

# Code Modification Forum/Biomethane Workshop

## Agenda

Thursday, 13<sup>th</sup> of June 2024

Hybrid Meeting, Croke Park

Time: 10:30

<u>No.</u>	<u>Item</u>	<u>Duration (minutes)</u>	<u>Time</u>
1.	<i>Review of Minutes from last meeting</i>	5	10:30 - 10:35
2.	<i>Review of Action Items from last meeting</i>	5	10:35 - 10:40
3.	<i>GNI Scheduled Maintenance Update - Operational Maintenance</i>	10	10:40 - 10:50
4.	<i>Code Modification Proposal A111 - Amendment to Code of Operations to increase oxygen limit for biomethane entry points on the transmission network</i>	5	10:50 - 10:55
5.	<i>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</i>	5	10:55 - 11:00
6.	<i>Code Modification Proposal A113 - Amendment to Gas Quality Standards at Entry Points - GB Gas Quality Update</i>	10	11:00 - 11:10
7.	<i>Code Modification Proposal A114 - Amendment to Code of Operations to classify Gas Points with a design MHQ of 100,000kWh as LDMs</i>	5	11:10 - 11:15
8.	<i>Status of Code Modification Proposals</i>	5	11:15 - 11:20
9.	<i>Gas and Electricity interaction</i>	10	11:20 - 11:30
10.	<i>Net Zero Carbon Network - Update on GNI's pathway to a Net Zero Carbon Gas Network</i>	15	11:30 - 11:45
11.	<i>GNI presentation on Security of Supply</i>	25	11:45 - 12:10
12.	<i>GNI presentation on Methane Emissions</i>	20	12:10 - 12:30
13.	<i>Update on Biomethane for Shrinkage proposal</i>	10	12:30 - 12:40
14.	<i>AOB Items/ Next Meeting / Close of the CMF</i>	5	12:40 - 12:45

*Following the conclusion of the Code Modification Forum there will be a light lunch served from 12:45 - 13:25 and a complementary tour of the Croke Park stadium from 13:30 - 14:20 for all participants.*

*As noted previously, the afternoon session will consist of a Biomethane Workshop, the agenda of which can be seen below.*

<u>No.</u>	<u>Item</u>	<u>Duration (minutes)</u>	<u>Time</u>
1.	<i>Project Update on the Mitchelstown CGI and on Business Operational Arrangements</i>	45	14:30 - 15:15
2.	<i>Update on Business Rules</i>	45	15:15 - 16:00
3.	<i>Update on Charging Model</i>	45	16:00 - 16:45
4.	<i>AOB</i>	15	16:45 - 17:00

## Microsoft Teams meeting

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# **Code Modification Forum**

Minutes of Hybrid Meeting- 13 June 2024

# 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

The [Minutes](#) of CMF meeting of 24 April were issued on 15 May. These minutes were approved.

### 2.2 Review of Action Items

Action items C572, C575, C587 & C589 will remain open, while action items C584, C590 & C591 are now complete. Further actions items C592, C593, C594 and C595 were undertaken by the Transporter and the EAI, more detail of which can be found in Section 7.

In relation to action item C587, a shipper representative noted that this item was open since October and that he was still awaiting a response from the Transporter on the matter. Stephen O’Riordan, Wholesale Market Manager at the Transporter, indicated that there was research ongoing on this topic and the Transporter would intend to provide an update in the second half of the year.

### 2.3 GNI Scheduled Maintenance Update

Kieran Quill, Senior Market Analyst at the Transporter, presented on Planned Maintenance, referring to Slide 8. Mr. Quill detailed that the Transporter does not plan to undertake any maintenance activities during the Gas Year 2023/24 which will interfere with gas flows. All maintenance activities on GNI infrastructure / equipment at the Bellanaboy Entry Point will be coordinated with planned maintenance shutdowns by the Corrib Operator.

Brendan McCarthy, Project Delivery Lead at the Transporter, presented an update on the ongoing Brighthouse Bay Station splitting project, referring to slides 9-14. He particularly referred to planned 8-hour outages during the periods 17<sup>th</sup> to 11<sup>th</sup> July and 23<sup>rd</sup> to 25<sup>th</sup> July and specifically reminded Shipper attendees of the requirement for accurate and timely nominations during these periods. In response to Mr. McCarthys presentation, the Regulator queried how much engagement the Transporter had with the Regulators Security of Supply team on this topic. The Transporter detailed that they do not talk about specific projects with their counterparts in the Regulator but

that the Regulator was aware of their works programs. The Transporter agreed to open an action item to engage with the Regulator on this topic. Action item C592 was opened.

## 3 Biomethane Update

### 3.1 Biomethane for Shrinkage Update

Padraig Fleming, Biomethane Program Delivery Manager at the Transporter, gave an update the Biomethane for Shrinkage proposal, referring to slide 56. In response to Mr. Fleming presentation, Stephen O'Riordan, Wholesale Market Manager at the Transporter, stressed that the prior indication notice ('PIN') that the Transporter is planning to issue in July is just a part of an information gathering process and does not oblige the Transporter to undertake any subsequent actions. He confirmed that there would be ongoing engagement with the Regulator and the CMF on this topic. The Regulator stated that it had made no decision on this proposal and it had continuing concerns about pass through costs and the quality of the Shrinkage gas data being provided.

In response to a question from a shipper representative, Mr. Fleming confirmed that, to comply with RED II provisions, the Transporter is seeking to acquire Green Certificates with its' biomethane procurement. Another shipper representative queried the Transporter's Biomethane procurement timeline, and, in response, Mr. Fleming stated that the Transporter was hoping to sign contracts for the biomethane for its Shrinkage Gas requirements in Q1'25, but it might be closer to Q1'26 before biomethane might be physically delivered. The same shipper representative also queried whether the biomethane had to be indigenously produced. Mr. Fleming stated that was the intention and if the biomethane was being imported, the Shipper will have to demonstrate that this biomethane can be injected onto the network.

A representative from the PowerGen sector asked when the Transporter is planning to issue green certs for the Power Generators. In response, Mr. Fleming stated that the Transporter is currently undergoing this process with its first Supplier and are ensuring that the EPA are satisfied with this process. Mr. Fleming detailed that members of the Power Gen sector are free to engage with the Transporter on this process.

## **4 Code Modification Proposals**

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

Kieran Quill, Senior Market Analyst at the Transporter, presented an update on Code Modification Proposal A111, referring to Slides 16 to 18. To allow the final OEMs time to finish their reports it was agreed to push the final industry review dates out to the 01 October 2024. Stephen O’Riordan, Wholesale Market Manager at the Transporter, detailed that the current status of the Proposal is Industry/CRU review. Mr. O’Riordan stated that this hybrid status was a pragmatic solution agreed with the Regulator to allow the CRU review to be progressed in tandem with industry review.

### **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.**

Mr. Douglas O’Brien, Gas Point Register Manager at the Transporter, provided a presentation on the Code Modification Proposal A112, referring to Slide 20. Mr. O’Brien detailed that there had been management engagement between the Transporter and the existing SoLR on this matter. He also reported that the Transporters’ Trading and Settlements team are currently reviewing how they manage their billing process in the event of a cyber security attack and he was hopeful that a lot of this work could be leveraged in the event of a SoLR. Furthermore, Mr. O’ Brien also detailed that the Transporters Gas Transportation Management System team are in the process of conducting a review of potential implications of a SOLR event on their system. In June, the Transporter had submitted a paper to the Regulator detailing its experience with the 2022 SoLR events and provided several recommendations on enhancements that could be made in any future SoLR events.

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

Kieran Quill, Senior Market Analyst at the Transporter and Michael Crowley, Asset Performance Manager at the Transporter, gave an overview of Code Modification Proposal A113 along with an update on GB gas quality, referring to Slides 21 and 27. Mr. Quill outlined that, as with Code Modification A111, the industry review date for A113 had been extended to 01 October 2024, to allow the final OEMs time to finish their reports. Mr. Quill also outlined that the proposal is currently in Industry/CRU review and that this hybrid status was a pragmatic solution agreed with the Regulator to allow the CRU review to be progressed in tandem with industry review.

In response to Mr. Crowley’s update on GB gas quality, a shipper representative queried whether Mr. Crowley would expect oxygen levels to increase as more biomethane producers connected to the NTS. Mr. Crowley noted that the push towards Biomethane could mean that GSMR limit could

go to 1% further down the line.

#### 4.4 A114 – Amendment to Code of Operations to classify Gas Points with a design MHQ of 100,000 kWh as LDMs.

Kieran Quill, Senior Market Analyst at the Transporter, gave an overview of Code Modification Proposal A114, referring to Slide 32. This proposal currently remains under CRU review with one or two outstanding queries from the Regulator left to be addressed before the Instruction and Rationale can be issued.

