approved by the Regulators Safety Team. In general, the Regulator stated that it was broadly happy with the Proposal but wanted to examine in more detail the proposed discretionary powers in relation to future connection applications which the Transporter has included in the proposed legal text for the Proposal.

The Regulator agreed to the Transporter's suggestion that the review period was extended to the next Code Modification Forum Meeting in June.

4.2 A112 – Amendment to Code of Operations to the existing Supplier of Last Resort clauses to update new options on Capacity Products and revised arrangements around Supplier of Last Resort invoicing.

Douglas O'Brien, GPRO Manager at the Transporter gave an overview of Code Modification Proposal A112, referring to Slide 11. Mr. O'Brien noted that the Transporter are continuing to engage with both the current SoLR and the Regulator on the Code Modification Proposal. The Regulator requested that Mr. O'Brien presented an update on the Modification Proposal at GMARG. Action Item C603 was accordingly opened by the Transporter.

4.3 A113 – Amendment to Code of Operations to amend gas quality requirements at Entry Points.

Conor Murphy, Wholesale Market Analyst at the Transporter, gave an overview of Code Modification Proposal A113 referring to Slide 13. The Instruction & Rationale for this modification issued on the 3rd of March with the modification coming into effect on the 01/04/2025.

Following the update, Paul Crowley, Grid Control Manager at the Transporter, gave an overview on the Transporters' proposed email notification of imminent inward flows of lower Wobbe Index gas. The Regulator welcomed the proposed email notification from the Transporter. Following Mr. Crowley's update, the Transporter agreed to take an Action to issue a notice requesting market participants to opt into the email notification. Action Item C604 was accordingly opened by the Transporter.

A Shipper Representative stated that this proposed email notification from the Transporter is greatly welcomed by Industry and further queried whether, as the Transporter gains experience in dealing with inward flows of lower Wobbe Index gas, it would better able to infer probable quality content in intakes at individual Power Stations based on where they are placed on the network. In response, Mr. O'Riordan, Wholesale Market Manager at the Transporter noted that they are new EU reporting requirements for Wobbe Changes which will be available on the Transporters Transparency Platform and that these reporting refinements will allow for more access to data for market participants to help them analyse how changes in Wobbe Index in gas may impact their own individual plants.

A Power Generation Representative reported that National Gas are updating their Transparency Platform to include more information on various constituents of gas quality and queried whether the Transporter is considering to make the same updates. In response, Mr. O'Riordan detailed that in the first instance the Transporters main concern is to ensure that they are compliant with the new EU reporting requirements but referred to GNIs' gas quality presentation which was a later agenda item where this issue would be fully discussed.

4.4 A115 – Amendment to Code of Operations to remove Tolerances at RNG Entry Points.

Conor Murphy, Wholesale Market Analyst at the Transporter, presented an update on Code Modification Proposal A115, referring to Slide 16. The Instruction & Rationale issued on the 3rd of March with the modification coming into effect on the 01/10/2025.

4.5 Status of Open Code Modification Proposals

ID	Title	Status	Reason for Status	Status End Date	Next Step
A099	CNG Supply Point Capacity Setting	In abeyance	Awaiting the development of the CNG market and sufficient data to inform the next steps.	TBC	NA
A111	Amendment to Code of Operations to increase oxygen limit for biomethane entry points on the transmission network	CRU Review	Extended hybrid review period has now ended	11/06/2025*	CRU Determination
A112	Amendment to Supplier of Last Resort provisions	Industry Review	Discussions are ongoing with existing SOLR	TBC	CMF Proposal Report to issue
A113	Amendment to Gas Quality Standards at Entry Points	Instruction & Rationale Issued			
A115	Removal of Tolerances at RNG Entry Point	Instruction & Rationale Issued			

*Provisional status end date for the CRU Review Period, to be reviewed at the next CMF.

5 Other Agenda Items

5.1 Gas Quality Update

Michael Crowley, Asset Performance Manager at the Transporter presented an update on Gas Quality referring to Slides 26 – 37. In response to his presentation, Mr. Crowley received questions on his interactions with National Gas on changes to gas quality, the need for a European Regulatory Framework for WI Classification and on EN 17726: Oxygen Limit.

Following Mr. Crowley's presentation the Regulator noted the deep interest of Industry on this matter and its concern to be comprehensively briefed on all potential gas quality impact developments. The Regulator also expressed that there has been significant engagement with industry on gas quality and highlighted that ultimately changes in gas quality have resulted in Code Modifications.

The Transporter noted the Forums wide concerns in this area and agreed to take an Action Item to organise a wider Gas Quality Workshop to take place either as a standalone event or in tandem with a Forum meeting. Action Item C606 was accordingly opened by the Transporter.

5.2 Network Development Plan

Laura Ryan, Network Forecasting Manager at the Transporter, presented on the Transporters Network Development Plan referring to Slides 39 – 48. Ms. Ryan received questions on the total carbon emissions from gas network decreasing by 33% in the best estimate demand forecast over the NDP Horizon, what blends the Transporter is assuming in their forecast and whether there should be any supplement for a FSRU in their forecast.

5.3 GNI Update on EU Affairs & Policy

Tom Lyons, EU Affairs & Policy Manager & Mary O'Mahony, European Innovation & Policy Analyst at the Transporter presented an update on EU Affairs and Policy, referring to Slides 51 -54.

6 Next Meeting/AOB

The next meeting is a Hybrid meeting scheduled for Tuesday 10/06/2025 and will be hosted at the Ashling Hotel, Dublin.

7 Open CMF Actions

ID	Action	Responsibility	Date Raised	Status
C572	Transporter to monitor the ongoing basis the adequacy of the initial 25% Tolerance for RNG Entry Points	Transporter	27/03/2019	Completed
C575	Transporter to furnish required data to CRU in connection with tariff review in relation to Supply Point Capacity Settings	Transporter/ CRU	25/03/2020	Ongoing
C602	Transporter Asset Manager for Compressor Stations to review potential impacts of gas quality changes at St. Fergus	Transporter	12/02/2025	Completed
C603	Transporter to present an update on Code Modification proposal A112 at GMARG	Transporter	01/04/2025	Ongoing

C604	Transporter to issue notification to market participants requesting that they opt in to the email notification on lower Wobbe Index	Transporter	01/04/2025	Ongoing
C605	Transporter to provide an update on the Biomethane for Shrinkage project	Transporter	01/04/2025	Ongoing
C606	Transporter to organise a gas quality workshop	Transporter	01/04/2025	Ongoing

8 Calendar of meeting for 2024

Next CMF Meeting

CMF Dates	Location
12 February	Virtual
1 April	Hybrid (Dublin)
10 June	Hybrid (Dublin)
3 September	Virtual
15 October	Hybrid (Dublin)
3 December	Virtual

9 Attendees

Name	Organization
Conor Murphy	GNI
Kieran Quill	GNI
Stephen O'Riordan	GNI
Linda McKernan	GNI
Michael Crowley	GNI
Kevin O'Keefe	GNI
Paul Murphy	ESB
Stephen English	GMO NI
Nicholas Lincon	Nephin Energy
Sam Clutterbuck	Nephin Energy
Paul Crowley	GNI
Sean Mac An Bhaird	CRU
Danny O'Brien	GNI
Claire Walsh	Centrica
Colm Griffin	Energia
Emma O'Leary	EAI
Martin Regan	Marex
David Grainger	BGE
Michael Murphy	Ormonde
Keith Deacon	Axpo
Pranav Kakkar	Epuki
Kenneth Parkinson	Flogas
Stephen O'Hare	GMO NI
Adam McCallion	GMO NI
Laura Ryan	GNI
Douglas O'Brien	GNI
Mark Phelan	Electric Ireland
Aine Spillane	GNI
Paul Hoey	Electric Ireland
Therese Lannon Crean	SEAI

Cian Fitzgearld	Energia
Mary O’Mahony	GNI
Tom Lyons	GNI

Code Modification Forum

Tuesday, 1st of April 2025

Ashling Hotel, Dublin

Time: 10:30

No.	Item	Duration (minutes)	Time
1.	*Review of Minutes from last meeting*	5	10:30 - 10:35
2.	*Review of Action Items from last meeting*	5	10:35 - 10:40
3.	*GNI Scheduled Maintenance Update*	5	10:40 - 10:45
4.	*Code Modification Proposal A111 - Amendment to Code of Operations to increase oxygen limit for biomethane entry points on the transmission network*	5	10:45 - 10:50
5.	*Code Modification Proposal A112 - Amendment to Code of Operations to the existing Supplier of Last Resort clauses to update new options on Capacity Products and revised arrangements around Supplier of Last Resort invoicing*	5	10:50 - 10:55
6.	*Code Modification Proposal A113 - Amendment to Gas Quality Standards at Entry Points*	5	10:55 - 11:00
7.	*Code Modification Proposal A115 - Removal of Tolerances at RNG Entry Points*	5	11:00 - 11:05
8.	*Status of Code Modification Proposals*	5	11:05 - 11:10
9.	*Update on the Mitchelstown CGI*	5	11:10 -11:15
10.	*Gas and Electricity Interaction*	5	11:15 - 11:20
11.	*GNI presentation on Gas Quality*	30	11:20 - 11:50
12.	*GNI presentation on the Network Development Plan*	30	11:50 - 12:20

13.	***GNI update on EU Affairs and Policy***	20	12:20 - 12:40
14.	***AOB Items/ Next Meeting / Close of the CMF***	10	12:40 - 12:50

Microsoft Teams Need help?

