Biomethane Injection into NI's Gas Network

Industry Update

04/03/2022

Agenda

11:00	**UR Welcome** Tanya Hedley – Utility Regulator
11:05	**Strategic Policy Context** Irene McAllister – Department for the Economy
11:15	**Project Overview** Roisin McLaughlin – Utility Regulator
11:20	**Green Gas Certification Scheme** Jesse Scharf, Green Gas Certification Scheme
11:30	**Biomethane Connections** Ryan Love – Phoenix Natural Gas, Jason Hannon – GNI (UK)
11:50	**Changes to Regulatory Framework** Lisa McCarthy – firmus energy, Stephen English – GMO NI
12:05	**Key Contacts** Ryan Love – Phoenix Natural Gas, Jason Hannon – GNI (UK)
12:10	**Q&A, UR Close**

Strategic Policy Context

Department for the Economy
www.economy-ni.gov.uk

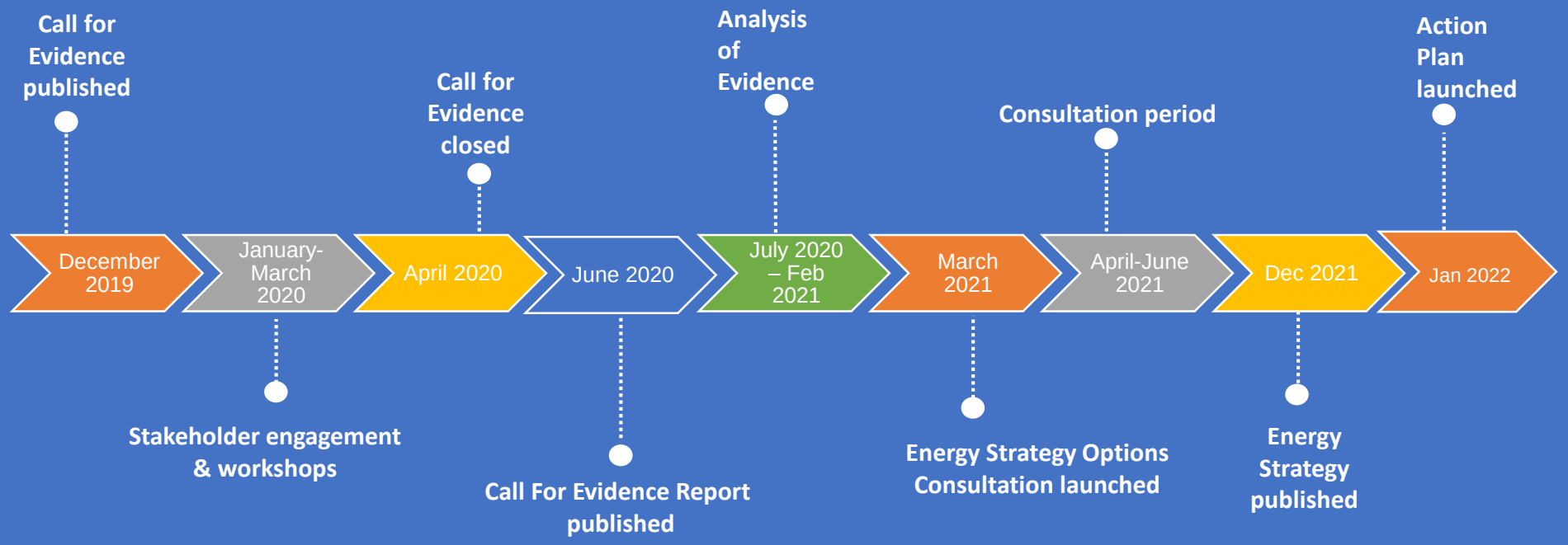
BIOMETHANE INDUSTRY BRIEFING

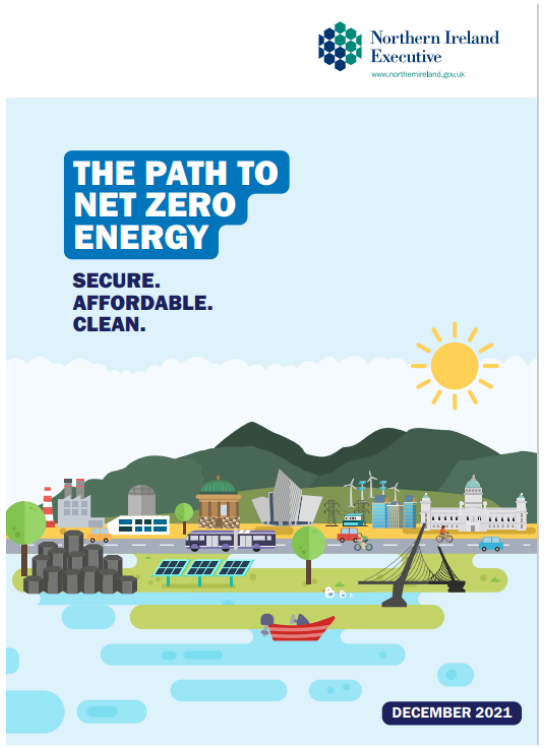
4 March 2022

Irene McAllister, Gas Policy Branch

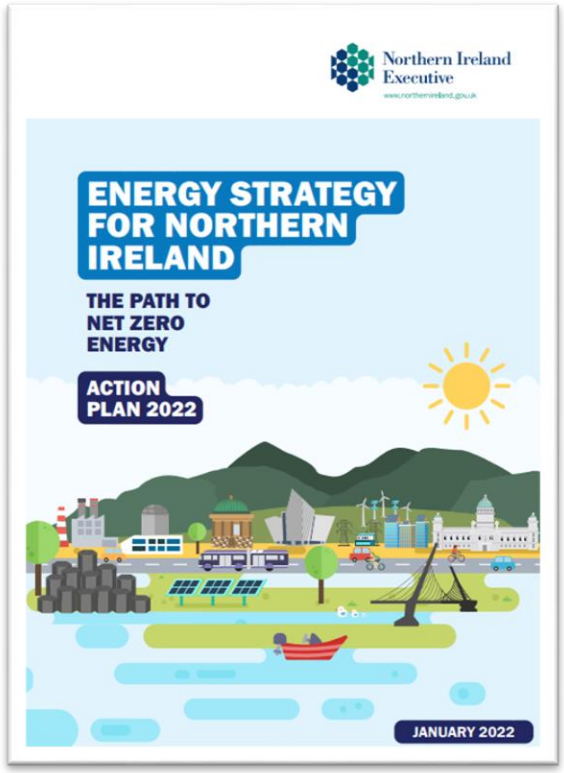
Development of a New Energy Strategy for Northern Ireland

Department for the Economy
www.economy-ni.gov.uk





http://www.economy-ni.gov.uk/publications/energy-strategy-path-net-zero-energy



https://www.economy-ni.gov.uk/sites/default/files/publications/economy/energy-strategy-path-to-net-zero-action-plan.pdf

Vision

*"Ensuring our energy is **secure**, **affordable** and **clean** for us now and for future generations"*

Supporting Principles

- Place citizens at the heart of our energy future;
- Grow the green economy;
- Do more with less;
- Replace fossil fuels with indigenous renewables; and
- Create a flexible, resilient and integrated energy system.