#### 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	Industry Review/ CRU Review	To allow time for OEMs to finish their studies.	01/06/2024	CMF Proposal Report to issue
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	Industry Review/ CRU Review	To allow time for OEMs to finish their studies.	01/06/2024	CMF Proposal Report to issue
A114	Re-classify Gas Points with a design MHQ of 100,000KWh as LDM	CRU Review	To allow industry to make any formal submissions to the Transporter.	TBC	Instruction & Rationale to issue

## 5 Other Agenda Items

### 5.1 Gas and Electricity Generation

Jason Herbert, Policy Analyst at the Electricity Association of Ireland, provided an update on Code Modifications [A111](#) and [A113](#), referring to slides 32 to 35. Mr. Herbert outlined in his presentation that there are no major red flags in the progression of OEM reports for these proposals and highlighted the high levels of engagement the EAI and their members received from the Transporter and the Regulator on this topic.

In response to Mr. Herberts presentation, the Regulator queried the EAI on their optimum information flow platform for gas quality information from National Gas in respect of gas quality in respect of flows in process of being exported to Republic of Ireland , and , in particular, whether they favoured a potential option of the Transporter developing a system, informed by National Grid data, which details gas quality indicators on gas in the Interconnectors . Mr. Herbert agreed to canvass his members on the information options and would revert to the Transporter/CRU. Action item C593 was opened in this regard.

Mr. Herbert made a point in his presentation regarding concern among EAI members around gas system constraints in peak day demand and the fact that further integration of renewables would mean higher intermittency. In response to this point, Stephen O’Riordan, Wholesale Market Manager at the Transporter pointed towards a presentation delivered by the Transporter at the [February CMF](#) on gas quality and outlined the difficulty in coming up with a glide path given high levels of variation on the system. However, Mr. O’Riordan noted that the Transporter would continue to engage with the EAI on this topic. Action item C594 was opened.

The Transporter also agreed to open an action involving engaging with EirGrid on dispatch signals & gas system constraints in peak demand to ensure sustainable gas and power interaction. Action Item C595 was opened.

### 5.2 Net Zero carbon Network – Update on GNI’s pathway to a Net Zero Carbon Network

Con O’Donnell, Head of Regulatory Affairs at the Transporter presented on GNI’s pathway to a Net Zero Carbon Network. Mr. O’ Donnell received questions from the Regulator about plans for a wider public consultation and from a Shipper representative about GNI’s views on long duration Hydrogen storage being a part of the Net Zero journey.

In relation to the first query Mr. O’Donnell replied that GNI would not be consulting on this publication, but, as part of the foundation phase a transition plan will be developed in consultation with Industry and the Regulator

In relation to the second query Mr. O’Donnell confirmed that hydrogen storage would be required as hydrogen transportation would not be feasible without storage. The Energy Security Report called out the need for renewable storage. As the Gas and Hydrogen package is implemented it will be clearer who will take responsibility for the various elements of the H2 value chain but what



is certain is that H2 storage will be required.

### **5.3 GNI Presentation on Security of Supply**

Tom Hegarty, Network Operations manager at the Transporter presented on Security of Supply more detail of which can be found on slides 37 – 45.

### **5.4 GNI presentation on Methane Emissions**

Brid Sheehan, Sustainability Engineer at the Transporter, provided an update on Methane Emissions more detail of which can be found on slides 46 – 54.

## **6 Next Meeting**

The next meeting is a virtual meeting scheduled for 22 August.

## 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	Ongoing
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
C584	Transporter to provide an update focusing on timelines regarding how they plan on first engaging with the Regulator on the Mitchelstown CGI and in turn the Code Modification Forum	Transporter	13/12/2023	Completed
C587	Transporter to commence review of the Emergency Section of the code of Operations and	Transporter	18/10/2023	Ongoing

	provide an update at the next CMF			
C589	EAI to give ongoing updates on OEM status	EAI	24/04/2024	Ongoing
C590	The Transporter to query National Gas about potentially publishing real time data about gas quality changes coming from the UK	Transporter	24/04/2024	Completed
C591	Transporter to issue a notice about potentially extending industry review dates for Code Modification Proposals A111 & A113	Transporter	24/04/2024	Completed
C592	Transporter to engage with the Regulator about upcoming planned works	Transporter	13/06/2024	Ongoing
C593	EAI to share a notice to their members about whether they are in favour of GNI developing a	EAI	13/06/2024	Ongoing

	system which shows gas quality on the interconnectors.			
<b>C594</b>	Transporter to engage with the EAI concerns about Dispatch Signals & Gas System Constraints in Peak Demand	Transporter	13/06/2024	<b>Ongoing</b>
<b>C595</b>	Transporter to engage with EirGrid to discuss dispatch signals & gas system constraints in peak demand to ensure sustainable gas and power interaction.	Transporter	13/06/2024	<b>Ongoing</b>

## 8 Calendar of meeting for 2024

Next CMF Meeting



CMF Dates	Location
14 February	Virtual
24 April	Hybrid (Dublin)
13 June	Hybrid (Dublin)
21 August	Virtual
16 October	Hybrid (Cork)
4 December	Virtual

## 9 Attendees

Name	Organization
Conor Murphy	GNI
Kieran Quill	GNI
Stephen O’Riordan	GNI
Emerson O’Callaghan	CRU
David Lindsay	CRU
Padraig Fleming	GNI
Yvette Jones	GNI
Con O’Donnell	GNI
Tom Hegarty	GNI
Brid Sheehan	GNI
Padraic Duffy	CRU
Paul Barnett	Manx
Kim Kennington	Manx
Mark Phelan	Electric Ireland
Paul Hoey	Electric Ireland
Wayas Javid	Energia
Martin Regan	Marex
Keith Deacon	Axpo
David Grainger	BGE
Brian McGlinchey	Vermilion
Irene O’Donovan	OFX
Conor Lupton	OFX
Therese Lannon Crean	SSE
Fiachra Smith	Flogas
Sam Clutterbuck	Ceres
Jason Herbert	EAI
Shane McHugh	Green Generation
Anthony Foody	ESB
Patrico Garay	ESB

Paul Murphy	ESB
Conor Brady	ESB
Michael Crowley	GNI
Douglas O'Brien	GNI
Andrew Reeves	GNI
Paul Ahern	GNI
David Horan	Aughnish
Pranav Kakkar	Epuki
Tom Nolan	Ormond Organics
Kio Isenose	SSE
Stephen O'Hare	GMO
Harry Molly	Tynagh
Stephen English	GMO
Nicholas Downey	Ormond Organics
Cailean Campbell	Flogas

# Code Modification Forum



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Thursday, 13 June 2024 – Hybrid Meeting, Croke Park



# Agenda

1. Review of minutes from last meeting
2. Review of open actions
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
  - GB Gas Quality Update
7. Code Modification Proposal A114 - Amendment to Code of Operations to classify Gas Points with a design MHQ of 100,000kWh as LDMS
8. Status of Code Modification Proposals
9. Gas and Electricity Interaction
10. Net Zero Carbon Network
  - Update on GNI's pathway to a Net Zero Carbon Gas Network
11. GNI presentation on Security of Supply
12. GNI presentation on Methane Emissions
13. Update on Biomethane for Shrinkage proposal
14. AOB Items/Next Meeting

# 1. Review of minutes from last meeting

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- [Minutes](#) of CMF meeting of 24 April were issued on 15 May.

# 2. Review of Open Actions

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# 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	Ongoing
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
C584	Transporter to provide an update focusing on timelines regarding how they plan on first engaging with the Regulator on the Mitchelstown CGI and in turn the Code Modification Forum	Transporter	13/12/2023	Completed
C587	Transporter to commence review of the Emergency Section of the code of Operations and provide an update at the next CMF	Transporter	18/10/2023	Ongoing

# Review of open actions

ID	Action	Responsibility	Date Raised	Status
C589	EAI to give ongoing updates on OEM status	EAI	24/04/2024	Ongoing
C590	The Transporter to query National Gas about potentially publishing real time data about gas quality changes coming from the UK	Transporter	24/04/2024	Completed
C591	Transporter to issue a notice about potentially extending industry review dates for Code Modification Proposals A111 & A113	Transporter	24/04/2024	Completed

# 3. Maintenance Days

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### 3. 2023/2024 Maintenance Days

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- GNI does not plan to undertake any maintenance activities during the gas year 2023/24 which will interfere with gas flows.
- All maintenance activities on GNI infrastructure/equipment relation to the Bellanaboy entry point will be co-ordinated with planned maintenance shutdowns by the Corrib operator.