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Meeting ID: 392 393 406 351

Passcode: oC6PT3ej

Code Modification Forum – Hybrid Meeting

Gas Networks Ireland

Wednesday, 01 April 2025 – Ashling Hotel, Dublin

Agenda

1. Review of Minutes from last meeting
2. Review of Action Items from the last meeting
3. GNI Scheduled Maintenance Update
4. Code Modification Proposal A111 - Amendment to Code of Operations to increase oxygen limit for biomethane entry points on the transmission network
5. Code Modification Proposal A112 - Amendment to Code of Operations to the existing Supplier of Last Resort clauses to update new options on Capacity Products and revised arrangements around Supplier of Last Resort invoicing
6. Code Modification Proposal A113 - Amendment to Gas Quality Standards at Entry Points
7. Code Modification Proposal A115 - Removal of Tolerances at RNG Entry Points
8. Status of Code Modification Proposals
9. Update on the Mitchelstown CGI
10. Gas and Electricity Interaction
11. GNI presentation on Gas Quality
12. GNI presentation on the Network Development Plan
13. GNI update on EU Affairs & Policy
14. AOB Items/Next Meeting/Close of the CMF

1. Review of minutes from last meeting

- Draft Minutes of the Code Modification Forum Meeting from the 12th February were issued on the 3rd March.

2. Review of Open Actions

2. Review of open actions

ID	Action	Responsibility	Date Raised	Status
C572	Transporter to monitor the ongoing basis the adequacy of the initial 25% Tolerance for RNG Entry Points	Transporter	27/03/2019	Completed
C575	Transporter to furnish required data to CRU in connection with tariff review in relation to Supply Point Capacity Settings	Transporter/ CRU	25/03/2020	Ongoing
C602	Transporter Asset Manager for Compressor Stations to review potential impacts of gas quality changes at St. Fergus	GNI	12/02/2025	Completed

3. Maintenance Days

Gas Networks Ireland

Kevin O'Keefe – Southern Regional Operations Manager

3. 2025/2026 Maintenance Days

- GNI does not plan to undertake any maintenance activities during this gas year which will interfere with flows however below is a snapshot of the significant works due to be undertaken this year and early 2026;
  - Moffat AGI Refurbishment by NGT from 19th May to 6th June – ongoing engagement with GNI but not expected to impact supply to Beattock Compressor Station.
  - Air intake upgrade on two compressor trains at Beattock and station capacity upgrade project planned to start Q2 2026.
  - Turbine control system upgrade on two compressor trains at Brighouse Bay Q1 and Q3 2025.
  - Inline Pipeline Inspections –
    - SS2 – Scotland On-Shore (April 2025)
    - PL89 – Craggs to Aughinish (July 2025)
    - PL85 – Bellenaboy to Knockroe (August 2025)
  - Southern Area Reinforcement (SAR) project (2026)
- All maintenance activities on GNI infrastructure/equipment in relation to the Bellanaboy entry point will be co-ordinated with planned maintenance shutdowns by the Corrib operator.

4. Code Modification Proposal A111

Amendment to Code of Operations to increase oxygen limit for biomethane entry points on transmission network

4. Code Modification Proposal A111 - Increasing the oxygen limit for biomethane entry points on the transmission network

Issued and circulated on 15 June 2023

Documents issued with Code Modification Proposal can be found here.

- Explanatory Memorandum
- Proposed Legal Text
- Penspen Report
- Report Analysis Summary

Update

- Upper limit for oxygen is 0.2% for natural gas in Transmission and Distribution Networks
- RNG injected into the distribution network has upper limit of 1%
- Industry review date extended to 1 October 2024.
- Industry submissions to date can be accessed on slides 42 and 43 on the following Slide Deck.
- **Next Steps:** Currently in CRU Review Period.

ID	Title	Status	Reason for Status	Status End Date	Next Step
A111	Amendment to Code of Operations to increase oxygen limit for biomethane entry points on the transmission network	CRU Review	Extended hybrid review period has now ended	11/06/2025*	CRU Determination

- *Provisional status end date for the CRU Review Period, to be reviewed at the next CMF.

5. Code Modification Proposal A112

Amendment to Code of Operations to the existing Supplier of Last Resort clauses to update new options on Capacity Products and revised arrangements around Supplier of Last Resort invoicing

5. Code Modification Proposal A112 – Supplier of Last Resort

Four SoLR documents previously issued at Code Mod Forum can be found here.

The combined proposals outline how GNI and the SoLR will manage an event to take account of:

- New short-term capacity products in the DM/LDM market;
- Amended SoLR invoicing and Disbursement billing processes in the month of the SoLR event;
- Permit SoLR CoS/EUA at SoLR Affected DM & LDM Offtakes at the end of any month of the SoLR event; and
- Recent experience in NDM SoLR events.

Next Steps: GNI continues to engage with BGE on their SoLR comments around the Failed Supplier obligations, Entry arrangements, , “SoLR affected Shippers” and GNI reporting.

ID	Title	Status	Reason for Status	Status End Date	Next Step
A112	Amendment to Supplier of Last Resort provisions	Industry Review	Discussions are ongoing with existing SOLR.	TBC	CRU Determination

6. Code Modification Proposal A113

Gas Networks Ireland

Amendment to Code of Operations to amend gas quality requirements at Entry Points

6. Code Modification Proposal A113 - Amending gas quality requirements at Entry Points

- The Health and Safety Executive (HSE) in the UK has recently approved changes to the Great Britain (GB) gas quality specification in the Gas Safety Management Regulations (GSMR). The relevant changes approved by HSE include the reduction in the lower WOBBE limit to 46.5 MJ/m3 and the replacement of the Incomplete Combustion Factor and Soot Index with the relevant density limit of ≤0.7. The replacement of ICF and SI with a RD limit has become effective in the UK as of 6 April 2023.
- GNI has reviewed the implications of the planned changes to the GSMR specification and concluded it would be best to realign the RoI gas quality specification in the Code with the new GSMR specification.
- The implementation of the lower WOBBE limit has been deferred until 6th April 2025 (to allow sufficient time for industry to prepare for the change).
- GNI published relevant Supporting Documentation on the 11th of August 2023.
- The CRU have accepted the Safety Case submission relating to the realignment of the gas quality specification with the amended Gas Safety Management Regulations (GSMR) .
- Instruction & Rationale issued on the 3rd of March with the modification coming into effect on the 1st of April.

ID	Title	Status	Reason for Status	Status End Date	Next Step
A113	Amendment to Gas Quality Standards at Entry Points	Instruction & Rationale Issued			

GNI update on Email Notification of low Wobbe Index

Paul Crowley – Grid Control Manager

Email Notification of low Wobbe Index

- Following the CRU's approval of Code Mod A113, GNI propose to implement a procedure whereby email notifications will be sent to interested parties when an agreed Wobbe Index level is measured by GNI at the Moffat IP.
- The relevant changes approved by the CRU include the reduction in the lower Wobbe limit to 46.5 MJ/m3, down from its previous limit of 47.2 MJ/m3.
- According to our analysis it will take 1-3 days for gas to travel from Moffat to Gormanston depending on flowrates and demand. A further update will be issued via email when low Wobbe Index gas eventually reaches onshore Ireland at Gormanston and Loughshinny.
- This notification will be for information only and include a no-liability clause.
- This will be a manual process with emails issued by GNI Grid Control and will be implemented from April 6th.
- **Proposed Email text:**
- *Please be advised that for Gas **Day 06/04/2025** , as of **19:26**, the Wobbe Index of gas entering the network at Beattock from the UK network is less than 47.2 MJ/m3.*
- *It is impossible to know exactly when this gas will arrive into onshore Ireland but it should be between 1 and 3 days depending on demand. We will send out a further update if the Wobbe Index breaches this low limit at Gormanston/Loughshinny (Ireland entry points).*

7. Code Modification Proposal A115

Removal of Tolerances at RNG Entry Points

7. Code Modification Proposal A115 – Removal of Tolerances at RNG Entry Points

Gas Networks Ireland

- The Proposal is to Remove Tolerances at RNG Entry Points .
- As outlined in the most recent ENTSOG Implementation Monitoring Report, Ireland has not complied with the obligation in Article 45 of the Balancing Network Code to **discontinue the use of interim measures (which include balancing tolerances) within five years from the date of entry into force of the Code, November; 16 April 2019, due to the remaining outstanding tolerance at RNG Entry Points.**
- The rationale for retaining the RNG Entry Point tolerance was to support the development of renewable gas injection. On reviewing this relief, GNI is of the view that its retention is no longer justifiable as it does not provide any benefit to RNG producers and is of small benefit to Shippers granting them a more favorable cashout price.
- This is a matter of compliance and practical implementation is straight forward. Amending Part E (Balancing/Shrinkage) of the Code of Operations to remove tolerances from RNG Entry Points will ensure full compliance with the Balancing Network Code.
- GNI issued the proposal along with supporting documentation on the 31st of July.
- Instruction & Rationale issued on the 3rd of March with the modification coming into effect on the 1st of October.