Key Targets for 2030

- ***Reducing emissions:*** 56% reduction in energy-related emissions;
- ***Energy Efficiency:*** Deliver energy savings of 25% from buildings and industry;
- ***Renewables:*** Meet at least 70% of electricity consumption from a diverse mix of renewable sources; and
- ***Green Economy:*** Double the size of our low carbon and renewable energy economy to a turnover of more than £2 billion.

Decarbonising Heat Challenge

- Heat accounts for 56% of NI energy consumption and is currently almost entirely met by fossil fuels.
- 2/3 of NI energy consumers still use oil-fired heating.
- Decarbonising heat will include a range of technologies with off-gas grid and on-grid solutions required.
- Focus to 2030 is on certain “low regret” pathways, and removing the most carbon intensive heating sources.

Potential Solutions

- Heat pumps – high levels of energy efficiency required.
- Existing gas network can have an important role in supporting the transition to net zero carbon.
- Zero carbon gas – biomethane and hydrogen.
- LPG and bioLPG for areas off the gas grid.
- Liquid biofuels.

Gas Decarbonisation

- Initial focus is on the biomethane potential with 76 existing Anaerobic Digestion plants in NI, and a significant feedstock resource.

- Potential for hydrogen blending or 100% hydrogen in selected gas networks or areas, utilizing our modern gas network.

- Continue to liaise with counterparts in other areas on gas decarbonisation initiatives.

Forward Look

- Too soon to make changes to the current policy position on gas, but the gas industry is working towards a pathway to net zero by 2050.

- DfE to publish a Decarbonising Heat Consultation with further information on available options and timeframes for decarbonising heat.

- DfE and the Utility Regulator are aiming to take forward research into:
  - the biomethane resource in Northern Ireland; and

  - an economic assessment of biomethane, including as to whether there is any requirement for financial support/ incentivisation.

Project Overview

Project Overview

Purpose:

Achieving readiness for biomethane injection into the gas network

Project Team:

Utility Regulator, Gas Distribution Network Operators, Gas Transmission System Operators, Gas Market Operator Northern Ireland, Department for the Economy (observer)

Project Overview

Key Considerations:

- Facilitation of biomethane injections at transmission and distribution level
- Alignment with existing framework where reasonable
  → trade off between timely implementation and functionality
- Avoidance of unnecessary complexity of regulatory arrangements and network operations
- Cost efficiency
- Protection of consumer interests
- Least regrets approach in light of ongoing development of energy strategy/policy
- Subsidies to incentivise biomethane injection subject to DfE policy
- Facilitating hydrogen injection is a longer term issue

Project Overview

Key Focus Areas:

- Development of biomethane base case - industry updates in April 2021 https://www.uregni.gov.uk/news-centre/presentations-and-qa-list-biomethane-industry-updates
- Regulatory framework changes (ongoing)
  - Development and implementation of (amendments to) arrangements that:
    - are required to facilitate biomethane injection connections to the NI gas network; and
    - require regulatory decision/direction/approval/consent
  - Examples: network codes, gas distribution and high pressure licences licences, connection policies
  - Lead: Gas operators & Utility Regulator
  - Prioritisation of changes absolutely required for first biomethane entry connection to become operational
- Technical and operational readiness (ongoing)
  - Examples: health and safety requirements, technical specifications and operating procedures, contractual arrangements, process and system changes
  - Lead: Gas operators

Green Gas Certification Scheme

Intro to Green Gas Certification Scheme

GreenGas CERTIFICATION SCHEME

RENEWABLE ENERGY ASSOCIATION

Who are the GGCS?

- Operated by 2010 by Renewable Energy Assurance Limited (REAL) – subsidiary of Association for Renewable Energy and Clean Technology (trade association)
- Membership lists, annual report, scheme rules are publically available
- Externally audited to ensure no double counting
- *Approved Certification Scheme* within GB - Green Gas Levy framework

GreenGas CERTIFICATION SCHEME

REA RENEWABLE ENERGY ASSOCIATION

What is the GGCS?

- Green Gas Certification Scheme (GGCS) is a registry where Renewable Gas Guarantees of Origin (RGGOs) are issued, transferred and retired
- RGGOs sometimes referred to as “Certificates”, “Certs” or “Green Gas Certificates”.
- RGGOs are a kind of Energy Attribute Certificate (EAC) - other examples of EACs are Renewable Electricity Guarantees of Origin (REGOs), Guarantees of Origin (GOs) or International Renewable Energy Certificates (I-RECs)
- Biomethane producers and RGGO traders have accounts on the GGCS registry where RGGOs are issued and traded. Traders can retire RGGOs and allocated them to a gas consumer.

GreenGas CERTIFICATION SCHEME

REA RENEWABLE ENERGY ASSOCIATION

IT

- The GGCS registry is a Microsoft SQL database
- Each producer has a secure account where they
  - View their activity within the database
  - enter data in order to be issued with RGGOs
- Each trader has a secure account where they
  - send, receive and retire RGGOs
- Consumers can operate trader accounts but it is rare.

GreenGas CERTIFICATION SCHEME

RENEWABLE ENERGY ASSOCIATION

GreenGas CERTIFICATION SCHEME

Search the website...

contact | privacy | member log out

HOME | REGISTER GAS | TRANSFER RGGOS | EVIDENCE | LOG OUT

Welcome

Welcome to your GGCS account

Test Plant UK Ltd

Plant Number: P0006

122 Abingdon Road, Drayton, OX14 4HT

Green Gas (Biomethane), Process (Anaerobic Digestion), Delivery (Grid Injection)

Metering Point (0000015322), Commissioning Date (May '15), Capacity (12 MW)

Investment Support (No)

Biomass Inputs:

- GGCS - Biomass (Unspecified) Classification (Product/Co-product)
- GGCS - Biomass (Unspecified) Classification (Residues)
- GGCS - Biomass (Unspecified) Classification (Waste)

If any of the above details are incorrect you must contact the Scheme Administrator immediately

On this page:

Your GGCS account enables you to register green gas you have injected into the grid and upload evidence related to those injections.

When your gas registrations are approved Renewable Gas Guarantees of Origin (RGGOs) are issued into your account, which you can then transfer to GGCS Trader accounts.

Please note that it is not possible for other producers or traders who participate in the GGCS to transfer RGGOs into your account, or for you to retire RGGOs.

Please check that the details shown above (plant address, commissioning date, etc) are

Contact Status:

✖ You have not yet agreed to share your contact details with GGCS Traders. Click here to change this.

Trader Contacts:

The list below shows you the contacts of GGCS Trader accounts who have chosen to share their details with you.