# Brighthouse Bay Station Splitting Project Update

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During certain periods looking for:

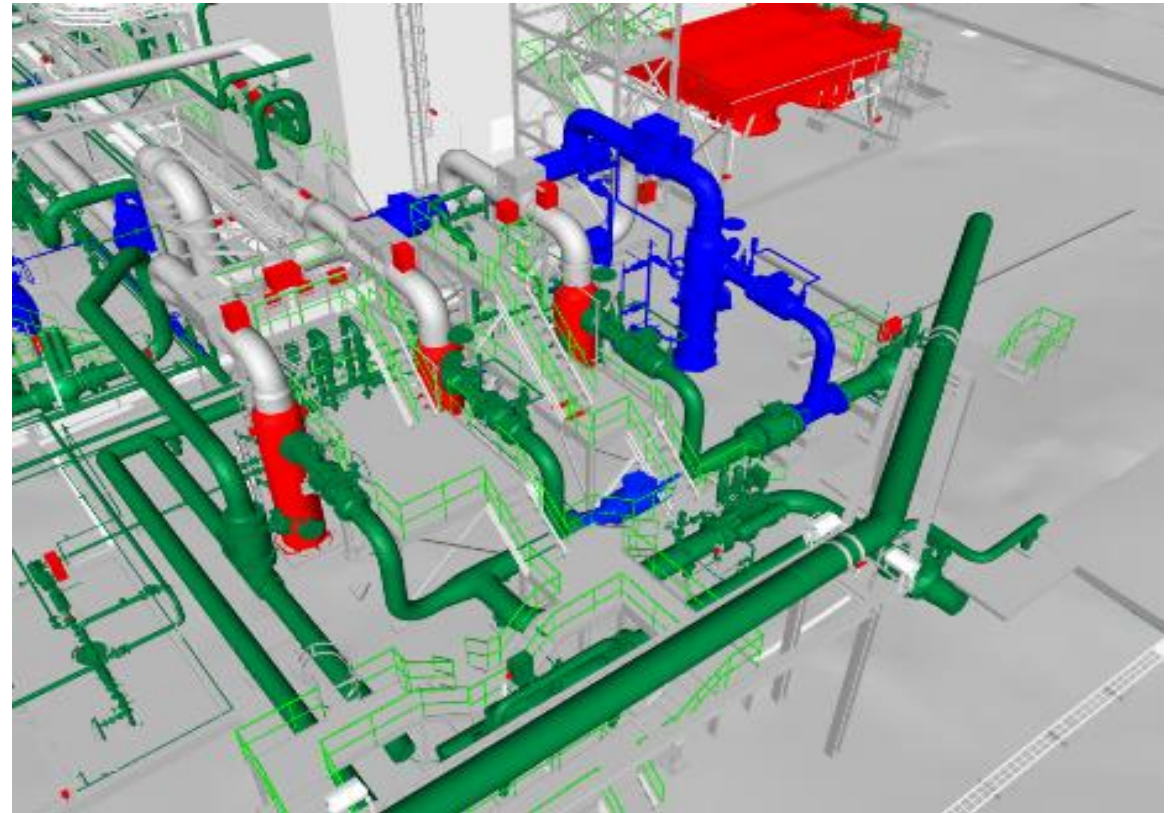
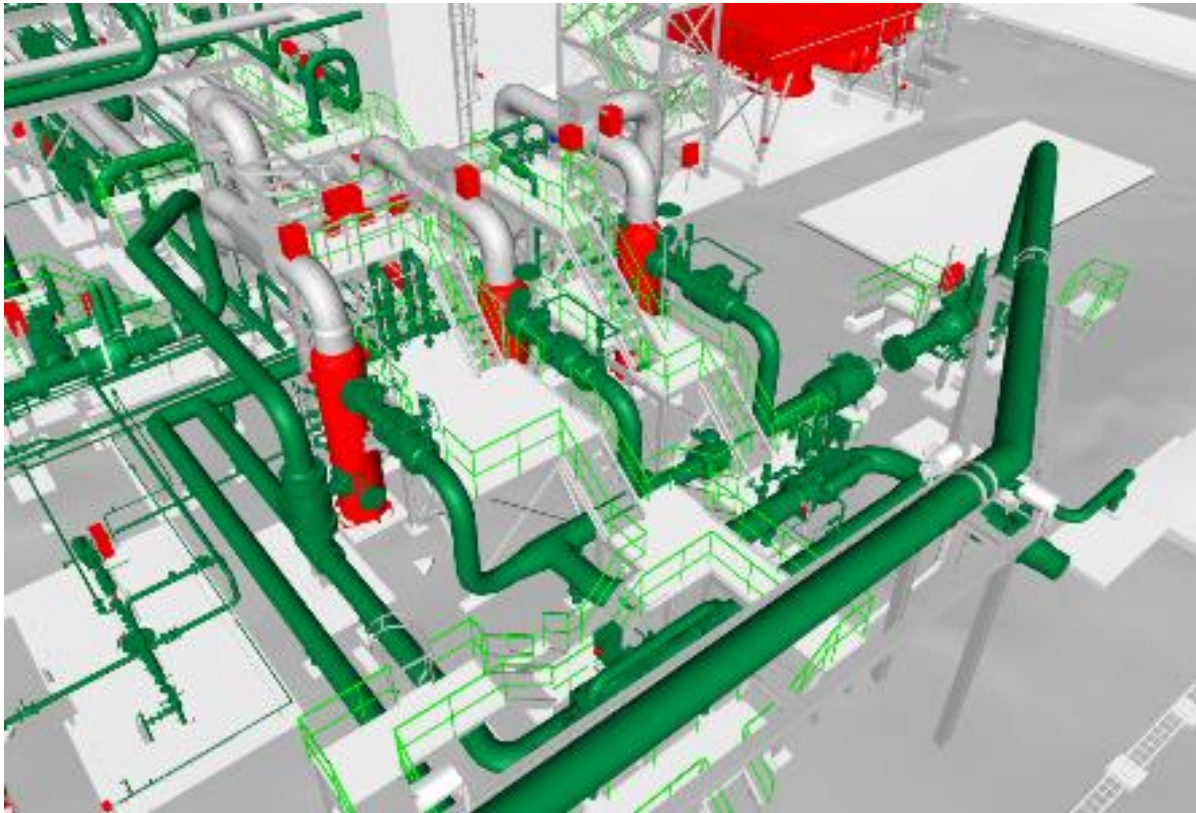
- Nominations as early and realistic as possible on the day. This assists with knowledge of available time for Grid Control and Operations on site;
- Communications will be issued if there is an issue during an outage i.e. if during an outage there is a failure of a component or a leak path which may need immediate repair but outcome may be unable to make up gap in nominations for gas day.
- Status:
  - Pipework being fabricated at present. 4th (new) scrubber on site and in position.
  - 1st 8 hour outage followed by availability of 2 scrubbers for 36 hours to compressor trains due 6th to 8th June now 17th to 19th July. Primarily due to welding production process, volume of pipework, and then timing with Corrib and other network activities.
  - 2nd to 5th now 23rd to 25th July approx. an 8 hour outage followed by 48 hours period of flow through 2 scrubbers to 3 Siemens Units (Hall 1).