ID	Title	Status	Reason for Status	Status End Date	Next Step
A115	Removal of Tolerances at RNG Entry Point	Instruction & Rationale Issued			

8. Status of Code Modification Proposals

8. Status of Code Modification Proposals

ID	Title	Status	Reason for Status	Status End Date	Next Step
A099	CNG Supply Point Capacity Setting	In abeyance	Awaiting the development of the CNG market and sufficient data to inform the next steps.	TBC	NA
A111	Amendment to Code of Operations to increase oxygen limit for biomethane entry points on the transmission network	CRU Review	Extended hybrid review period has now ended	11/06/2025*	CRU Determination
A112	Amendment to Supplier of Last Resort provisions	Industry Review	Discussions are ongoing with existing SOLR.	TBC	CMF Proposal Report to issue
A113	Amendment to Gas Quality Standards at Entry Points	Instruction & Rationale Issued			NA
A115	Removal of Tolerances at RNG Entry Point	Instruction & Rationale Issued			NA

*Provisional status end date for the CRU Review Period, to be reviewed at the next CMF.

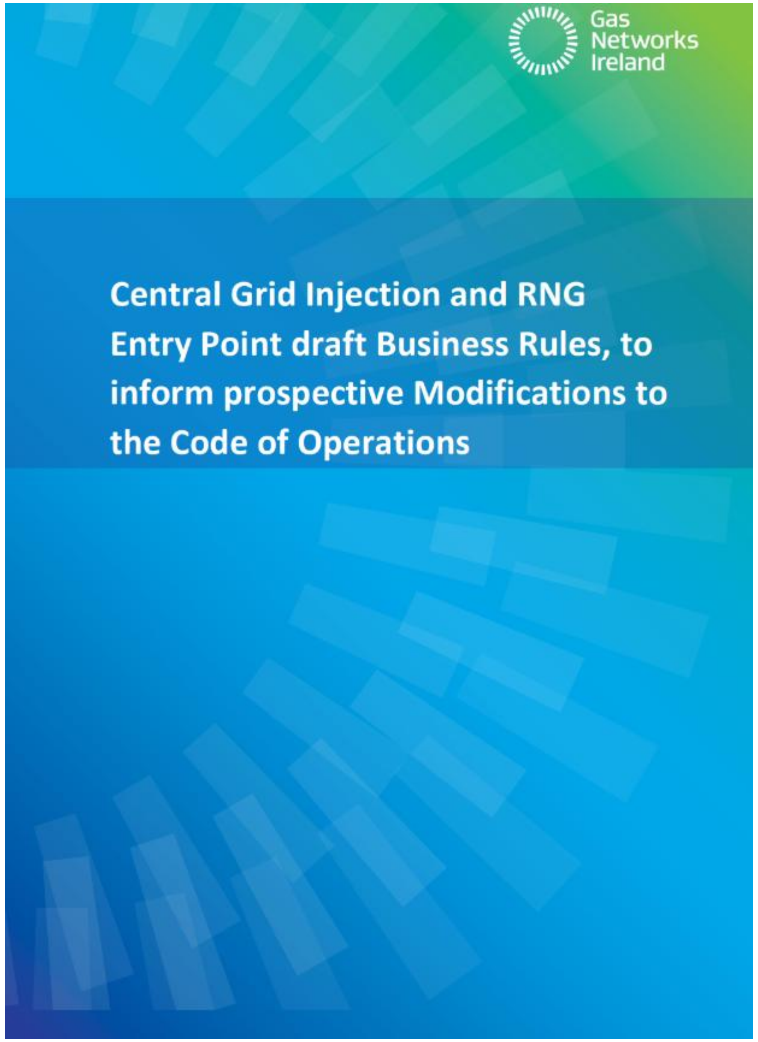
9. Update on the Mitchelstown CGI

Gas Networks Ireland

Stephen O'Riordan – Wholesale Market Manager

Business Rules process

- The Central Grid Injection and RNG Entry Point draft Business Rules were issued for industry review on the **7th of August 2024**.
- GNI formally introduced the draft Business Rules at the Code Mod Forum, on the **4th of September 2024**.
- Industry review closed on the **13th of November 2024,** with three responses received.
- The draft Business Rules are now at CRU Review – **final Business Rules will be published following if / when approved by the CRU.**



Purpose of the Business Rules

- The **draft Business Rules** have been developed to outline GNI's current view on how the Mitchelstown CGI Facility (and other similar facilities) will operate; many of the provisions outlined will also be applicable for other RNG Entry Points.
- The draft Business Rules are designed to enable industry to understand and comment on the provisions as they relate to the Code prior to the commencement of detailed Code drafting.
- This will be an **iterative process** and GNI cannot develop all relevant documentation in parallel without some level of agreement on the broad approach.
- **Code Modifications Proposals** will be advanced in line with the Business Rules (if &) when approved by CRU and will include the proposed legal drafting amending the Code of Operations.
- For the avoidance of doubt, **Code Modification proposals including the detailed legal drafting will also be presented for industry review in due course** – other relevant documents will be presented as directed by CRU e.g. PSA / CSA etc.

Sections 1 through 4 of the draft Business Rules document are included to provide an overview of the CGI structure, and the general context to support discussion of the Business Rules. Sections 5 and 6 outline the Business Rules and Code Impacts and are designed to inform prospective Code Modifications.

CGI next steps

- CRU is currently considering the **Business Rules** and **related CGI proposals** submitted by GNI
- CRU is planning to consult on Regulatory arrangements for **Direct Connections and CGIs** in Q2 2025 covering;
  - Financial Security
  - Economic Test
  - Reverse Compression
  - CGI Proposals
  - The consultation will also outline timelines for potential progression towards a developer choice model.

10. Gas and Electricity interaction

Gas Networks Ireland

David Flanagan / Alexandra Murphy / Emma O'Leary – Electricity Association of Ireland

11. GNI presentation on Gas Quality

Gas Networks Ireland

Michael Crowley – Asset Performance Manager

Overview

- Great Britain (GB) gas quality developments:
  - Increasing Oxygen (O_2) content
  - Increasing upper WOBBE Index (WI) limit
- European developments:
  - Revision of technical standard EN 16726 (gas quality)
  - WOBBE Classification system

Future GB Gas Quality Developments

- National Gas (NG) currently supporting initiatives to increase Oxygen (O2) limit on National Transmission System (NTS)
  - Seeking Gas Safety Management Regulations (GSMR) exemptions, to Increase O2 limit to 1.0 % for pressures > 38 barg

- Office for Gas & Electricity Markets (OFGEM) is looking to kick-start a process to increase the upper WOBBE Index (WI) limit
  - Looking to build the supporting evidence to allow the Health & Safety Executive to approve an increase to the upper WI limit
    - Longer term initiative

Increasing 02 limit in GB

- NG have applied to the HSE for GSMR exemptions for 2 x biomethane sites on NTS
  - Murrow (existing site: 4 kscm/h) & Glentham (New site: 1 kscm/h)
  - NG published a supporting DNV study, that indicates no adverse impact on most end-users, except for salt-cavity storage sites
- NG is progressing Unified Network Code (UNC) modification 0900 in parallel, to fast-track any exemption approved by HSE
- NG plan to eventually apply for a "Class Exemption" and then a GSMR amendment to codify future O2 limit of 1.0 (molar)%

Increasing the upper WI limit

- HSE rejected previous proposal to increase upper WI limit due to potential for increased Carbon Monoxide (CO) fatalities
  - HSE would require additional evidence to demonstrate that increasing upper WI limit would not reduce existing safety levels

- IGEM facilitated an industry meeting in Jun-24, to consider how to develop the evidence base to increase upper WI limit
  - Office for Gas & Electricity Markets (OFGEM) indicated that this would likely be a multi-year effort
    - Obtaining funding approval, retaining consultants, gathering evidence and holding a public consultation is likely to take 5+ years

European Gas Quality: EN 16726

- Revision of European standard EN 16726 (gas quality) is almost complete and will be submitted for Formal Vote (FV) by Apr-25
  - Results of FV expected by end of Q2 2025
- Revision includes WI range at Entry: 44.46 to 54.00 MJ/m3
  - New lower WI limit in Code of 46.5 MJ/m3 is aligned with EN16726, but there is a big gap at upper WI limit – 51.41 versus 54.0 MJ/m3
  - ***However, EN 16726 WI range is only a recommendation, and national regulations such as the Code take precedence***
- Revised EN 16726 also includes a WI classification system

EN 16726: WI Classification system

- Transmission System Operators (TSOs) and Distribution System Operators (DSOs) will have to classify Exit Points:
  - According to their forecast WI range or “Bandwidth” (variation) based on their historical data or other forecasting means
    - If forecast WI range is ≤ 3.7 MJ/m3 then **Class Specified**, customer should be able to safely burn gas with this level of variation in WI range
    - If forecast > 3.7 MJ/m3 then **Class Exempt**
  - TSOs and DSOs may be required to consider mitigation measures for Class Exempt exit-points
    - Range from enhanced gas quality data to gas blending etc, depending on cost/benefit analysis

WI Classification: Implementation

- CEN 234/WG 11 has written to European Commission (EC DG Energy) on need for regulatory framework
  - Not practical to stipulate procedures for Implementing WI classification system in a technical standard
  - Have suggested a combination of EU Regulation and non-binding guidance for member states needs to be developed
  - May also include changes to European Network Transmission System Operator Group (ENTSOG) Interoperability Code
- CEN 234/WG 11 will also establish a Task Force to produce technical report on WI Rate of Change