Supplier	Contact email

GreenGas CERTIFICATION SCHEME

Search the website...

contact | privacy | member log out

HOME | REGISTER GAS | TRANSFER RGGOS | EVIDENCE | LOG OUT

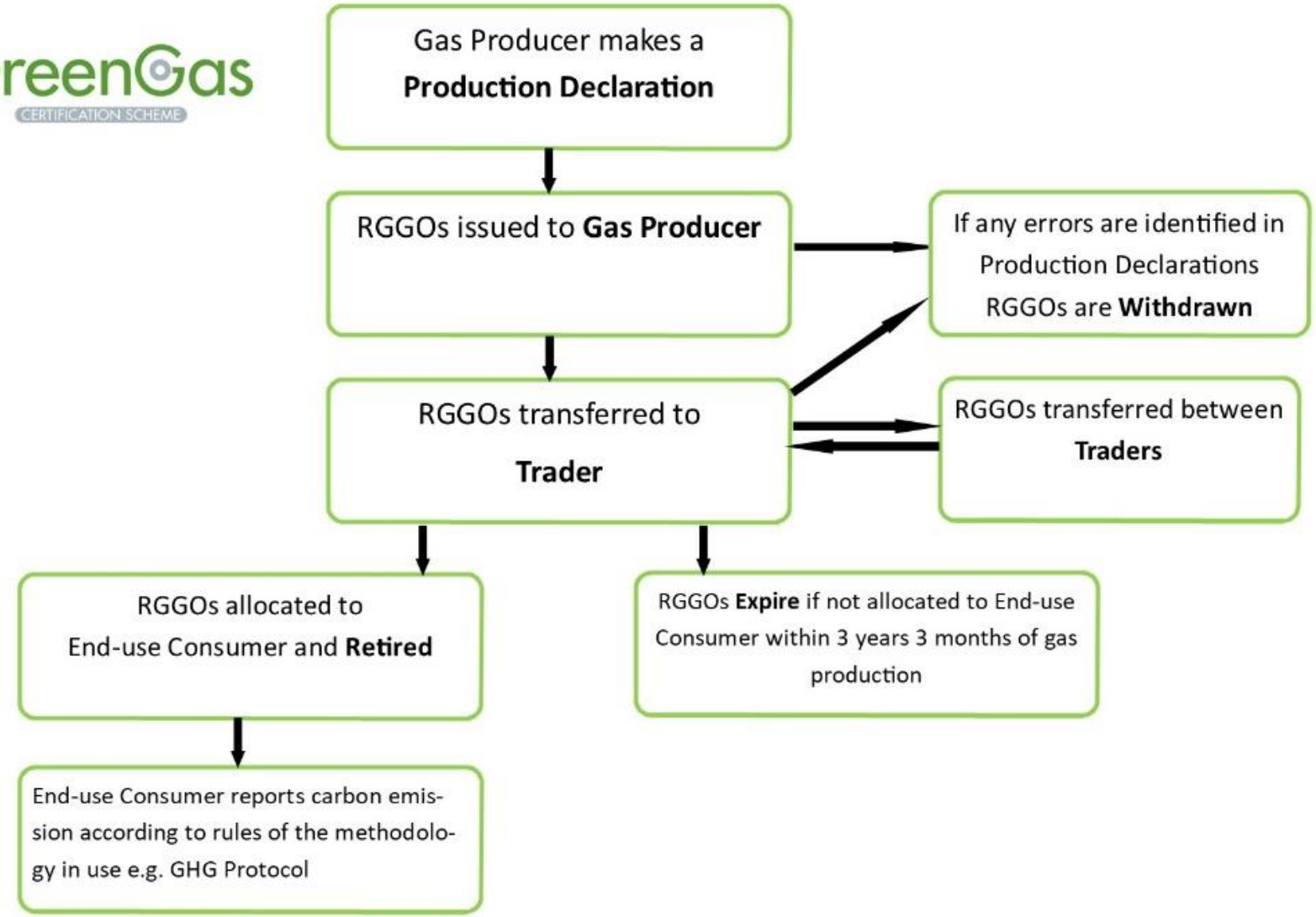
Register injected gas

Please enter the details of the green gas you have injected

Please enter the details of the green gas you have injected

Gas injected during quarter ending in	January 2022
Biomass information	GGCS - Biomass (Unspecified) Classification (Product/Co-product)
RHI number	1234567894
* Gas Injected	Gas Injected in kWh
* Injection date from	dd/mm/yyyy
* Injection date to	dd/mm/yyyy
Production support (e.g. RHI) received	No
Sustainability criteria met	No sustainability criteria met

Submit Gas Injected or cancel


Gas Producer makes a
Production Declaration
RGGOs issued to Gas Producer
If any errors are identified in Production Declarations RGGOs are Withdrawn
RGGOs transferred to
Trader
RGGOs transferred between
Traders
RGGOs allocated to
End-use Consumer and Retired
RGGOs Expire if not allocated to End-use Consumer within 3 years 3 months of gas production
End-use Consumer reports carbon emission according to rules of the methodology in use e.g. GHG Protocol

The biomethane producers

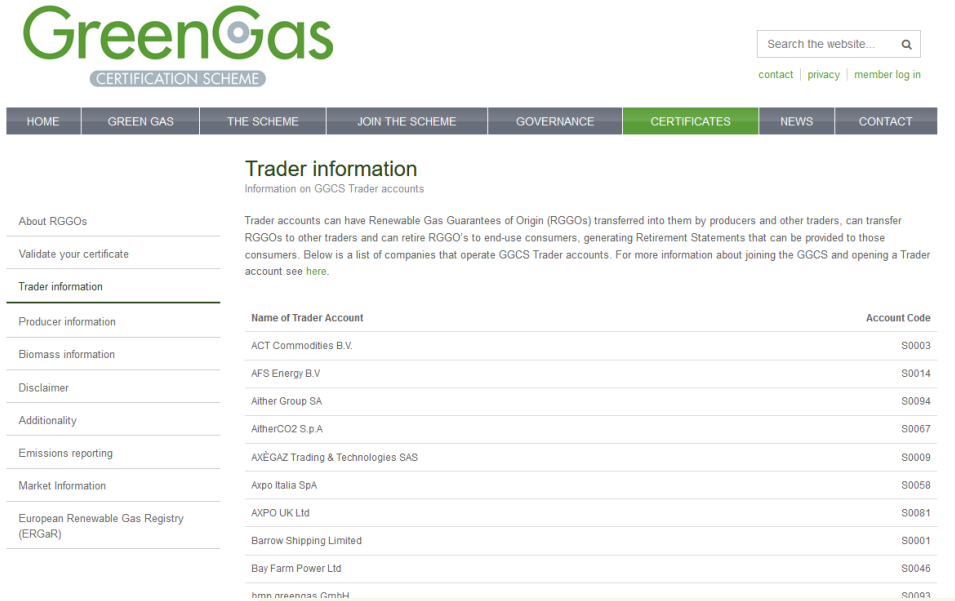
- Each plant signs a contract with the GGCS and opens an account
- 75+ biomethane producers
- Biomethane created from mix of wastes, residues and crops (products)
- Biomethane must meet recognised sustainability criteria e.g. RHI or RTFO
- Believe that future NI subsidy would include sustainability criteria that could be used.
- Value to producers has been reported at over £5/MWh so income stream worth £200,000/year to a “typical plant” (this is based on RHI gas not RTFO gas)
- Market information here