# Scrubber Inlet Manifold in fabrication



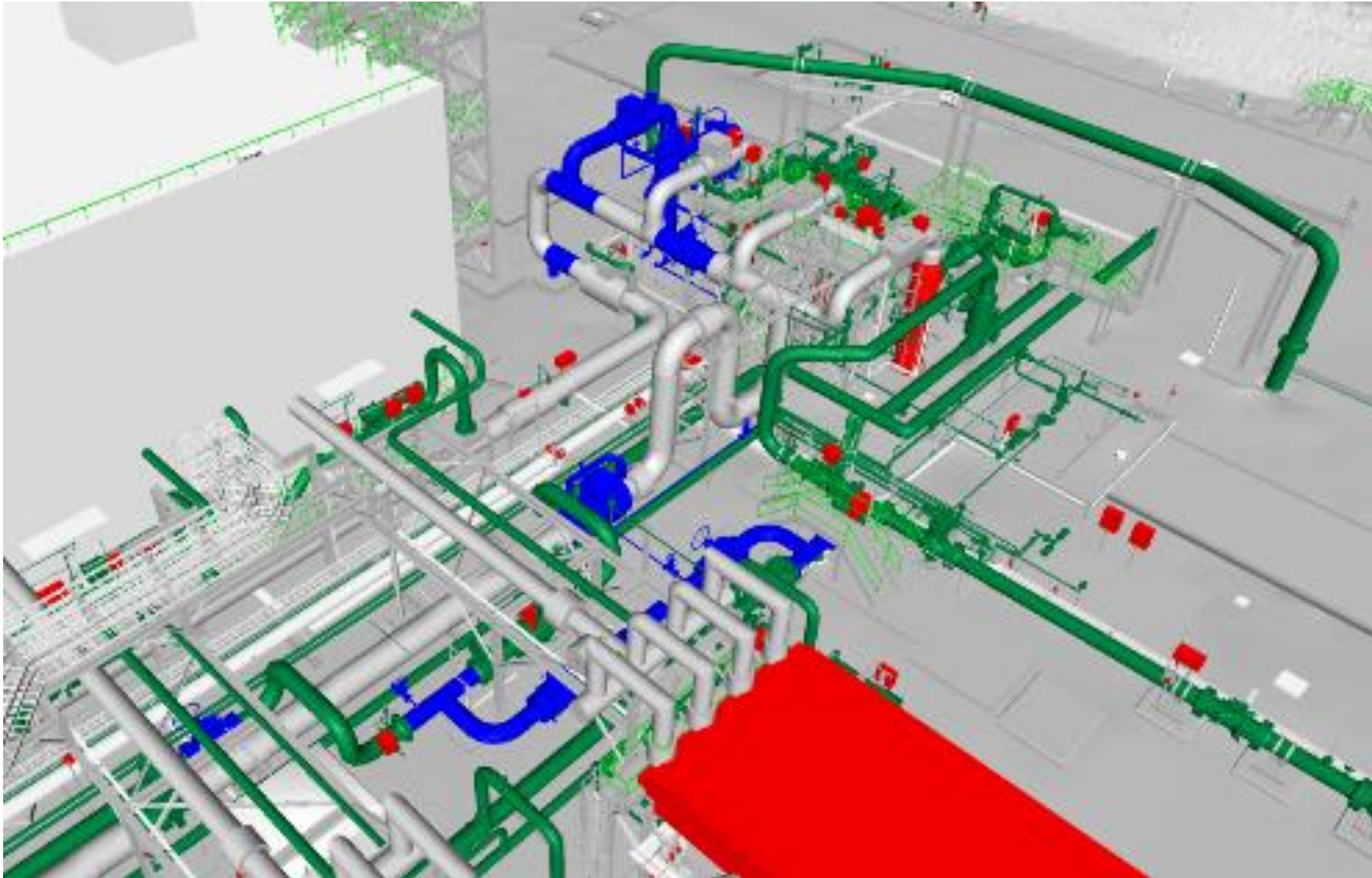


# 1<sup>st</sup> NRO - Inlet Header to New Scrubber 17<sup>th</sup> 18<sup>th</sup> July





# 2<sup>nd</sup> NRO – Outlet Header of New Scrubber 23<sup>rd</sup> to 25<sup>th</sup> July



# Thank You



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# 4. Code Modification Proposal A111



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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 June 2024.
- Industry submissions to date can be accessed on slides 42 and 43 on the following [Slide Deck](#).
- **Next Steps:** The industry review will continue in tandem with the CRU review until the 1st of October.

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	Industry/CRU Review	To allow time for OEMs to finish their studies.	01/10/2024	CMF Proposal Report to issue

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

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- Large energy users requested OEMs carry out analysis on potential equipment impacts
- Industry review period extended to 01 June 2024 to allow completion of OEM analyses
- OEM analyses in different stages of development
  - Some are completed, others in progress
  - Estimated that all OEM analyses won't be complete before 01 June 2024
- GNI plans to start commissioning Mitchelstown CGI in Q1 2025
  - GNI will submit Material Change Notice (MCN) to Transmission Safety Case September 2024 (tbc)
  - Oxygen Code Modification will form part of MCN submission
- EAI and GNI met recently for update on OEM progress:
  - Of analysis completed, no showstoppers reported



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

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- GNI proposes that this Code Modification is progressed after 01 June
- The Code Modification Proposal provides that before RNG Entry Points on the Transmission Network can avail of Code Modification, GNI must be of the reasonable opinion End User operational facilities would not be adversely impacted (unless could be reasonably mitigated)
- Code Modification Proposal provides that Entry Points would be considered on a case-by-case basis as circumstance may differ for individual Entry Points depending on capacity and location on network

# 5. Code Modification Proposal A112



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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	CMF Proposal Report to issue

# 6. Code Modification Proposal A113



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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/m<sup>3</sup> and the replacement of the Incomplete Combustion Factor and Soot Index with the relevant density limit of  $\leq 0.7$ . 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 6<sup>th</sup> April 2025 (to allow sufficient time for industry to prepare for the change).
- GNI published relevant [Supporting Documentation](#) on the 11<sup>th</sup> of August 2023.
- **Next Steps:** The industry review will continue in tandem with the CRU review until the 1st of October.

ID	Title	Status	Reason for Status	Status End Date	Next Step
A113	Amendment to Gas Quality Standards at Entry Points	Industry/CRU Review	To allow time for OEMs to finish their studies.	01/10/2024	CMF Proposal Report to issue

# Great Britain (GB) Gas Quality Update

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# GB Gas Quality; Enhanced Data

- Unified Code Modification (UNC) is being progressed by National Gas (NG) to implement reduced lower WOBBE Index (WI) limit:
  - Focus on provision of enhanced gas quality data, NG has proposed 7 x options:
    - **Option No. 1:** Publication of almost real-time WI and Calorific Value (CV) data at Gas Distribution Network (GDN) exit-points from the National Transmission System (NTS)
    - **Option No. 2:** Publication of almost real-time WI, CV, Carbon Dioxide (CO<sub>2</sub>), Relative Density (RD) and Nitrogen (N<sub>2</sub>) data at GDN offtakes from the NTS
    - **Option No. 3:** Publish WI and CV data at entry-points to the NTS
    - **Option No. 4:** Publish WI and CV data at entry points to the NTS with sensitive downstream customers
    - **Option No. 5:** Produce annual heat-maps of low WI gas on NTS system
    - **Option No. 6:** Automated alert in real time of low WI gas
    - **Option No. 7:** Forecast of future gas quality, i.e. WI and CV

# Data publication options.....continued

- NG preference appears to be Option No. 1: GDNs already provide data to NG, but requires GDNs permission to use this data for this purpose
  - NG plan to publish this data on their National Gas Transmission Data Portal – developed from the previous Market Information Provision Portal (MIPP)
    - **Data would be refreshed every 15-minutes – i.e. near real-time**, and portal has Application Programming Interface (API) to facilitate automatic download of data
- NG open to Option No.2 but needs support to justify extra cost - asked industry participants to outline the benefits to help make the case
- Publication of gas quality data at entry points is more complicated, as some producers consider data to be commercially sensitive
- NG believes Options No. 5 to 7 will be more difficult to justify



- NG is also progressing a UNC on transparency of non-standard gas quality parameters at new entry points to the NTS
  - Proposed UNC modification itself is not particularly relevant to Republic of Ireland (ROI), but the driver of the modification may be of interest
- It is being driven by new biomethane connections to the NTS requesting exemptions for up to 1% Oxygen (O2) at entry
  - NG is supportive of these applications to enable transition to “Net Zero”
  - NG envisage 2 x stage approach, with initial site-specific exemptions, and eventually a class exemption from Gas Safety Management Regulation (GSMR)
  - NG is currently developing the evidence to support application to HSE for site-specific exemptions
  - NG envisage O2 level being rapidly diluted but are conducting risk assessment of impact on downstream offtakes sensitive to O2 – e.g. storage & interconnectors

# Update on GNI Code Modifications

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- GNI has also held meeting with Safety Team of the Commission for Regulation of Utilities (CRU) on Safety Case submission on 28-May-24:
  - Awaiting CRU feedback to identify any outstanding issues with the submission

# 7. Code Modification Proposal A114



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Amendment to Code of Operations to classify Gas Points with a design MHQ of 100,000 kWh as LDMs

# 7. Code Modification Proposal A114 – Classifying Gas Points with a design MHQ of 100,000 kWh as LDMs

- The Proposal is to classify all Gas Points that have a design maximum hourly quantity of not less than 100,000 kWh classified as LDM pursuant to the Code of Operations irrespective of the Annual Quantity associated for such Gas Points.
- **Rationale for the Proposal**
- Shippers (including Generation Units subject to Central Dispatch) will be able to view hourly data on GTMS and be able to book capacity as required, leading to better trading decisions and enabling them meeting obligations under Part D of the Code of Operations to submit accurate information with respect to Nominations
- GNI system oversight and control is enhanced when receiving accurate nominations with a greatly reduced likelihood of experiencing unexpected substantial gas withdrawals.
- Industry Review closed on 31 January with one submission which supported the proposal.
- Transporter has submitted CMF Proposal Report to CRU with a response to CRU query in relation to prospective tariff/cost implications resulting from the modification.
- **Next Steps:** Proposal remains under CRU Review.

ID	Title	Status	Reason for Status	Status End Date	Next Step
A114	Re-classify Gas Points with a design MHQ of 100,000KWh as LDM	CRU Review	To allow industry to make any formal submissions to the Transporter.	TBC	Instruction & Rationale to issue

# 8. Status of Code Modification Proposals

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## 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	Industry/CRU Review	To allow time for OEMs to finish their studies.	01/10/2024	CMF Proposal Report to issue
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	Industry/CRU Review	To allow time for OEMs to finish their studies.	01/10/2024	CMF Proposal Report to issue
A114	Re-classify Gas Points with a design MHQ of 100,000KWh as LDM	CRU Review	To allow industry to make any formal submissions to the Transporter.	TBC	Instruction & Rationale to issue

# 9. Gas and Electricity interaction

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Gas  
Networks  
Ireland



## OEM Report Progress

- EAI collating information from members on OEM Report Progress re A11/A113 – further assessment on following slide.

## Gas Quality Signals

- We would support GNI developing a system which shows gas quality on interconnectors.
  - GNI best suited to provide this service
  - Creates operational efficiencies for generators
  - Ensures information is gathered in timely manner
  - Removes requirement for all generators to develop internal system

## Letter on Cost Recovery

- Response received from UR
- Applications can be made through USPC however unclear whether these will be regarded as net going forward costs.