EN 16726: Oxygen limit

- Proposed O_2 Limit ≤ 1.0% if no downstream sensitive end-users
- O_2 should be limited to between 1.0 and 0.001% if there are downstream sensitive end-users
  - Notes gas storage facilities may be sensitive to O_2 levels, but sensitivity may vary for different storage facilities
  - Precise limit to be determined by an assessment procedure
- CEN 234/WG 11 will establish O_2 task-force to produce technical report on sensitive users and O_2 thresholds etc

Annex 1

- Comparison of gas quality parameters in:
  - The Code of Operations
  - GSMR
  - EN 16726

Gas Quality Overview

Gas Quality Parameter	*Code of Operations Limits*	*GB GSMR Regulations*	*EN 16726*
Total Sulphur	< 50 mg/m3 (including H_2S)	< 50 mg/m3 (including H_2S)	< 30 mg/m3 (with odorant)
Oxygen: Upper Limit	≤ 1.0% for DX Renewable Entry Points ≤ 0.2% for TX Entry Points	≤ 1.0% for Pressure ≤ 38 barg ≤ 0.2% for Pressure > 38 barg	≤ 1.0% if no sensitive customer 1.0 to 0.001% for sensitive customers
Carbon Dioxide	≤ 2.5% but higher if total inerts < 8.0%	No specified limit	≤ 2.5% for Pressure > 16-barg ≤ 4.0% for Pressure ≤ 16-barg or if no sensitive customer
Hydrogen Sulphide (H_2S)	≤ 5 mg/m3	≤ 5 mg/m3	≤ 5 mg/m3
Water content	< 50 mg/m3	No specified limit but must not infere with operation and integrity of system	< -8 degree C @70 barg
Gross Calorific Value (real dry gross)	≥ 36.9 MJ/m3 (lower limit) ≤ 42.3 MJ/m3 (upper limit)	No specified limit	No specified limit
WOBBE Index (real dry gross)	≥ 46.5 (lower limit) ≤ 51.41 MJ/m3 (upper limit)	≥ 46.5 (lower limit) ≤ 51.41 MJ/m3 (upper limit)	≥ 46.5 (lower limit) ≤ 54.0 MJ/m3 (upper limit)

Gas Quality Overview

Gas Quality Parameter	*Code of Operations Limits*	*GB GSMR Regulations*	*EN 16726*
Contaminants	No solid or liquid etc that might interfere with safe operation of system	No solid or liquid etc that might interfere with safe operation of system	No solid or liquid etc that might interfere with safe operation of system
Odorant	O.I. of 2.0 on Sales scale	Gas to be treated with stenching agent with characteristic odor at < 7 barg	Not specified
Delivery temperature	1 to 38 degree C	Not specified	Not specified
Organo Halides	< 1.5 mg/m3	Not specified in GSMR but < 1.5 mg/m3 in IGEM/TD/16	Not specified
Radioactivity	< 5 Becquerels/g	Not specified	Not specified
Ethane	< 12 mol%	Not specified	Not specified
Nitrogen (N2)	≤ 5.0 mol%	Not specified	Not specified
Hydrocarbon Dewpoint	< -2 degree C up to 85-bar.g	No specified limit but must not infere with operation and integrity of system	< -2 degree C up to 70-bar.g

Gas Quality Overview

Gas Quality Parameter	*Code of Operations Limits*	*GB GSMR Regulations*	*EN 16726*
Relative density	< 0.70 (upper limit) No lower limit	< 0.70 (upper limit) No lower limit	< 0.70 (upper limit) > 0.45 (lower limit)
Hydrogen	< 0.1 mol%	≤ 0.1% (molar)	< 2.0%
Methane Number	Not specified	Not specified	70 or 65
Mercaptan sulphur	Not specified	Not specified	< 6.0 mg/m3
Sulphur other sources (excluding odorant)	Not specified	Not specified	< 9 mg/m3

12. GNI presentation on the Network Development Plan

Laura Ryan – Network Forecasting Manager

Agenda

- NDP 2024
  - Inputs and assumptions
  - Results
  - Public Consultation

Executive Summary

The purpose of this presentation is to update on the National Development Plan (NDP) 2024.

The primary purpose of the NDP is to assess the gas network's capacity based on a 10- year forecast of supply and demand. This is to guarantee the adequacy of the gas transportation system and security of supply. Development of the NDP is a licence requirement.

For the Best Estimate demand forecast over the NDP Horizon (to 2032/33):

- Annual ROI gas demand is projected to decrease by 14%
- 1-in-50 peak day ROI gas demand is expected to increase by 6% and will reach its highest point in 2025/26 (+11% vs. year 1)
- Total carbon emissions from the gas network decrease by 33%

For the Best Estimate supply forecast over the NDP Horizon (to 2032/33):

- Natural gas imports from GB via Moffat are expected to account for c. 70% of gas supply to ROI
- Corrib is anticipated to account for 8% of the ROI supply mix by the end of the NDP horizon
- Biomethane is expected to account for 18% of ROI supply with hydrogen supplying the remaining 4%

Phased capacity upgrades at both compressor stations in Scotland are being delivered to meet the projected 1-in-50 peak day demands

Inputs and assumptions – sources and references

- In addition to internal data sources, the NDP uses the following external data sources to inform our modelling inputs and assumptions:
  - Powergen:
    - Eirgrid and SONI's All-Island Resource Adequacy Assessment (AIRAA)
    - SEAI's Decarbonised Electricity System Study (DESS)
  - Non-power sectors – Residential and Industrial & Commercial:
    - Climate Action Plan 2024
    - SEAI Heat Study
    - SEAI With Additional Measures (WAM) and With Existing Measures (WEM) models
  - Gas Supply
    - National Hydrogen Strategy
    - National Biomethane Strategy

- In formulating the NDP assumptions, both national and EU policy is assessed and incorporated.

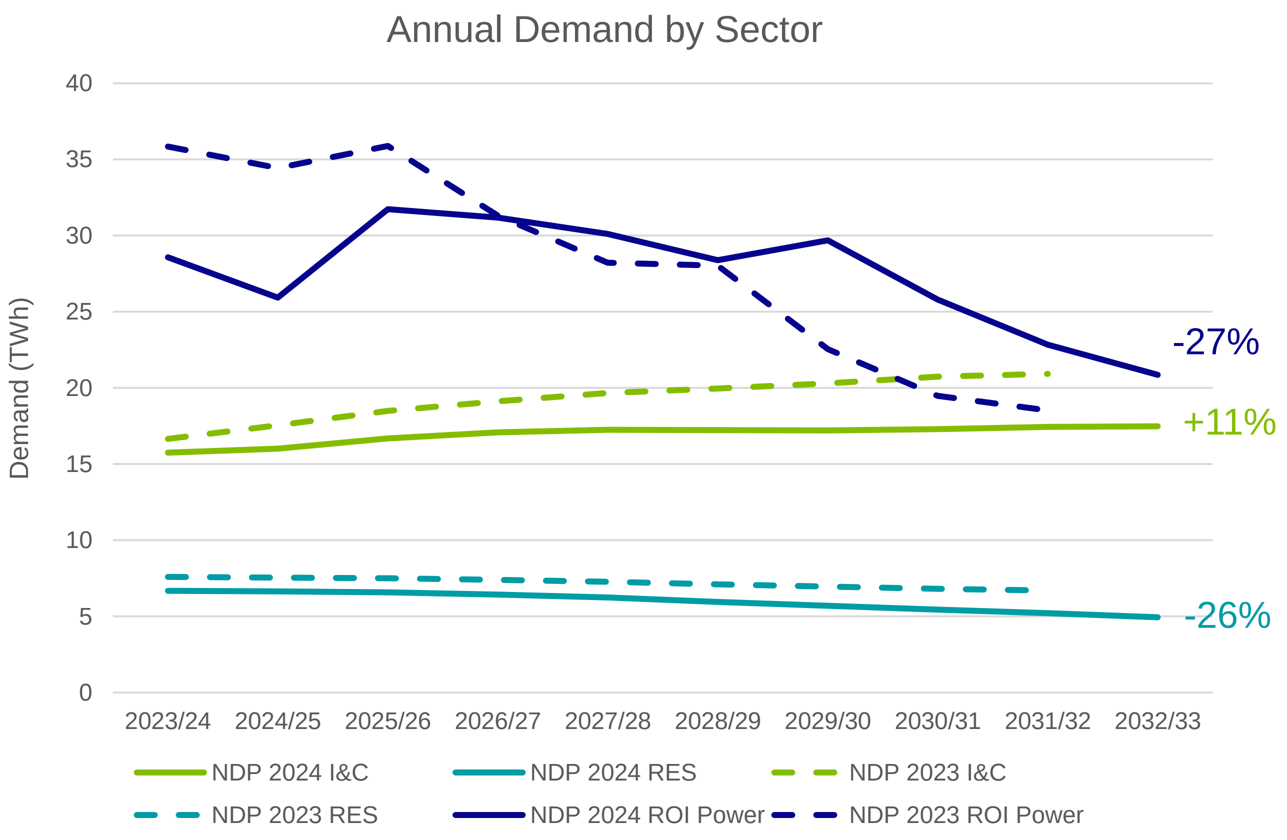
Power Generation – NDP 2024 Assumptions Summary