GreenGas CERTIFICATION SCHEME

RENEWABLE ENERGY ASSOCIATION

The traders

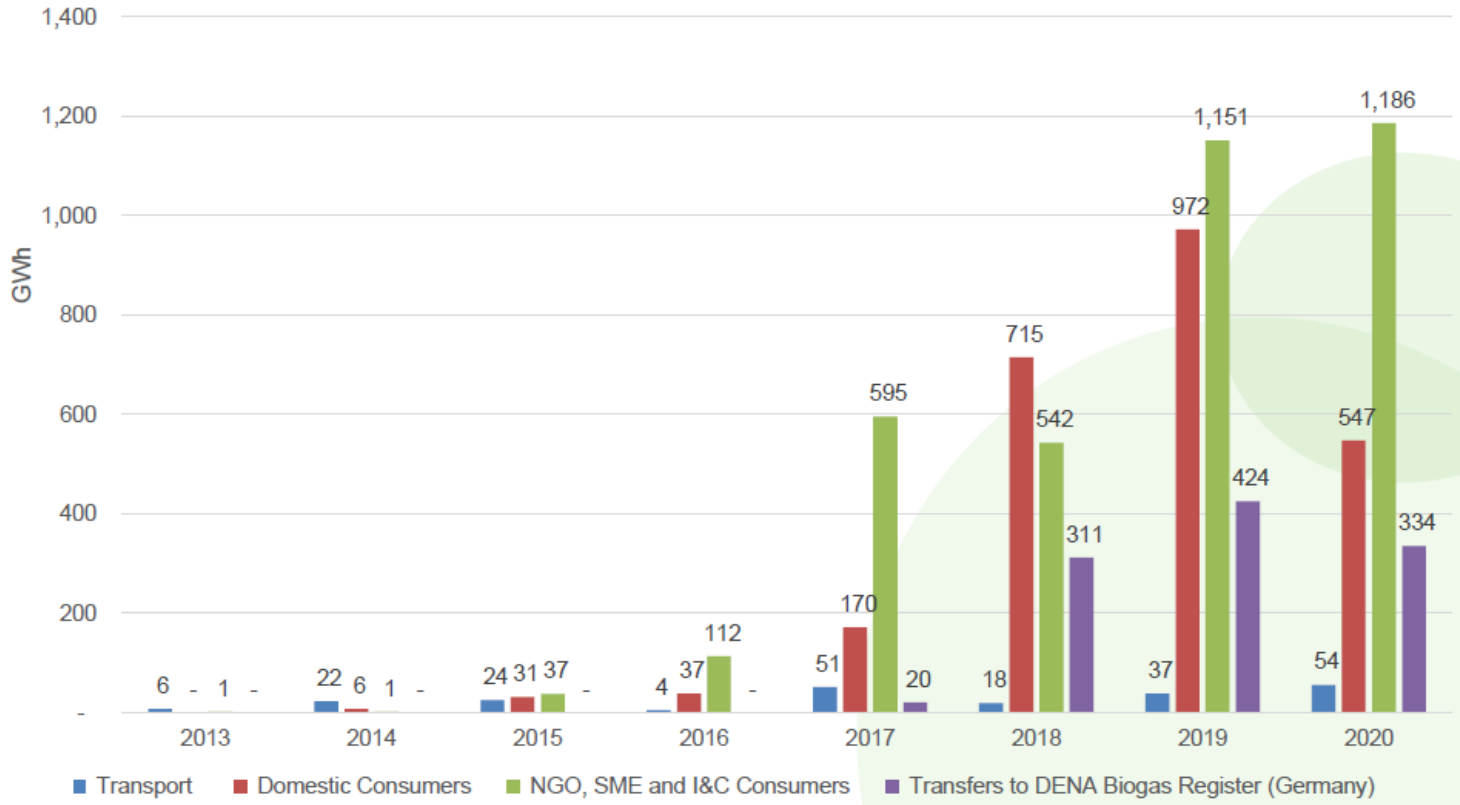
- Each trader signs a contract with the GGCS and opens an account
- 90+ traders offering route to market for RGGOs
- Ability to transfer RGGOs to German biomethane registry (DENA)



GreenGas CERTIFICATION SCHEME

RENEWABLE ENERGY ASSOCIATION

Consumers



GreenGas CERTIFICATION SCHEME

RENEWABLE ENERGY ASSOCIATION

Gas consumers receive a Retirement Statement

- Retirement Statements list retired Renewable Gas Guarantees of Origin (RGGOs)
- Each RGGO represents 1kWh of biomethane injected into the grid
- GGCS ensures that that RGGOs are only allocated to one customer
- Consumer can claim to have used green gas and report lower emissions
- Authenticity of Retirement Statements can be checked here

GreenGas CERTIFICATION SCHEME

REA RENEWABLE ENERGY ASSOCIATION

GreenGas

CERTIFICATION SCHEME

Example Certificate – DOES NOT CONTAIN VALID RGGOs

RGGOs issued on:	05/03/2018 11:06:29
RGGOs retired on:	05/03/2019 17:05:20
Retirement Statement downloaded on:	06/06/2019 10:45:13
RGGOs allocated to	**UK Supermarket Ltd**
Renewable Gas Guarantees of Origin	**G001MP00000001E0920** to **G001MP10395371E0920**
Injection Date:	01/7/2020 to 30/09/2020
Biomass Information:	GGCS - Biomass (Unspecified) Classification (Waste)
RGGOs issued by:	GGCS—UK
Amount:	10395371 kWh
Production Support received:	Yes
Sustainability Criteria Met:	Non-Domestic Renewable Heat Incentive (RHI) - UK
Certificate pin number:	kehif975d
Green Gas producer:	Biogas Biogas Ltd, Peterhead, Aberdeenshire, OX14 3LJ, Green Gas (Biomethane), Process (Anaerobic Digestion), Delivery (Grid Injection), Metering Point (00000012345), Commissioning Date (Dec '17), Capacity (5 MW), Investment Support (No) ,
Retirement statement generated by:	**Example Gas Suppliers Ltd ,** Drayton, Oxford, OX14HT, UK

Green CERTIFICATION S

RENEWABLE ENERGY ASSOCIATION

RGGO recognition

Scheme/Policy	RGGOs use recognised?
GHGP	Strong precedent
CDP	Yes – latest guidance in 2021
Green Gas Levy	Yes – exemptions based on RGGO backed supply
Domestic Price Cap	Yes – derogations based on RGGO backed supply
RHI/Green Gas Support Scheme	BEIS are aware that RHI/GGSS sites will generate income from RGGO sales
RTFO	No – but principle of grid supplied biomethane is
EU ETS	Yes – in some countries i.e. Germany and Demark
UK ETS	Not currently – consultation out soon