EAI Member	Gas Turbine	A111 - Increasing Oxygen Content to 0.5% - Status	A113 - Lowering Wobbe Index - Status	Timeline for Completion Assessment	Timeline for Completion of Works if Needed
ESB	Aghada CCGT			Complete	None required
	Aghada CT11			Complete	None required
	Aghada CT12			Complete	None required
	Aghada CT14			Complete	None required
	Dublin Bay Power CCGT			October'24	TBC
	Poolbeg A			Complete	None required
	Poolbeg B			Complete	None required
	Poolbeg Flexgen			TBC	TBC
	Shellybanks Flexgen			TBC	TBC
	Corduff Flexgen			TBC	TBC
	Northwall TEG			TBC	TBC
SSE	Great Island	OEM checking their study results at CV conditions they used vs those used by Gas industry - normalised vs standardised .		Report pending Summer '24	
Tynagh Energy Ltd	Tynagh TYC				
BNM	Edenderry				
Energia	Huntstown 1				
	Huntstown 2				
Aughinish Alumina	Sealrock				
EPUKI	Tynagh				
Bord Gais	Whitegate	Initial review by OEM suggests no impact on GT unit. However, this does not include the fuel supply and management system so 3rd party review being undertaken.	Initial review by OEM suggests no impact on GT unit. However, this does not include the fuel supply and management system so 3rd party review being undertaken.	Initial review results expected in July 2024.	
	Peaker Plant	Reviewing the impact of the changes with the engine supplier.	Reviewing the impact of the changes with the engine supplier.	No timeline given.	



## Raising of Upper Wobbe Limit

- IGEM workshop on Wednesday 26<sup>th</sup> June

## Dispatch Signals & Gas System Constraints in Peak Demand

- Concern among members regarding the current dispatch signals received from the electricity system operator & the ability to meet gas demand on short notice.
- Particularly concerning in 2025/2026 as system meets peak demand & further integration of renewables requires higher intermittency.
- Potential EirGrid/ GNI collaboration on this risk to ensure sustainable gas and power interaction.



# 10. Net Zero Carbon Network - Update on GNI's pathway to a net zero carbon gas network

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# 11. GNI presentation on Security of Supply



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Tom Hegarty – Network Operations Manager

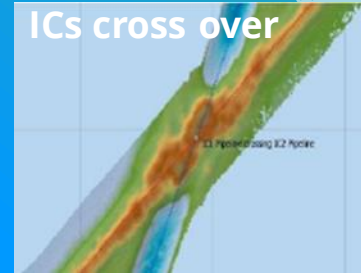
# Locations of our Critical National Infrastructure



Asset Location	CNI Level
Beattock CS	5
Brighthouse Bay CS	5
IC 1&2 cross over	5
Gormanston	5
IC2 on its own	5
IC1 on its own	4
Loughshinny	4
Ballough	4
Baldrummin	4
Carrickfergus	4



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





## Reliability

- The capability of our assets to operate and maintain service under a range of conditions.

## Resistance

- The level of physical protection our critical assets have.

## Redundancy

- The adaptability of our infrastructure to maintain services and covers assts, networks and systems.

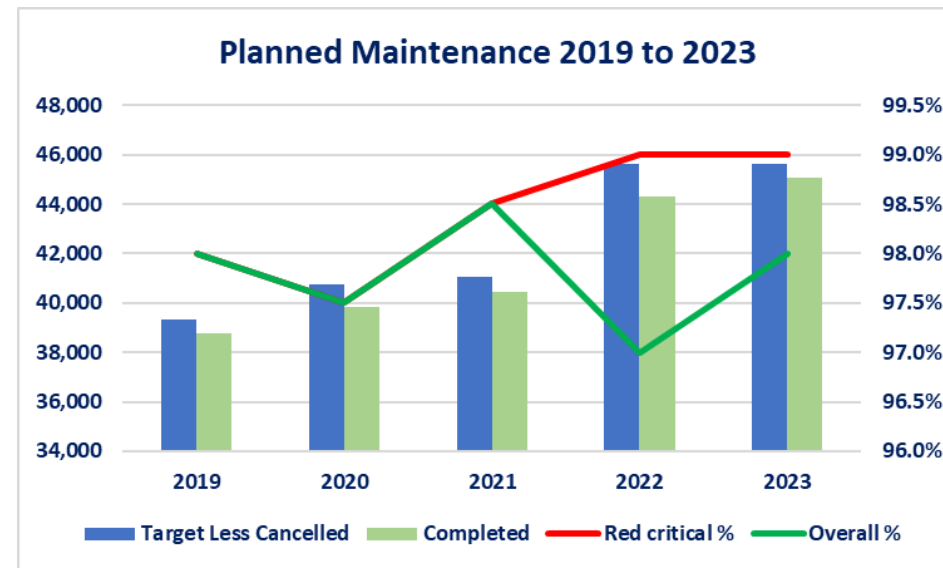
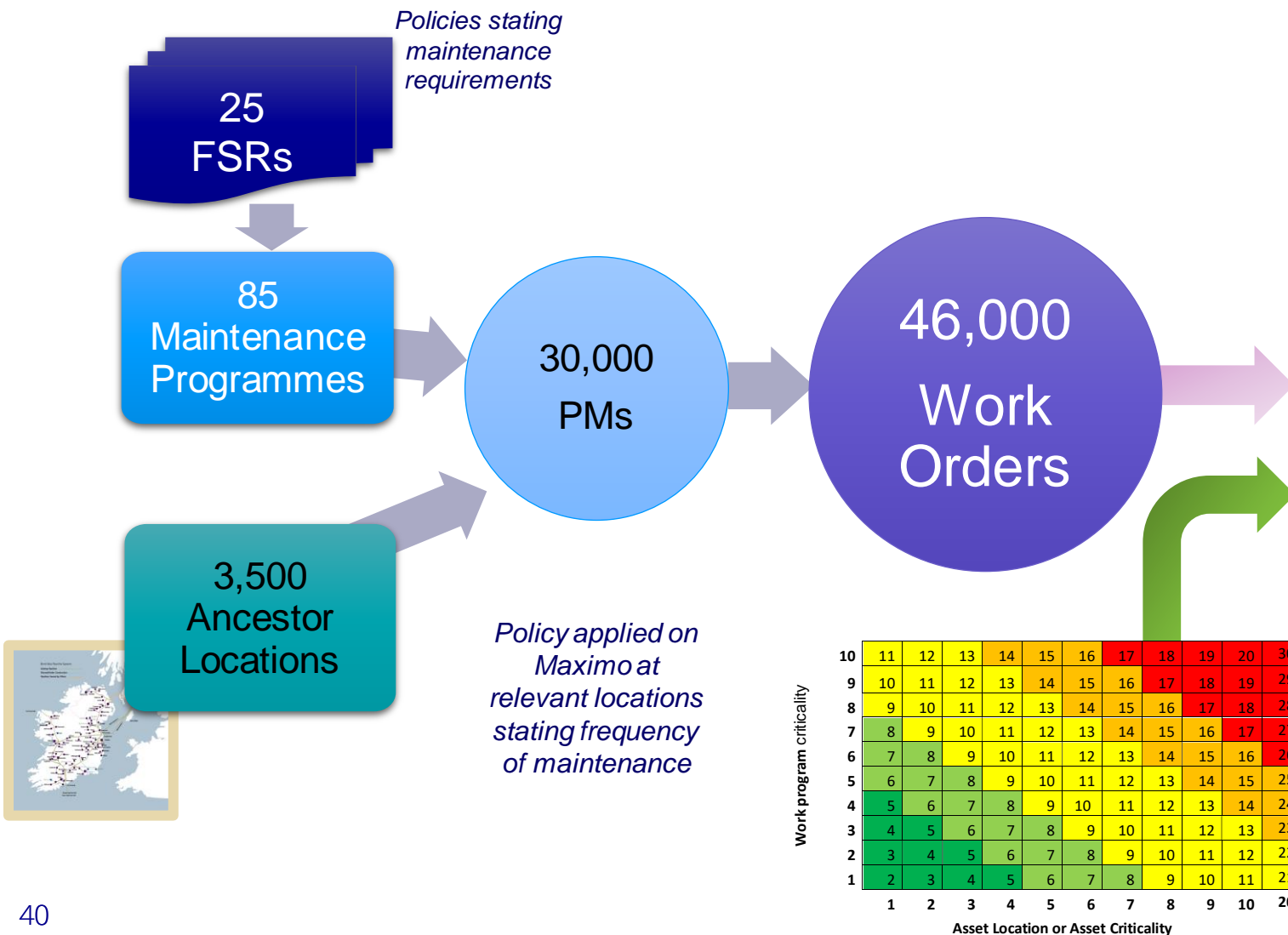
## Response and Recovery

- Our ability to respond and recover from a disruptive attack.