NDP 2024 Assumptions	NDP Low	NDP Best Estimate	NDP High
Electricity Demand	per AIRAA Low	per AIRAA Median	per AIRAA High
RoI Renewable Energy Sources (RES)	80% by 2030	Result of Model	Result of Model
RES Capacity	20.4GW by end-2030 26.8GW by end-2033	14.8GW by end-2030 19.5GW by end- 2033	10GW by end-2030 12.9GW by end- 2033
Moneypoint	Available until end-June 2025, at which point the units will not comply with the Emissions Directive and are no longer expected to participate in the electricity market		
Temporary Emergency Generation	Not included in the model as they will not operate within the electricity market		
North – South Interconnector	Jan-26	Jan-28	Jan-28
Celtic Interconnector	Jan-27	Jan-27	Jan-27
Greenlink Interconnector	Apr-25	Apr-25	Apr-25
Additional Gas-fired Generation	As per GNI's view of connection dates		
Additional Interconnection	+1 Interconnector connected from 2031	None	None

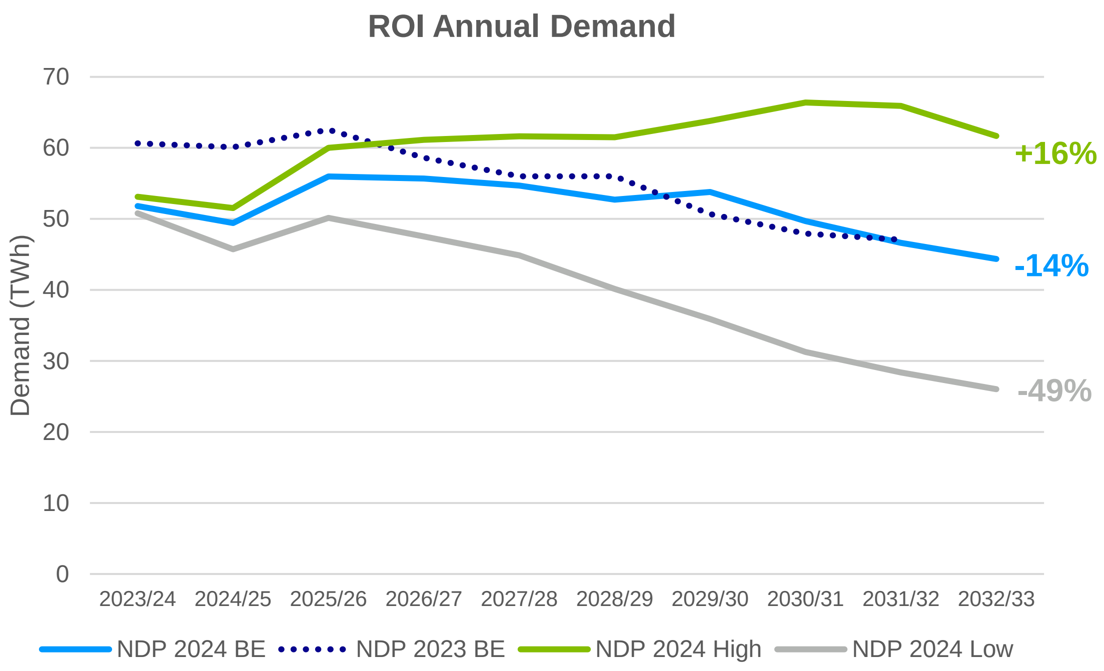
New Thermal Generation (MWe)	2024	2025	2026	2027	2028	2029	2030	Total
Eirgrid (AIRAA) Connection Dates	-	530	290	760	60	-	-	1,640
GNI Connection Dates – **Gas Only**	210	590	0	657	114	116	400	2,087
GNI Connection Dates – **All thermal**	210	590	399	657	114	116	400	2,486

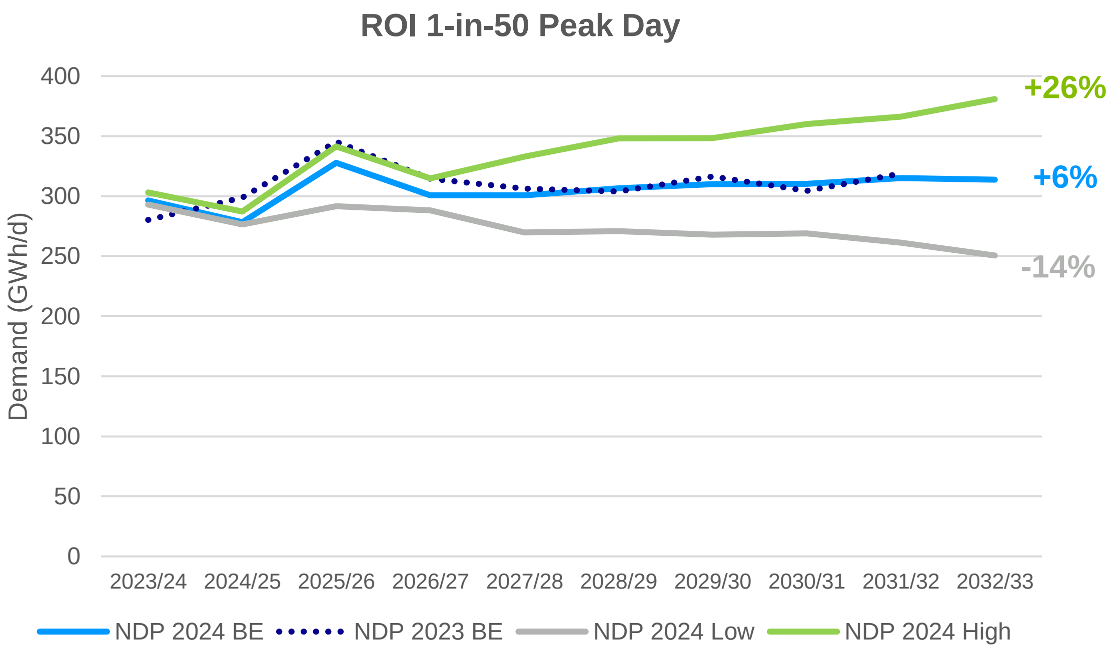
Annual Gas Demand Forecast by Sector

- **Powergen:**
  - Lower demand in years 1-3 in NDP 2024 due to higher electricity import flows vs. NDP 2023
  - Higher demand in years 5-10 due to slower roll-out of renewables
- **Industrial & Commercial:**
  - No uncontracted DCs in the Best Estimate for NDP 2024
  - Forecast economic growth of 2.4% p.a. on average across the 10 years, vs. 3.7% p.a. in NDP 2023
- **Residential:**
  - Lower starting point of 6.7 TWh p.a. vs. 7.6TWh p.a. (Residential Annual Quantities MWh/yr have decreased)
  - Similar overall trajectory: no. of disconnections and improvements in energy efficiency very similar to NDP 2023