GreenGas CERTIFICATION SCHEME

REA RENEWABLE ENERGY ASSOCIATION

Costs for users

- Producers
  - Annual membership of £250
- Traders
  - Annual membership of £500
  - RGGOs Retirement Fee – 9.5pence/MWh

GreenGas CERTIFICATION SCHEME

RENEWABLE ENERGY ASSOCIATION

Northern Ireland

- GGCS always intended to operate UK wide, however as RHI for biomethane to grid was not available in NI and no plants have been developed to date
- Our sister schemes both operate in NI
  - Biofertiliser Certification Scheme
  - Compost Certification Scheme
- Would welcome NI plants joining the scheme
- GGCS is a private enterprise and free to take these kinds of business decisions

GreenGas CERTIFICATION SCHEME

REA RENEWABLE ENERGY ASSOCIATION

Biomethane Connections

Biomethane Injection
INDUSTRY UPDATE
[Distribution Networks]

4th March 2022

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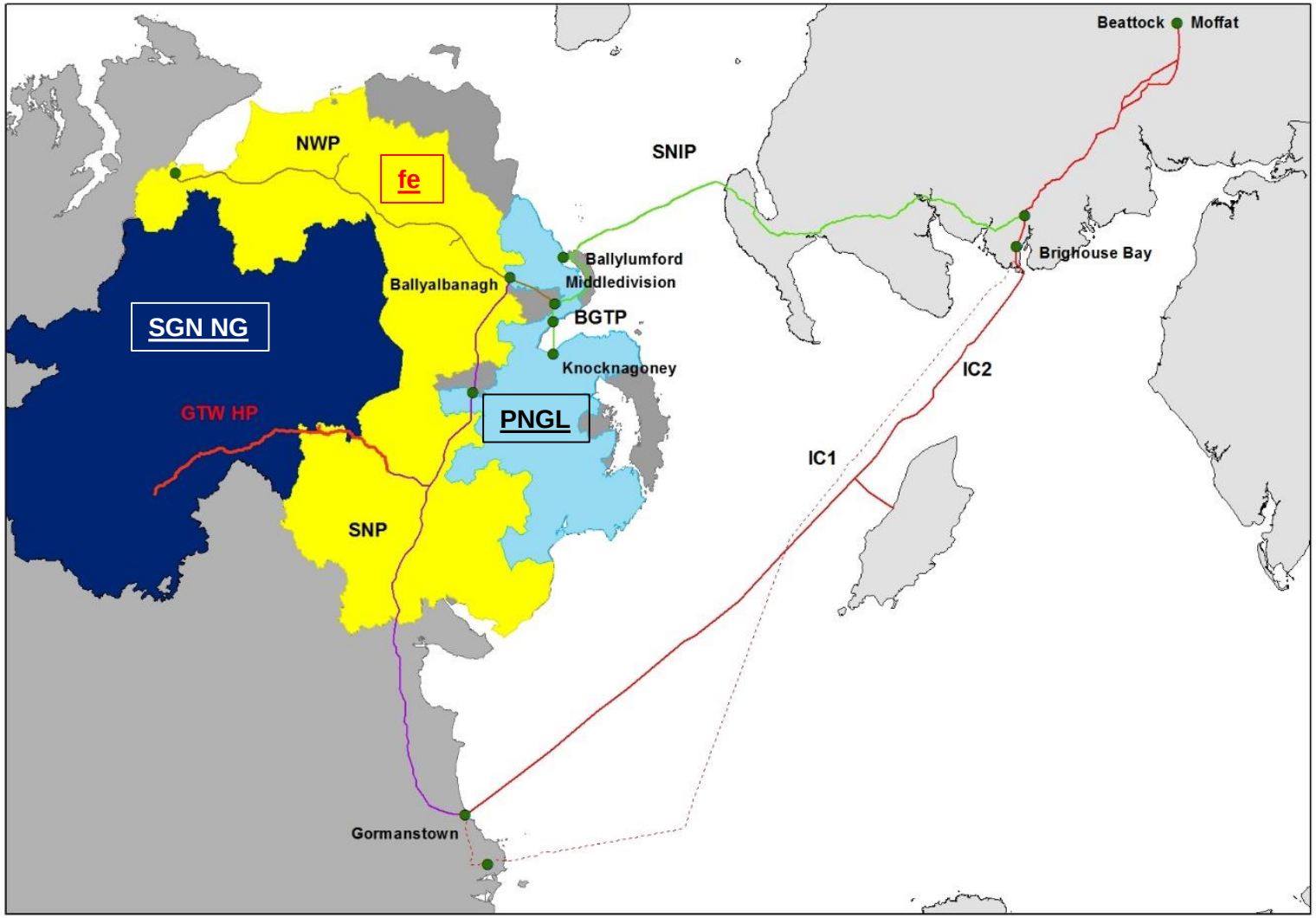
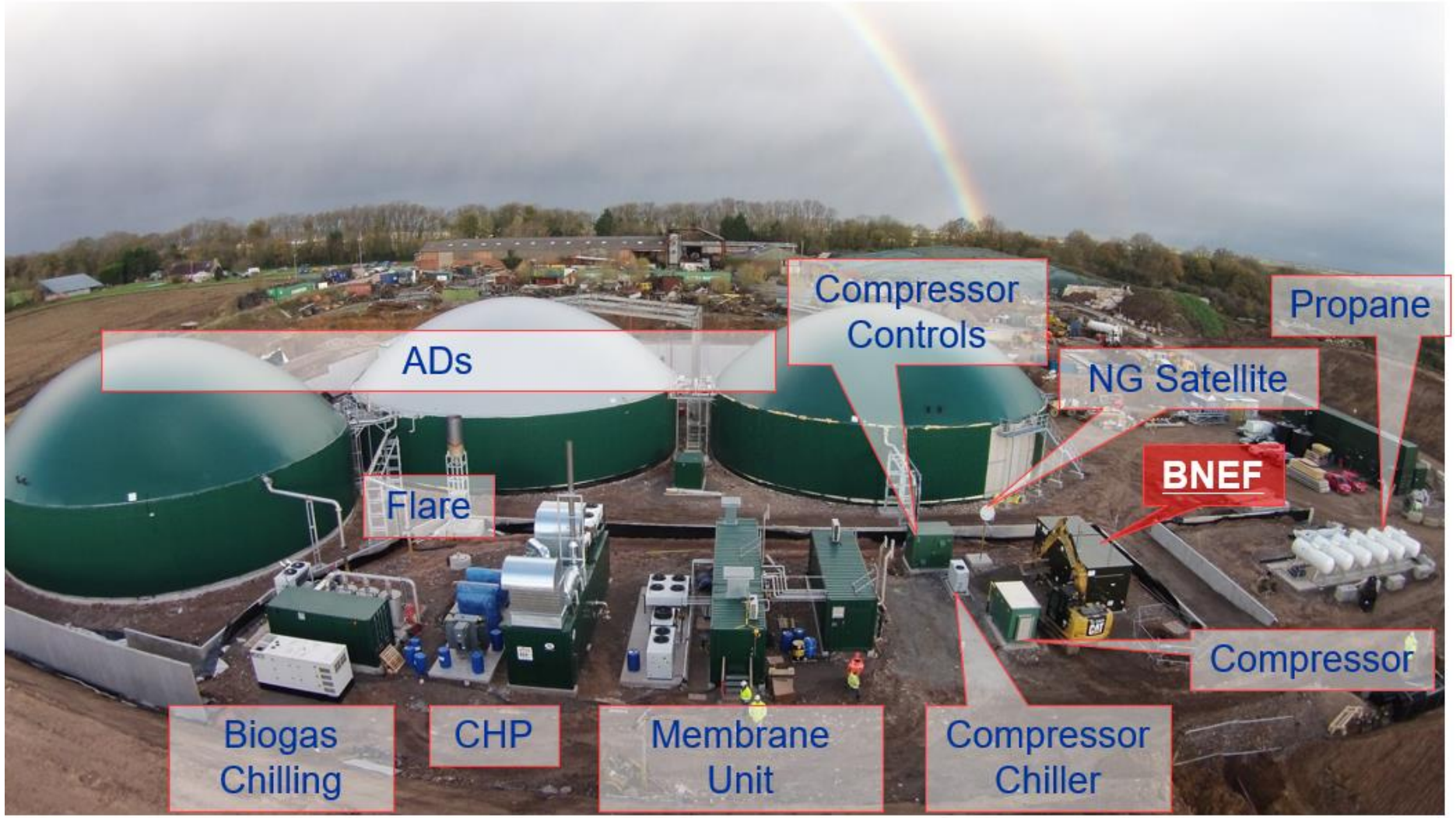
SGN Natural Gas