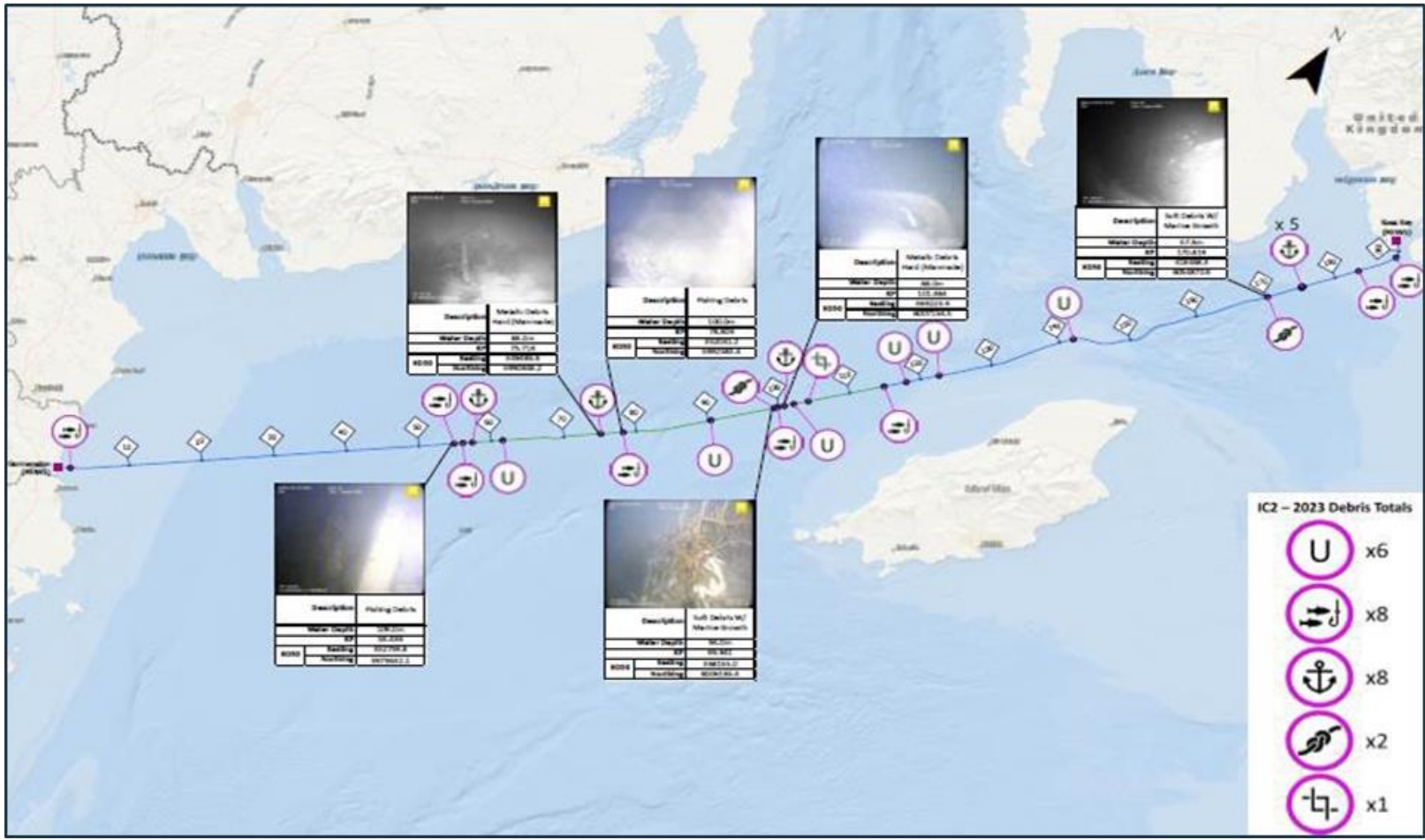
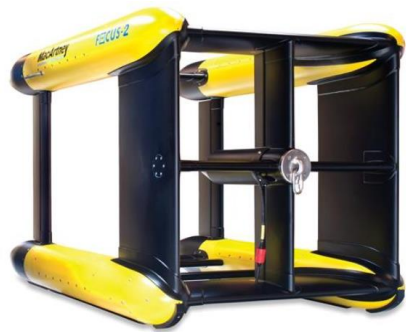
# Reliability - Maintenance



10	11	12	13	14	15	16	17	18	19	20	30	40
9	10	11	12	13	14	15	16	17	18	19	29	39
8	9	10	11	12	13	14	15	16	17	18	28	38
7	8	9	10	11	12	13	14	15	16	17	27	37
6	7	8	9	10	11	12	13	14	15	16	26	36
5	6	7	8	9	10	11	12	13	14	15	25	35
4	5	6	7	8	9	10	11	12	13	14	24	34
3	4	5	6	7	8	9	10	11	12	13	23	33
2	3	4	5	6	7	8	9	10	11	12	22	32
1	2	3	4	5	6	7	8	9	10	11	21	31
	1	2	3	4	5	6	7	8	9	10	20	30



# Sub Sea Inspection

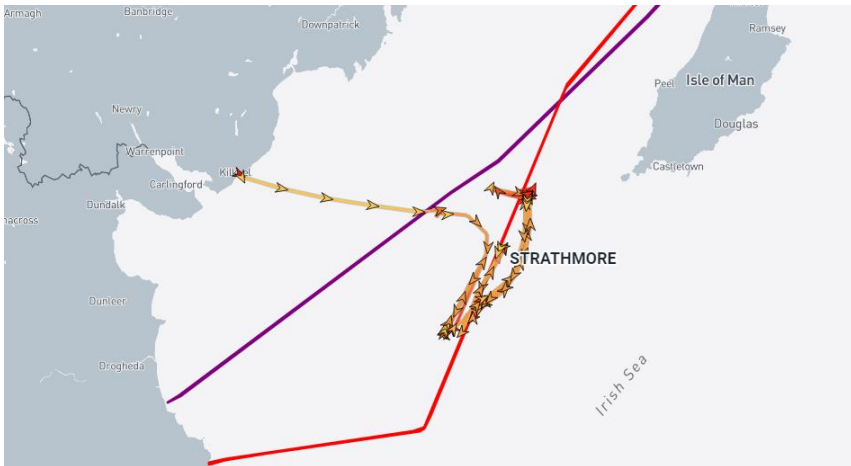
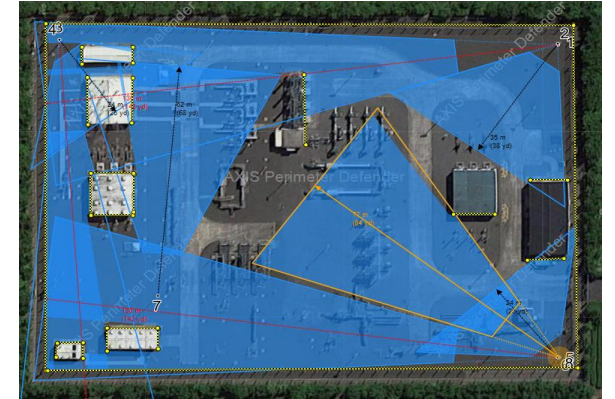