ROI Forecast demand

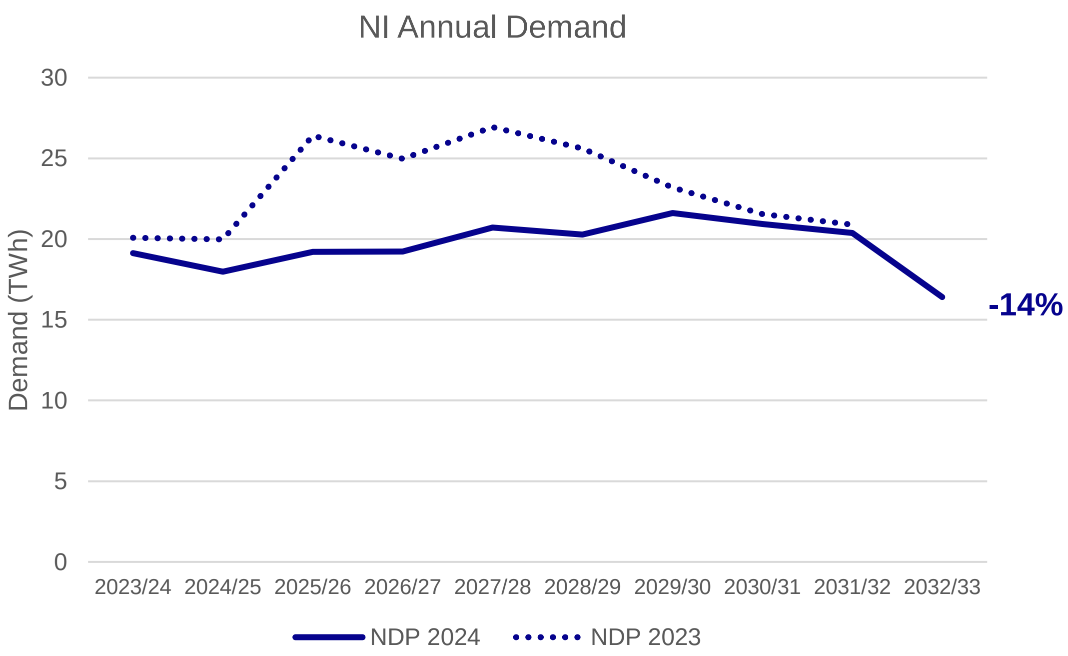


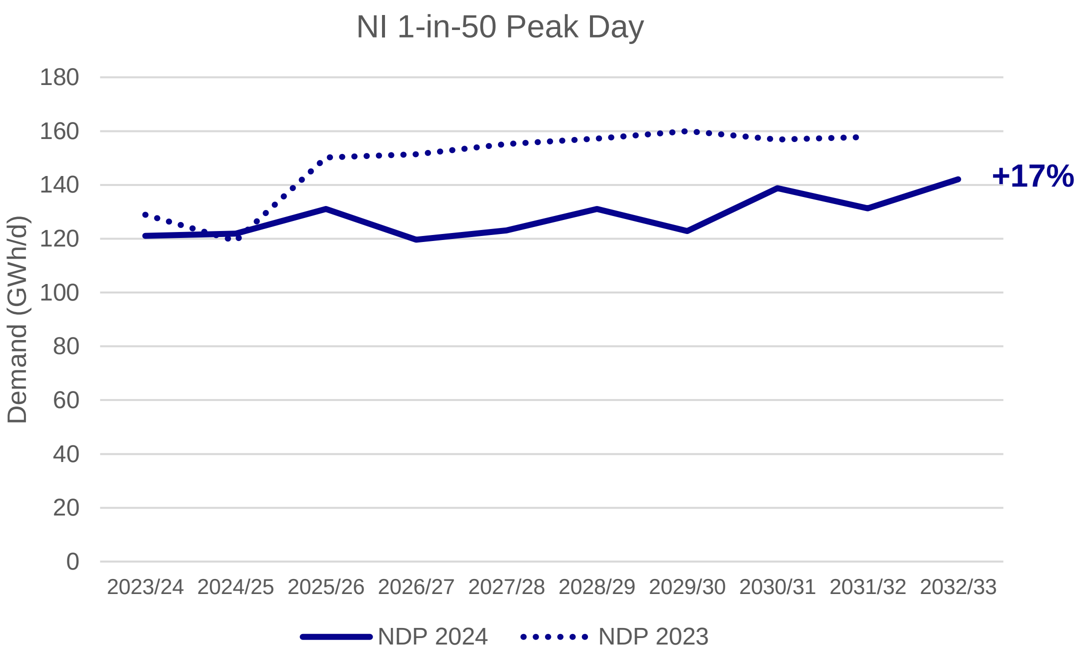


- **<u>Best Estimate Annual Gas Demand 2023/24 vs. 2032/33:</u>**
  - Total ROI gas demand: -14%
    - Power Generation: -27%
    - Industrial & Commercial: +11%
    - Residential: -26%

- **<u>Best Estimate Peak Day Demand 2023/24 vs. 2032/33:</u>**
  - Severe winter (1-in-50): +6%

NI Forecast demand

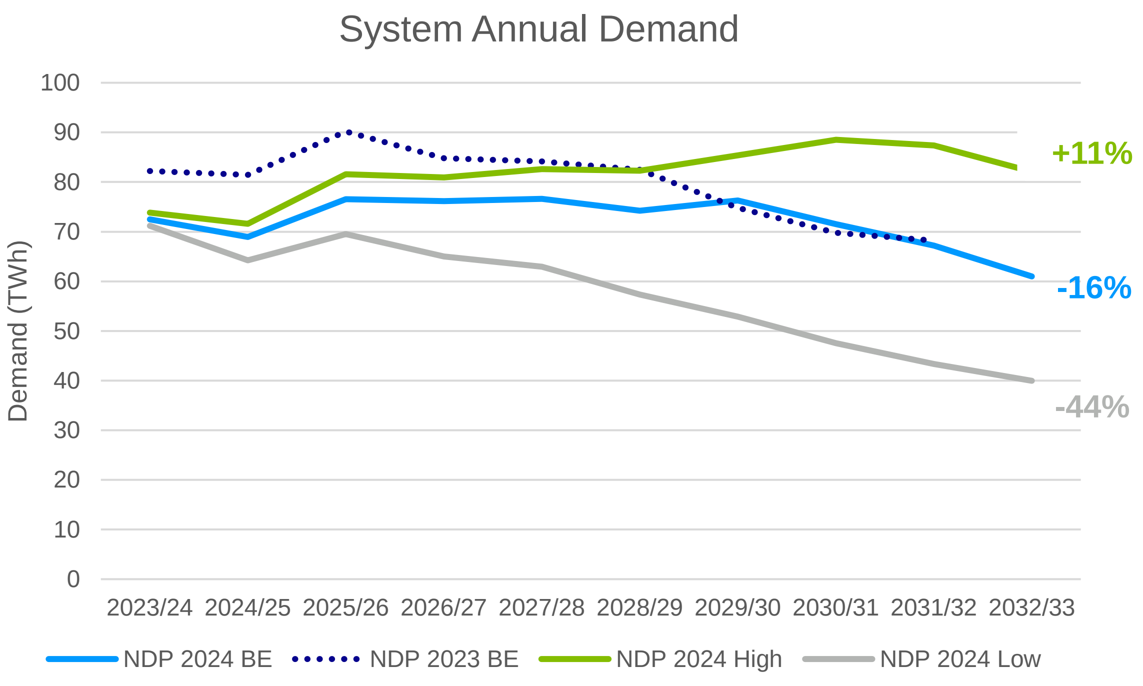


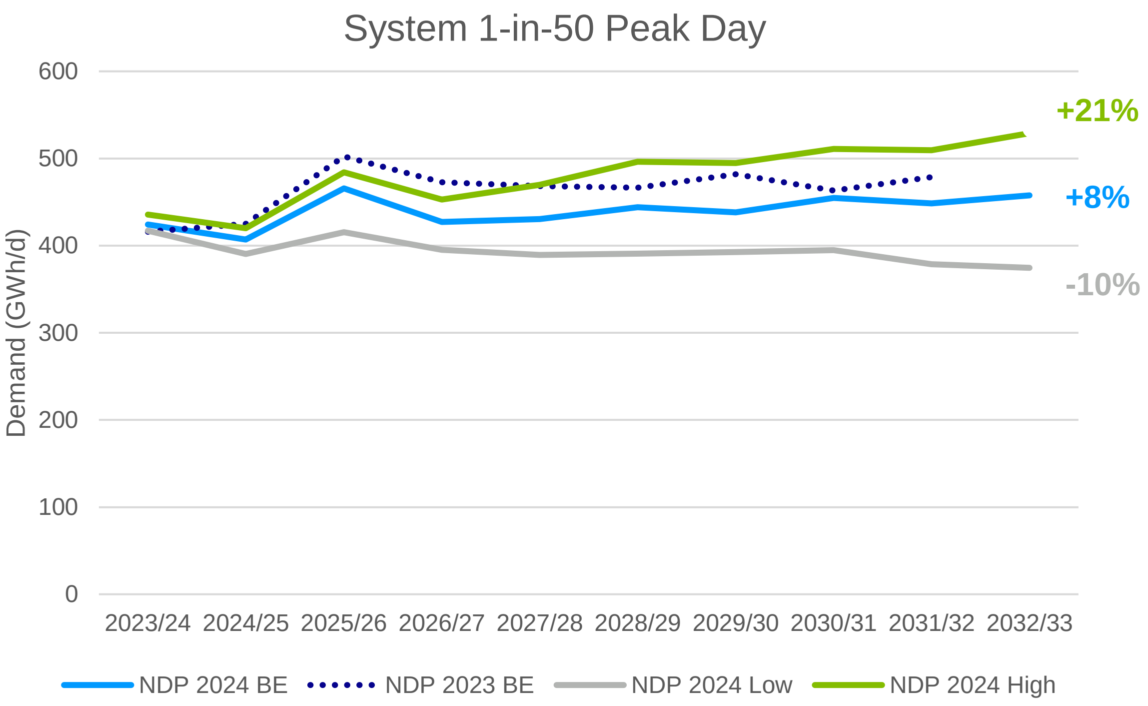


- **Annual Gas Demand 2023/24 vs. 2032/33:**
  - NI gas demand: **-14%**
    - NI power gas demand: **-38%**
    - NI non-power gas demand: **+19%**