NI Transmission & Distribution Networks

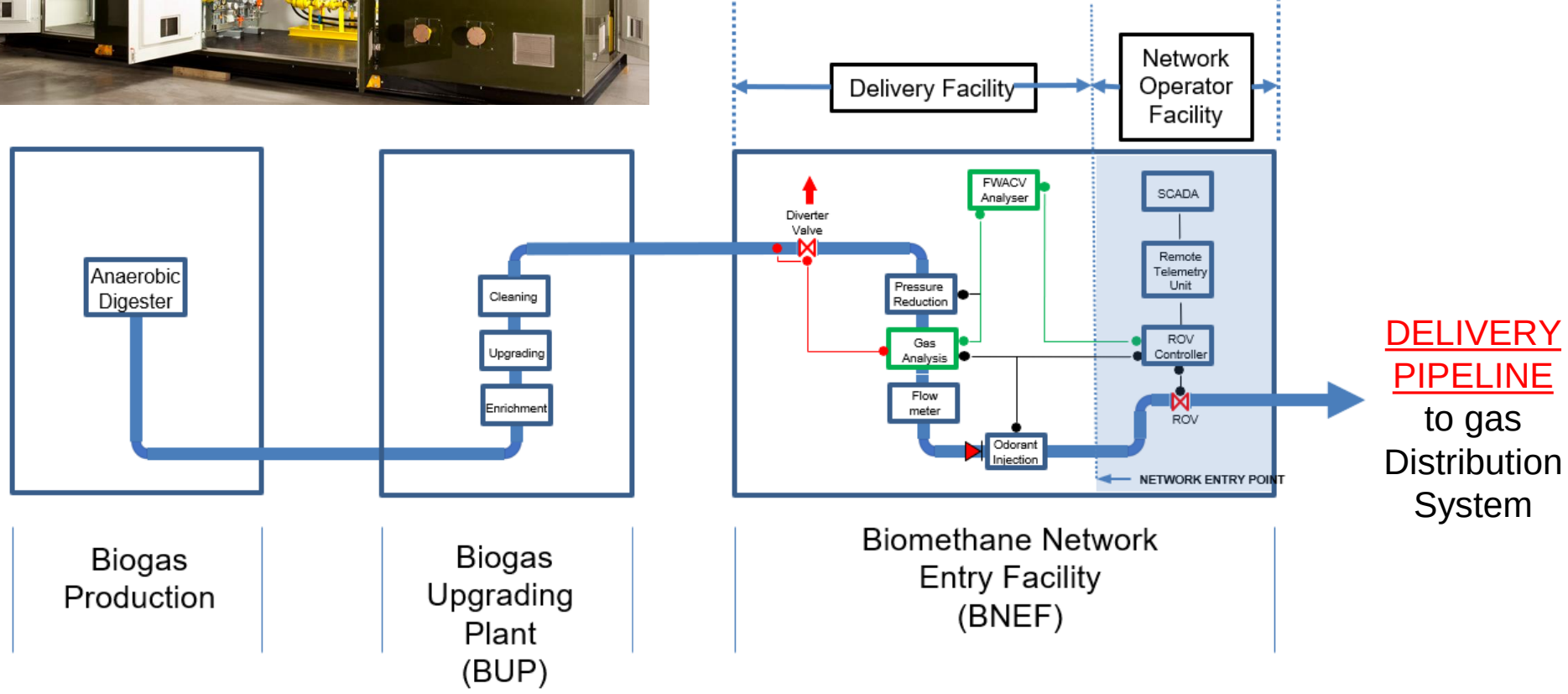


Gas Distribution: Primary focus - Single Point Injection



Following GB – Minimum Connection Model

Built to Spec provided by DNO
(Bio2 – Functional Design Spec)



DELIVERY PIPELINE to gas Distribution System

Gas Quality

Parameter	Biomethane quality
Temperature	1- 38 °C
Pressure	Dependent on grid (2, 7, 19 or 38barg)
Odour	**No uncharacteristic or masking of odour**
Hydrogen sulphide	**<= 5mg/Sm3**
Hydrogen	< 0.1 % vol
Carbon Dioxide	≤ 2.5% vol (not GSMR)
Oxygen	≤ 0.2% vol (1% vol exemption required)
Nitrogen	Balance (not GSMR)
Hydrocarbon dew temperature	≤ - 2°C at up to 85 barg
Water dew temperature	≤ - 10 °C at up to 10 barg (not GSMR)
Incomplete combustion factor (ICF)	≤ 0.48
Sooting index (SI)	≤ 0.6
Wobbe Number (WN)	47.2 – 51.41 MJ/Sm^3
Gross CV	36.9 – 42.3 MJ/Sm^3
GSMR Contaminants	**No significant solids or liquids**
Total sulphur	**≤ 30 mg/Sm^3**
Organo Halides	**≤ 1.5 mg/Sm^3**
Hydrogen chloride	**≤ 1.5 mg/Sm^3**
Hydrogen fluoride	**≤ 5 mg/Sm^3**
Ammonia	**≤ 20 mg/Sm^3**
Xylenes (all isomers)	**<=100 mg/Sm3**
Arsenic	**≤ 0.1 mg/Sm^3**
Radioactivity	≤ 5 Bq/g
Siloxanes	**<= 5 mg Si/Sm3 ** expected**

Gas Safety (Management) Regulations [GSMR] (Sch3)

- The Calorific Value (CV) coming into NI gas grid around 39.2 MJ/m^3
- The typical biomethane CV is 36.9 MJ/m^3 (98% CH_4 with 2% CO_2/N_2/O_2)

Gas Quality

What Gas Quality levels need to be met?