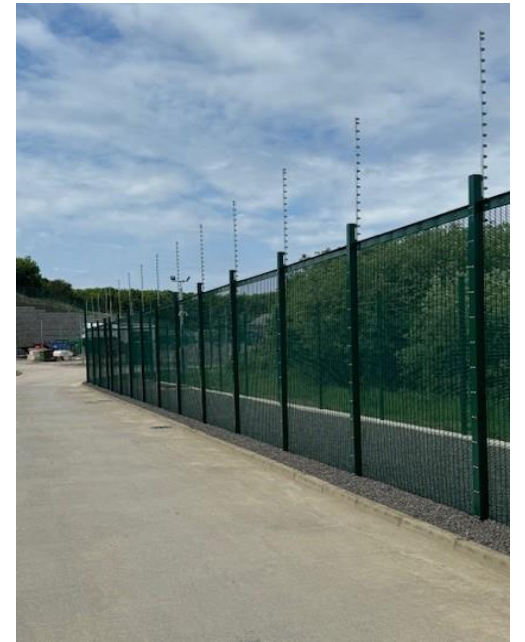


# Resistance

## On and Offshore Monitoring

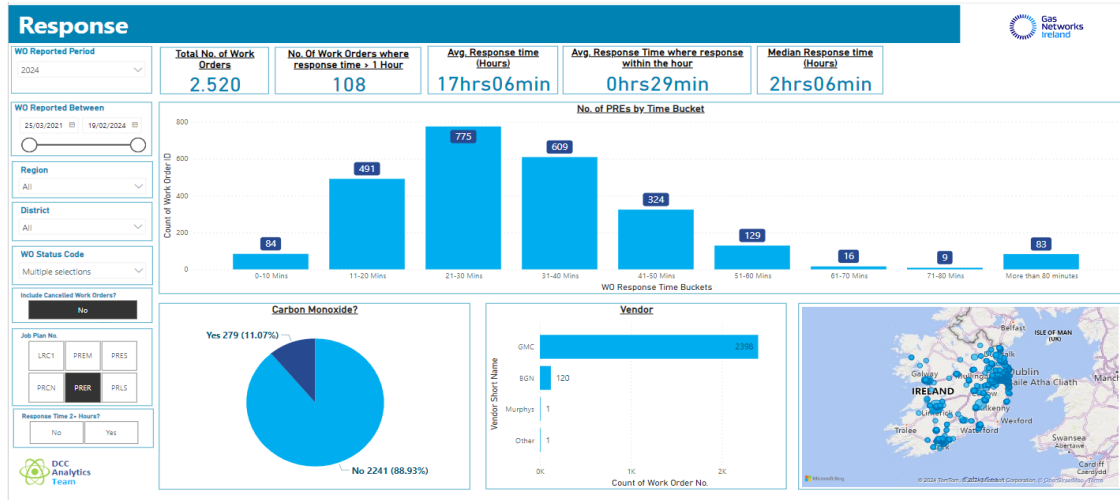


Physical Security





# Response and Recovery



## Specialist Repair Contracts – 24/7



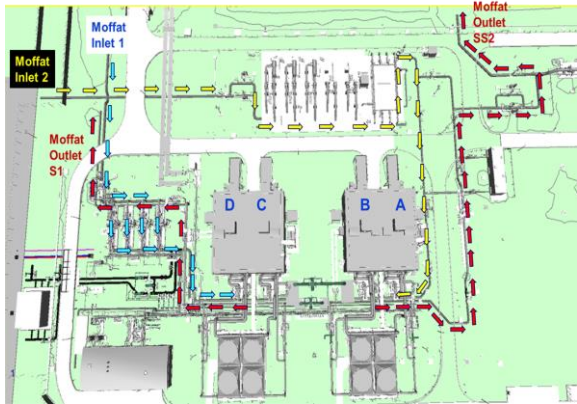
## Control Rooms – 24/7





# Redundancy

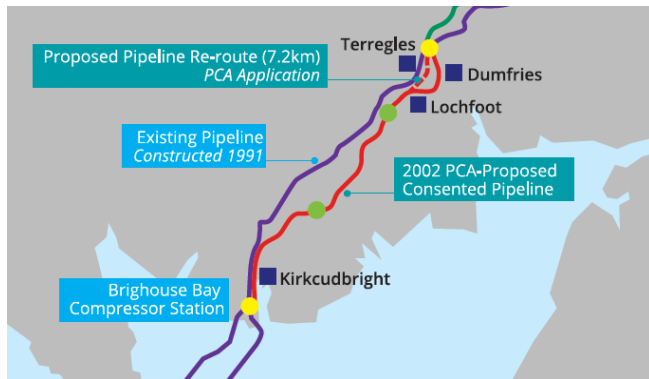
## What we've done (recently)



**Beattock Station Splitting**



**Ballough AGI Splitting**



**Twinned on shore**



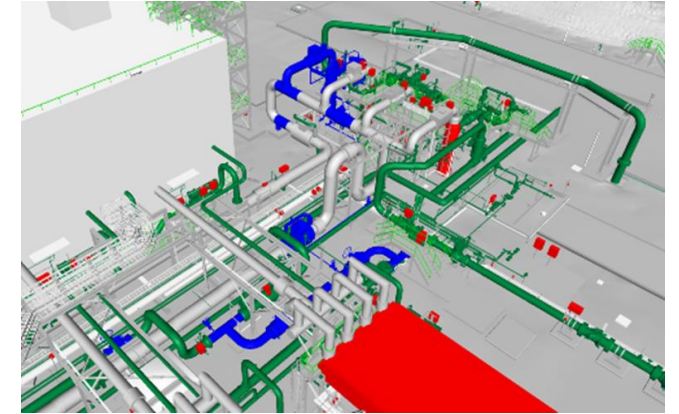
**Cush Bio**



**Mitchelstown CGI**



## What we're doing



**Brighthouse Bay Splitting**



**Strategic Storage**

# Thank You



Gas  
Networks  
Ireland



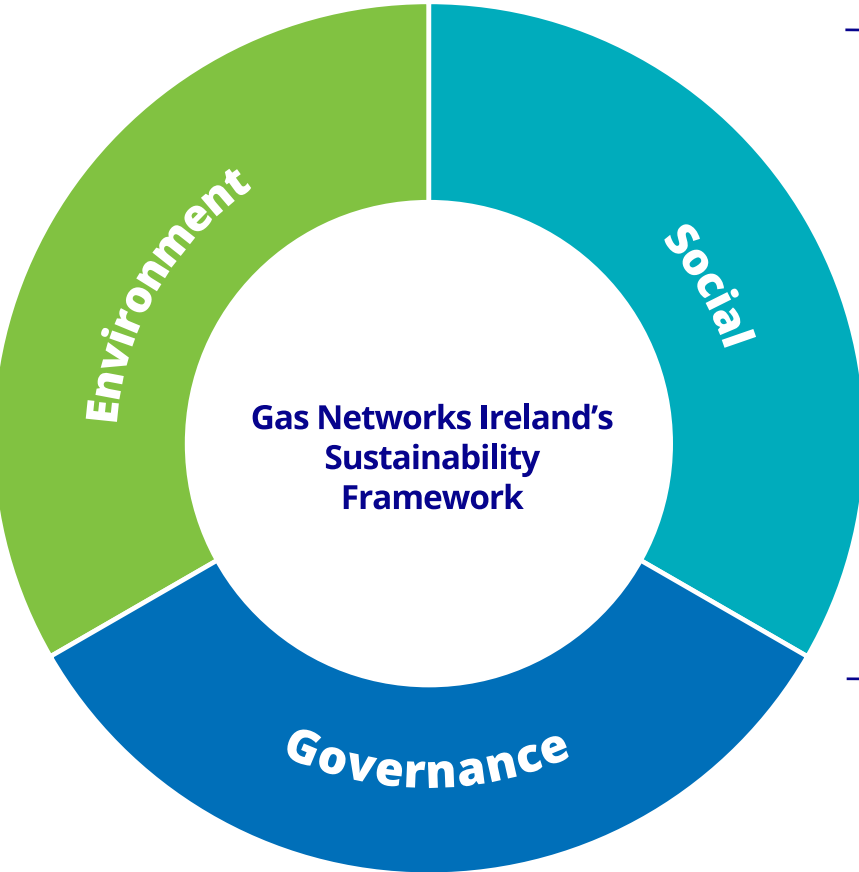
# 12. GNI presentation on Methane Emissions



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Brid Sheehan – Sustainability Engineer

# GNI Sustainability Strategy Priorities



**Environment**

Reduce our impact in the communities in which we operate



Emissions Reduction



Energy Efficiency

**Social**

Enhance our impact in the communities in which we operate



Diversity and Inclusion



Biodiversity

**Governance**

Reporting, assurance and legal requirements



ESG Ratings

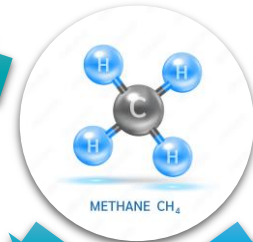
# Methane Emissions - Effects

The gas we transport is made up of ~ 90% methane



When methane is combusted, it is converted to CO<sub>2</sub> and water

Un-combusted methane is a potent greenhouse gas with a profound impact on global warming and climate change



Un-combusted methane is over **29** times more potent than CO<sub>2</sub> over a 100-year timescale.



Due to the short half-life of methane, cutting methane can produce a net climate cooling effect in a short time frame

## 2. EU Methane Emissions Regulation

- As part of the European Union's commitment to combat climate change and achieve carbon neutrality by 2050, it is imperative to address methane emissions, particularly in the energy sector where they are prevalent.
- Scope of the regulation:

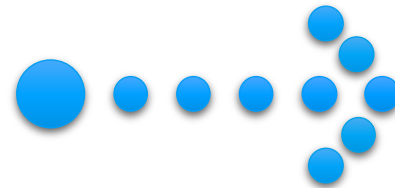
Accurate quantification, reporting and verification of methane emissions in the energy sector