- **Peak Day Demand 2023/24 vs. 2032/33:**
  - Severe winter (1-in-50): **+17%**

System Forecast demand



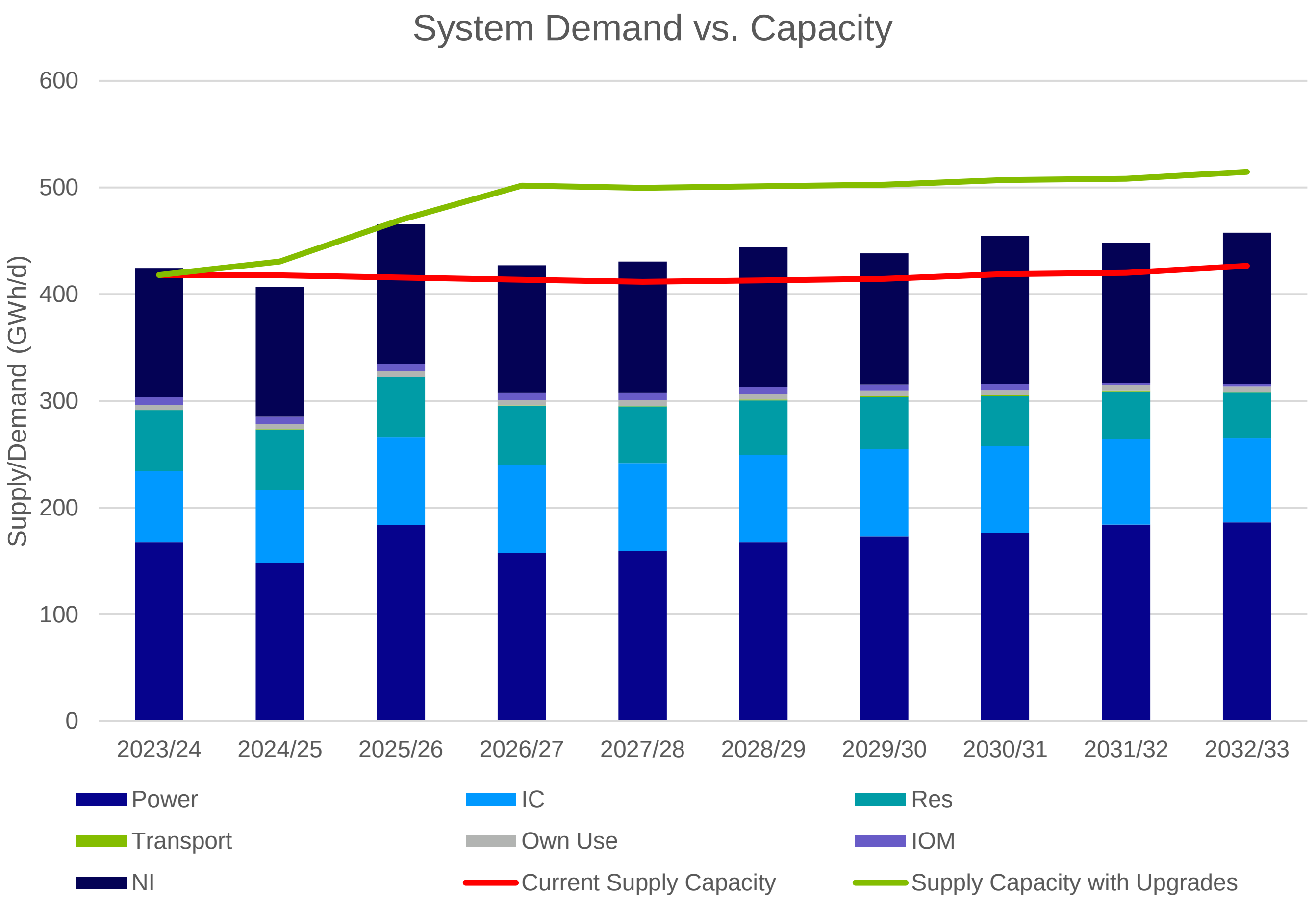


- **Best Estimate System Annual Gas Demand 2023/24 vs. 2032/33:**
  - Total System gas demand: -16%
    - ROI gas demand: -14%
    - NI gas demand: -14%
    - IOM gas demand: -86%

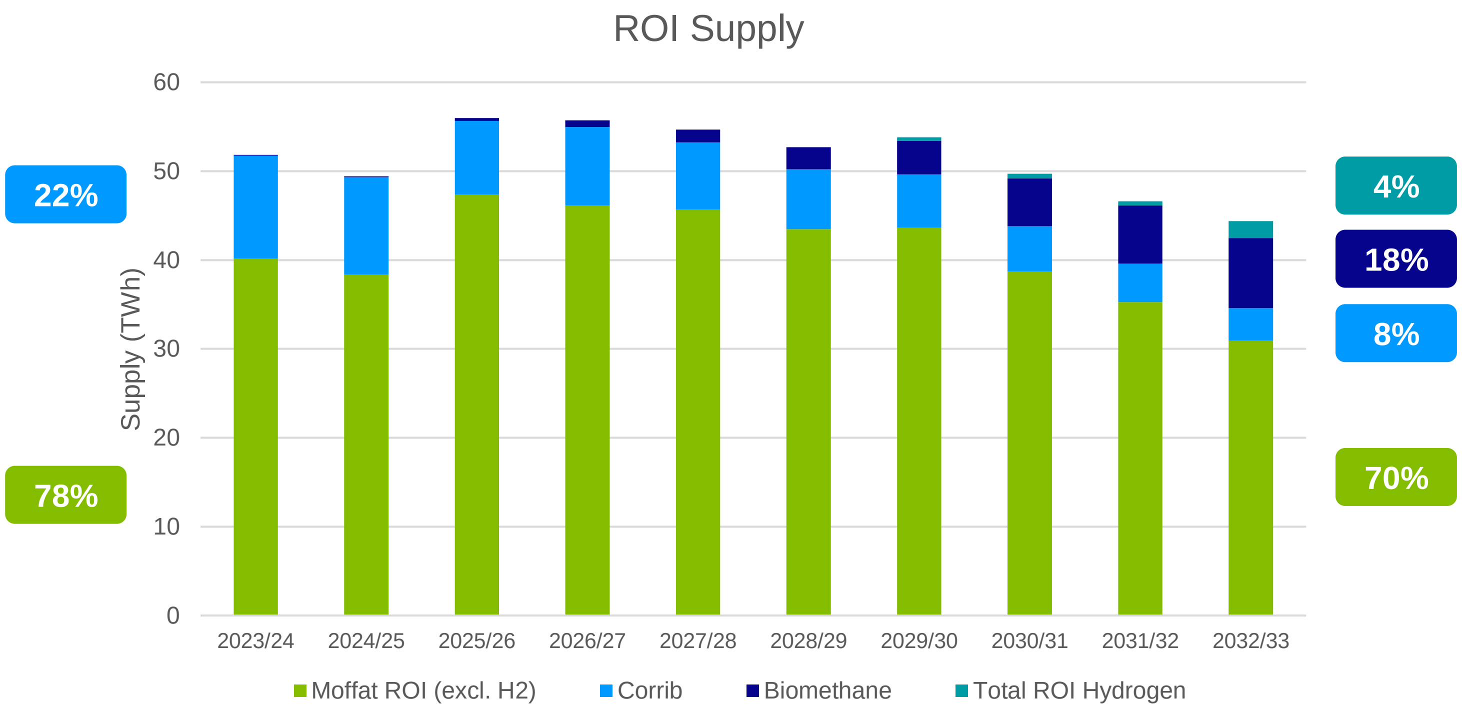
- **Best Estimate System Peak Day Demand 2022/23 vs. 2031/32:**
  - Severe winter (1-in-50): +8%

Supply Capacity

- Phased upgrades at both compressor stations in Scotland will provide incremental capacity increases for Winter 25/26 and 26/27 as shown opposite



Supply Outlook



- **By 2032/33:**
  - **Natural gas imports** from GB via Moffat are expected to account for **69.8%** of gas supply to ROI
  - **Biomethane** is expected to account for the remaining **17.7%** of ROI supply
  - **Corrib** is forecast to supply **8.2%** of ROI demand
  - **Hydrogen** is anticipated to account for **4.3%** of ROI demand, with Hydrogen imports via Moffat and indigenously-produced Hydrogen each accounting for 0.7% and 3.6% respectively

Questions

13. GNI update on EU Affairs and Policy

Tom Lyons – EU Affairs and Policy Manager
Mary O'Mahony – European Innovation & Policy Manager