- Gas needs to meet GS(M)R NI Schedule 3
- Site Specific gas quality parameters agreed after Gas Quality workshop (GQ8) with independent consultant
- Details will be set out in a Schedule in the Network Entry Agreement (NEA)

What is Non-Complaint Gas?

- Anything outside the parameters set out in the NEA

What happens if there is the non-compliant gas?

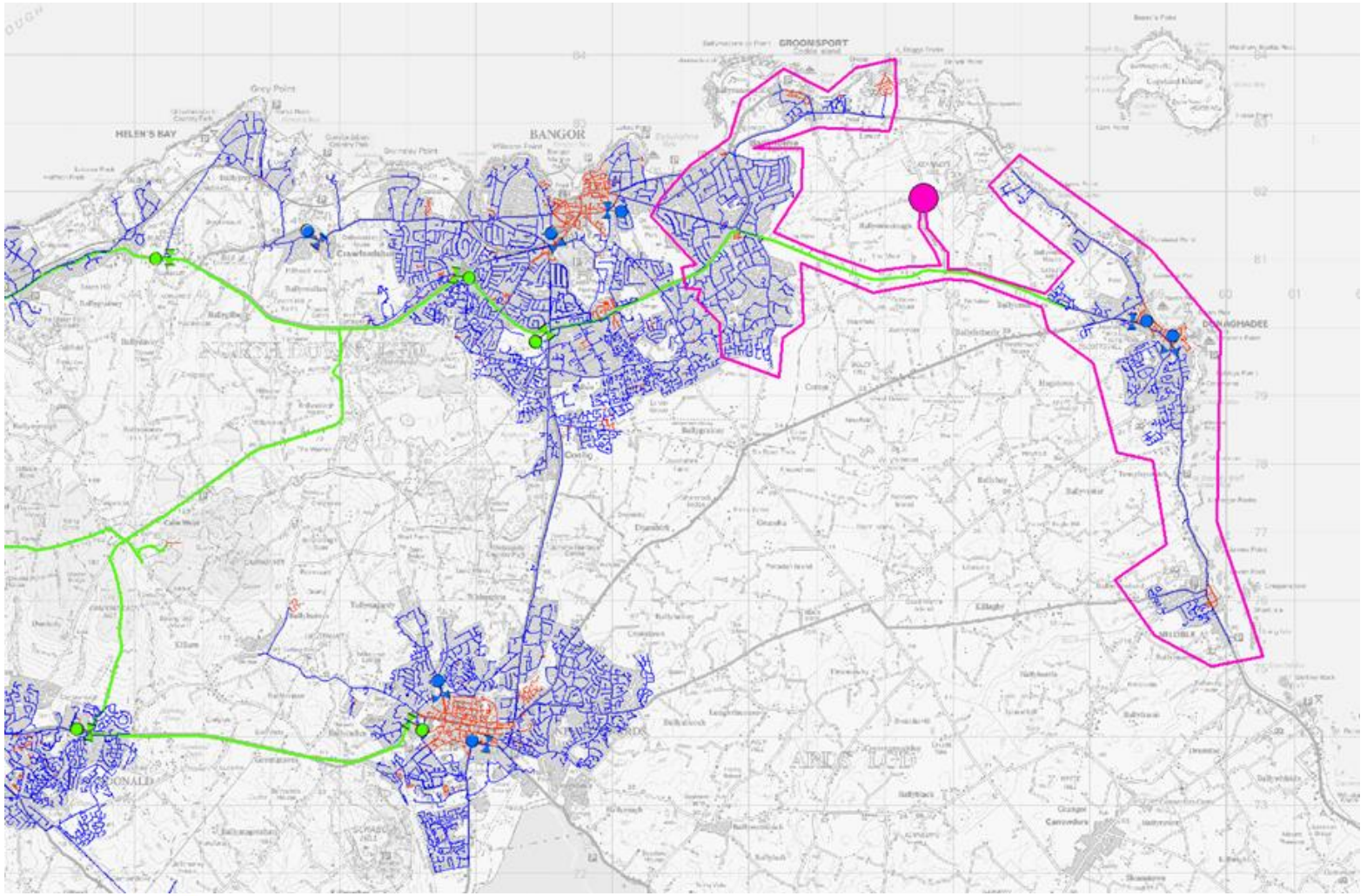
- Non-compliant gas must not enter the gas network and should be diverted to flare/vent/storage
- Consideration must be given against flaring/venting
- Remote Operated Valve (ROV) will shut in event passes diverter valve

What about the Calorific Value?

- Propane may be required to bring the CV up to match entry conditions
- Essential to ensure no consumers disadvantaged and billing consistency throughout the network
- Daily target CV will be issued to Producer
- GB are currently undertaking reviews in this area and we will consider for Future Billing Methodologies

Measurement and Management of CV

Wintertime – morning peak demand



ZONES OF INFLUENCE

PNGL operate 4bar MP network

Networks can create capacity by reducing outlet of 4 x local district pressure reduction sites to e.g. 3.8bar

Delivery Facility would be asked to operate at 4bar

Allows 200mbar buffer for line lack pack to fill pipelines to 4bar from the Biomethane Network Entry Facility (BNEF)

PNGL	7bar / 7000mbar (green) 4bar / 4000mbar (blue) 0.075 / 75mbar (red)
feDL	4bar / 4000mbar 0.075 / 75mbar
SGN NG	7bar / 7000 mbar 2bar / 2000mbar 0.075 / 75mbar