The abatement of those emissions



Transparency of methane emissions from imports of fossil energy into the Union

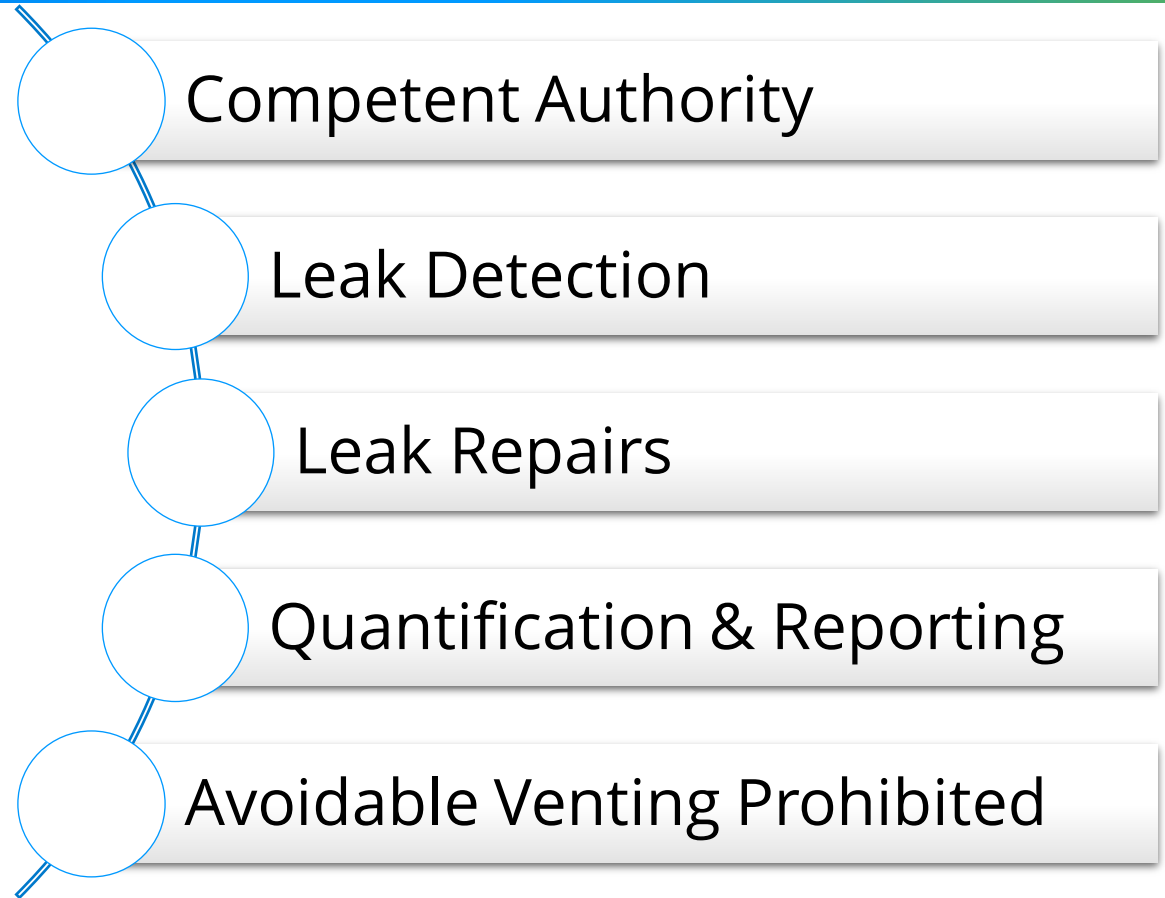


Regulation on Methane Emissions Reduction (EU) 2019/942

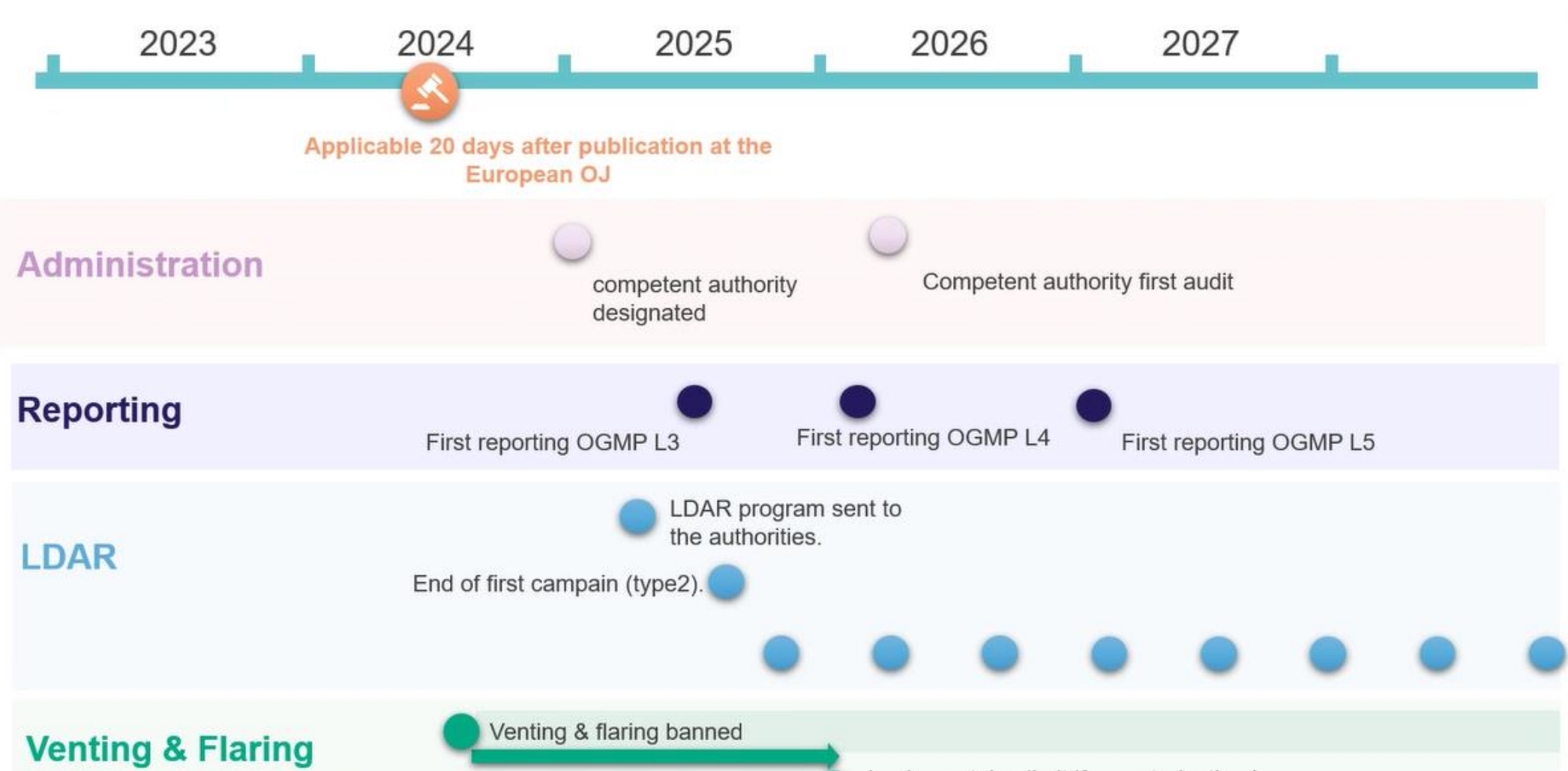


# Key Elements for GNI

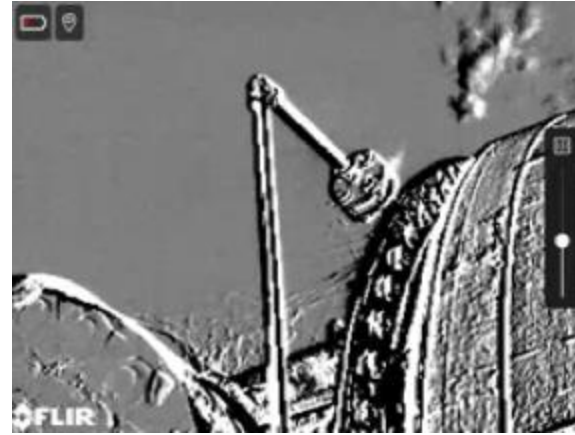
1. Creation of a competent authority to oversee implementation of this act
2. Mandated minimum leak surveys of the network and GNI installations (LDAR)
3. Mandated minimum time for leak repairs
4. Report annually on methane emission quantification from the entire network
5. Avoidable venting of natural gas is to be prohibited & zero-emitting devices installed



# Key Timelines for GNI



# What have GNI been doing?



# Importer Requirements (For Information)

## **Importers must provide CA with information relating to measurement, verification, reporting and mitigation of methane emissions**

- 3 implementation phases
  - Phase 1 - Methane Transparency database for gas, coal and oil placed on the EU market with methane intensity profiles for member states, third countries and companies.
  - Phase 2 &3 - Importers shall demonstrate that contracts concluded to renewed after the entry into force of the regulation are subject to monitoring, reporting and verification measures at the level of the producer, equivalent to those set out in the regulation. For contracts concluded before the entry into force of the regulation, all reasonable efforts in relation to monitoring, reporting and verification applies.

# Thank You



Gas  
Networks  
Ireland



# 13. Update on Biomethane for Shrinkage

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Networks  
Ireland

# 13. Biomethane for Shrinkage

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- Meeting with CRU 23rd April with follow up discussions.
- Planning to issue a Prior Indication Notice in July.
- Offering opportunity for a bilateral discussions and workshop.

# 14. AOB Items/Next Meeting

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# 14. Next Meeting

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- Next Meeting is a virtual meeting on the 22<sup>nd</sup> of August.

# 14. Code Modification Forum Meetings in 2024

Next CMF Meeting



CMF Dates	Location
14 February	Virtual
24 April	Hybrid (Dublin)
13 June	Hybrid (Dublin)
22 August	Virtual
16 October	Hybrid (Cork)
4 December	Virtual

**Thank you for your  
participation**

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Ireland**