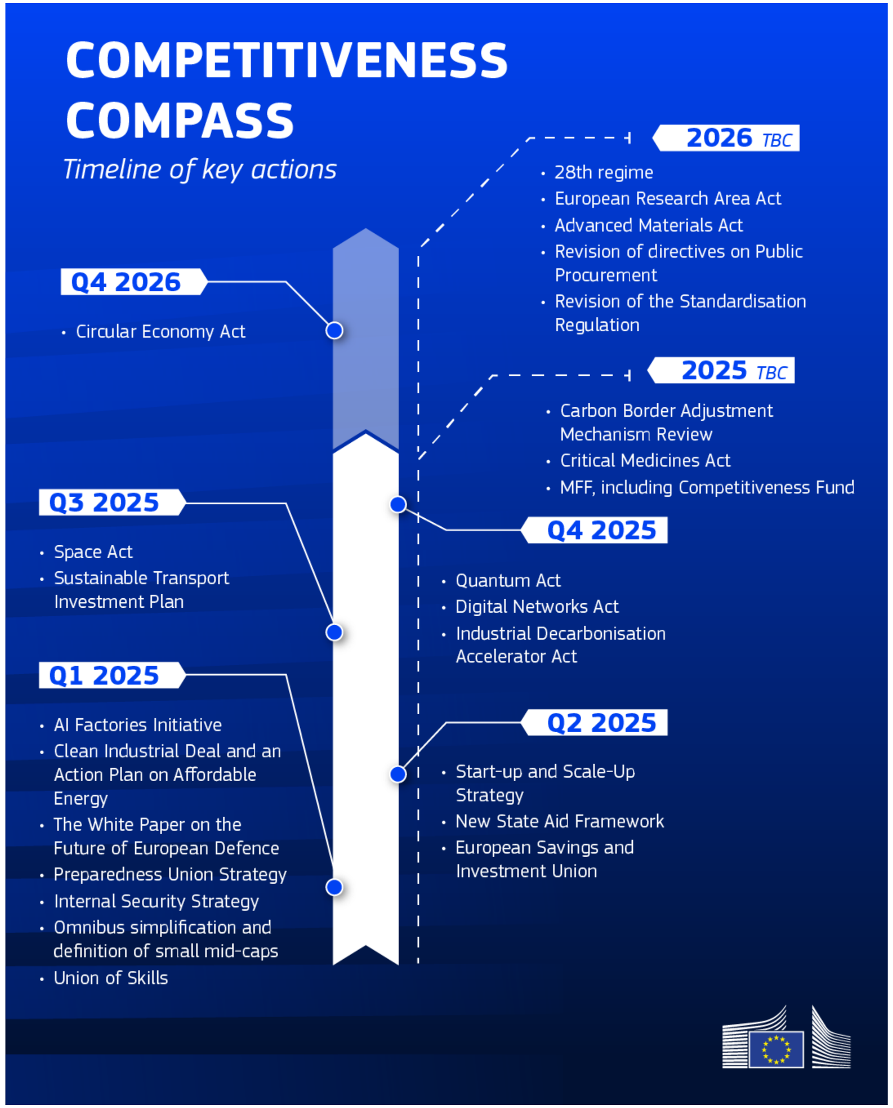
Gas Networks Ireland

Overview

In January 2025, the European Commission (EC) presented the **EU Competitiveness Compass.** The first major initiative of the new Commission, the Compass provides a strategic framework to drive the Commission's work during this mandate (2024 – 2029) vis-à-vis a joint roadmap for **decarbonisation** and **competitiveness**.

The first set of initiatives under this framework were launched by the EC on the 26th February 2025:

- **Clean Industrial Deal:** The EC's business plan to accelerate decarbonisation and competitiveness for European industry, by boosting innovation and reinforcing resilience.
- **Action Plan for Affordable Energy:** Aimed at securing affordable, efficient, and clean energy for all Europeans.
- **Omnibus Simplification Package:** Aimed at simplifying EU rules on sustainability and investments, and boost competitiveness.



EU policy developments

EU Policy / Regulatory Update

Clean Industrial Deal (February 26th 2025)

- Core aim is **to accelerate decarbonisation** while **supporting the competitiveness** and resilience of Industry.
- Commits to the EU's intention to deliver 90% net GHG emissions reduction by 2040 and become a decarbonised economy by 2050.
- The proposals are framed as **6 business drivers**
- Targeted **at energy-intensive** and clean-tech industries in particular.
- It is expected that The Clean Industrial Deal will act as a **framework for engaging with Industries** – **dedicated sectoral** plans are committed for the Automotive, Steel and Metals, Chemicals and Transport sectors.

Action Plan for Affordable Energy (February 26th 2025)

- Released as **adjunct to the Clean Industrial Deal (CID)** and is **aimed at securing affordable, efficient, and clean energy for all Europeans.**
- Positioned as **a "business driver"** for industry to succeed in the EU, with the stated aim of lowering energy bills for industries, business and households.
- Through a range of **short-term measures**, proposes to: speed up the rollout of **clean energy**; **accelerate electrification**; **complete the internal energy market with physical interconnections**; use energy efficiently; and, **cut the EU's dependence on imported fossil fuels**.
- Under **four pillars**, the Action Plan presents **eight key actions** to lower energy costs, complete the Energy Union and attract investments and be ready for potential energy crises.

Omnibus Simplification Package (February 26th 2025)

- A new package of proposals to simplify EU rules, boost competitiveness, and unlock additional investment capacity.
- Focused on **creating a more favourable business environment to help EU companies grow, innovate, and create quality jobs.**
- By bringing **competitiveness and climate goals together**, the EU is creating the conditions for businesses to thrive, attract investment, achieve shared goals – such as the European Green Deal objectives – and unlock the full economic potential.
- EC's target is to deliver at least a **25% reduction in administrative burdens**, and at least a **35% reduction for SMEs** until the end of this mandate.
- These first **Omnibus** packages, bring together proposals in a number of related legislative fields, covering **sustainable finance reporting**; sustainability due diligence; **EU Taxonomy**; **Carbon border adjustment mechanism**; and European investment programmes.

EU policy developments

EU Policy / Regulatory Update

Gas & Hydrogen Market Package (GHP) (July 2024) / European Network of Network Operators for Hydrogen (ENNOH)

- The **EU hydrogen and gas decarbonisation package (GHP**) was published in the in the EU Official Journal on 5th August 2024. The package updates the rules on the EU natural gas market set out in the Gas Directive 2009/73/EC and the Gas Regulation 715/2009 (3rd Gas Package)
- The Package consists of Directive (EU) 2024/1788 and Regulation (EU) 2024/1789. The Directive is to be transposed by 5th August 2026 and the Regulation has been fully applicable since 5th February 2025. Hydrogen and decarbonised gas market
- GNI to engage with stakeholders to progress the implementation of Regulation (EU) 2024/1789, and are planning for implementation of Directive (EU) 2024/1788 pending national transposition.
- EU Commission opinion on ENNOH draft statutes, list of members and rules of procedure is due by 31st March 2025. With ENNOH expected to be formally established in Q3 2025, the opinion from DG ENER will ultimately determine the route of travel required for GNI to secure full enduring membership of ENNOH.

Methane Emissions Reduction Regulation (July 2024) Methane emissions - European Commission

The Regulation was published in OJEU on 15th July 2024 and entered into force on 4th August. The Regulation introduces obligations including:

- Minimum leak survey intervals along with mandated minimum time for leak repairs;
- Accurate quantification and reporting on methane emissions; and
- Avoidable venting and flaring of natural gas to be prohibited.
- Awaiting appointment of the competent authority to oversee effective compliance with the Regulation.

Net Zero Industry Act (June 2024) The Net-Zero Industry Act

- The Regulation was published in OJEU on 28th June 2024 and entered into force the next day.
- The Regulation defines a series of net zero technologies, which include hydrogen, biomethane and CCUS technologies.
- Single points of contact to be appointed. The single points of contact will facilitate and coordinate permit-granting process for net-zero technology manufacturing / strategic projects.

National Policy / Regulatory Updates

Policy / Regulatory Update
CRU's National Energy Demand Strategy (NEDS) (July 2024) • Following publication by the CRU of the NEDS decision paper in July 2024, the first NEDS progress report was published in January 2025. GNI are leading four actions and are a Supporting Body on a further four actions. • GNI are also a member of the NEDS Implementation Group, tasked with overseeing progress of the NEDS. • The CRU published its proposed decision on the Review of Large Energy Users (LEU) Connection Policy in February 2025. The proposed decision is the subject of an ongoing public consultation.
Ireland's National Biomethane Strategy (May 2024) / Renewable Heat Obligation (TBC) • Two support mechanisms chosen in National Biomethane Strategy: Renewable Heat Obligation (RHO) and Capital Grant Support. • In Sept 2024 grants were awarded under the €40mil Capital Grant scheme, with successful projects required to be operational by end 2025. • The final high-level design of the RHO is still being developed, with the key issue of the treatment of indigenously produced biomethane outstanding.
Energy Security in Ireland to 2023 (November 2023) • GNI submitted a recommendation to DECC on 30th April 2024 in terms of Action 17 regarding a strategic gas emergence reserve. In March 2025, the Government approved the development of State-led strategic gas emergency reserve. GNI are now progressing the project as a matter of priority. • GNI and DECC are progressing engagement on other actions under the Energy Security Package, including Actions 15, 17, 22 and 24, and GNI sit on the Energy Security Group established under Action 28.
Ireland's National Hydrogen Strategy (July 2023) • 21 Actions identified in the Strategy. • GNI have engaged with DECC in development of the Implementation Plan. It is expected that the Hydrogen Task Force will be mobilised shortly – GNI will participate in task force.

14. AOB Items/Next Meeting/Close of the CMF

Gas Networks Ireland

Upcoming Meetings

- The next CMF is proposed to take place on the 11th of June 2025 in the Ashling Hotel Dublin. This meeting will involve an in person Stakeholder Event.

Next CMF Meeting → 11 June

CMF Dates	Location
12 February	Virtual
1 April	Hybrid (Dublin)
11 June	Hybrid (Dublin)
3 September	Virtual
15 October	Hybrid (Dublin)
3 December	Virtual

Appendix
Useful resources

Useful resources

Gas Networks Ireland

EU legislation

[Hydrogen and decarbonised gas market](#)

Methane emissions - European Commission

The Net-Zero Industry Act

Competeveness Compass

EU Competitiveness Compass

Factsheet - Competitiveness Compass.pdf

Action Plan for Affordable Energy

Action Plan for Affordable Energy - communication in full

European Commission press release on the Action Plan for Affordable Energy

Questions and Answers on the Action Plan for Affordable Energy

Clean Industrial Deal

Clean Industrial Deal – Communication in full

European Commission Press release on the Clean Industrial Deal

European Commission Questions and answers on the Clean Industrial Deal

Omnibus Package

Omnibus Press Release

Omnibus I

Omnibus II

Questions and answers on simplification Omnibus I and II