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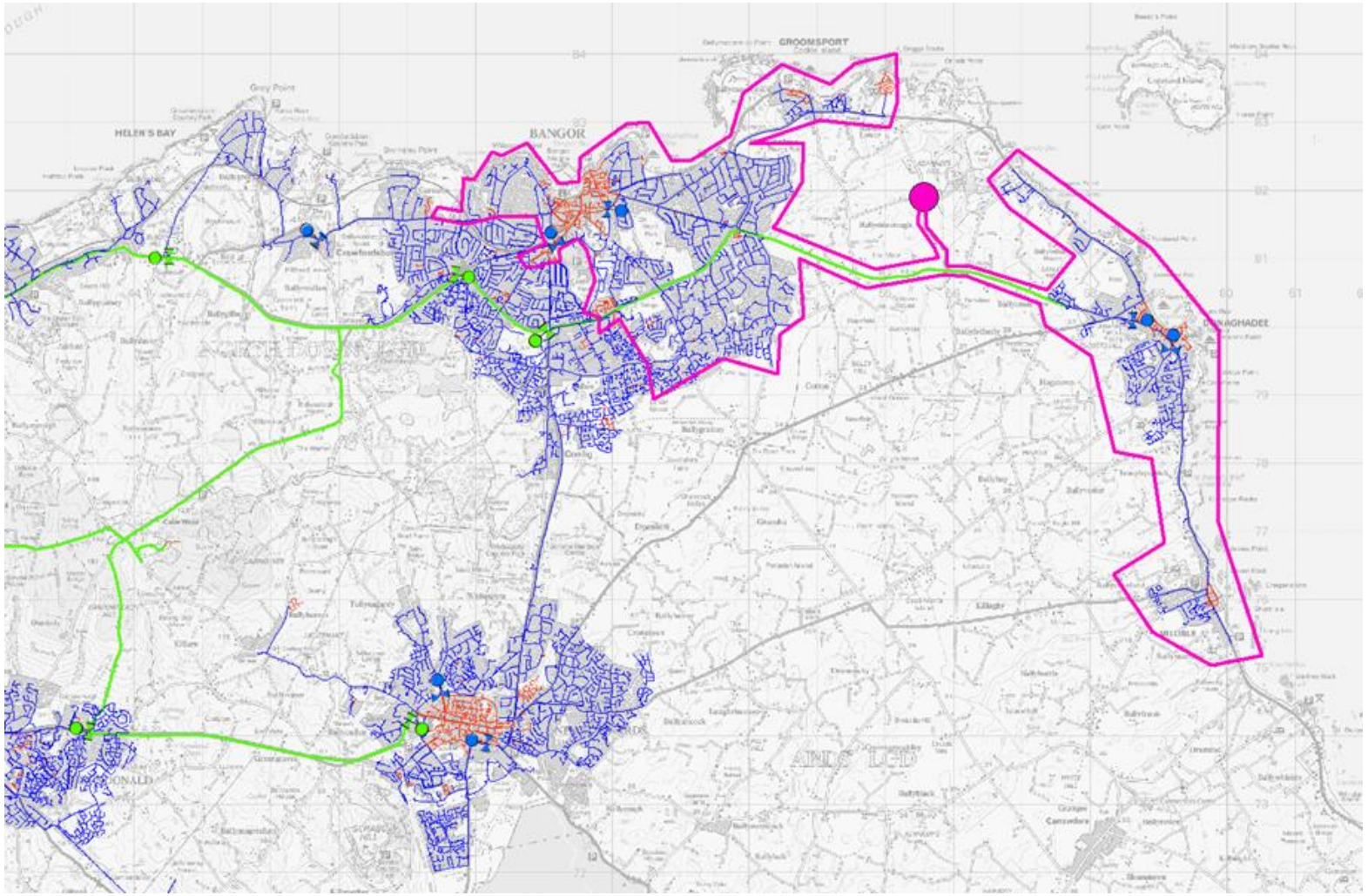
SGN Natural Gas

Measurement and Management of CV

Summer time – morning peak demand



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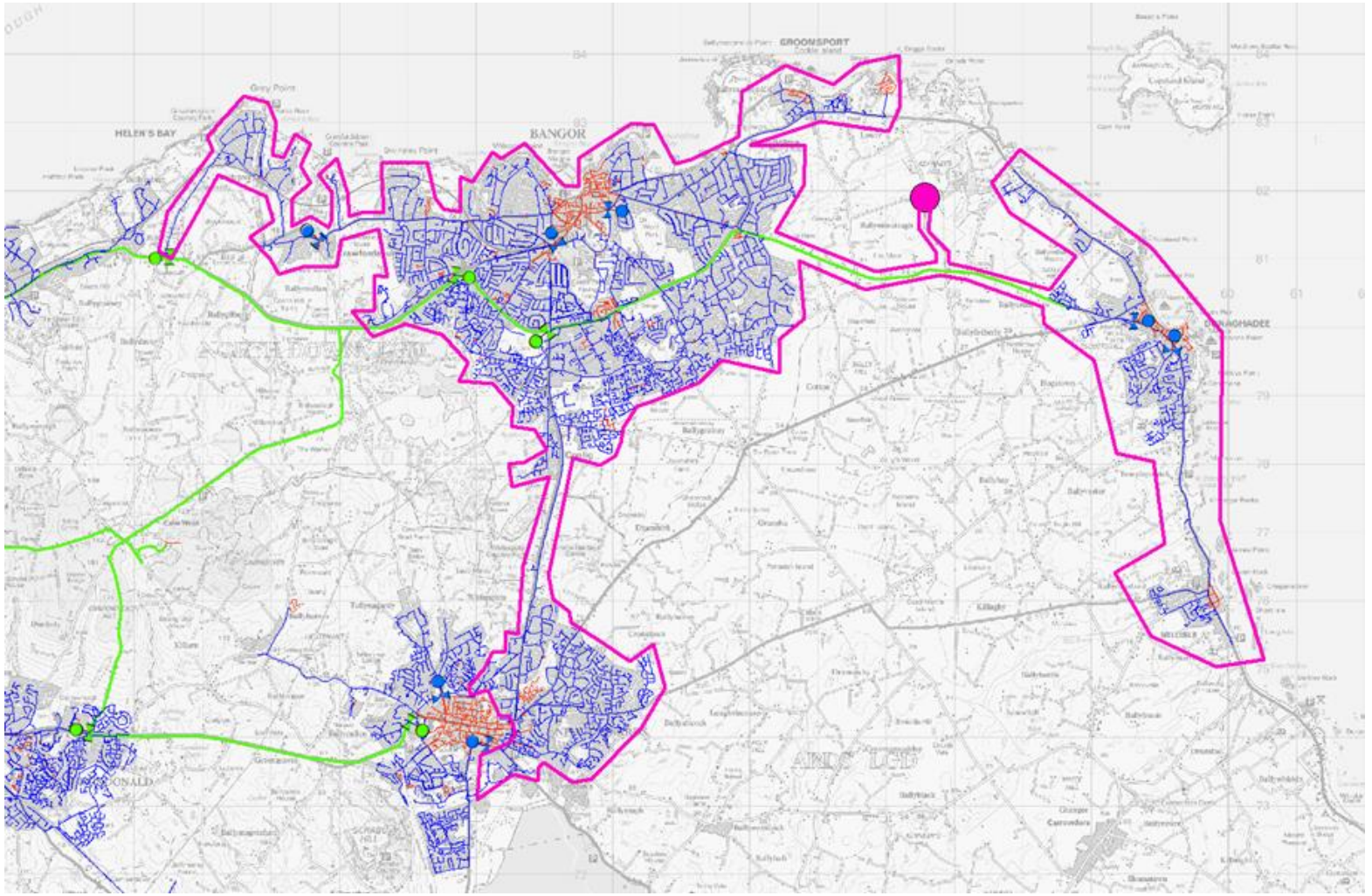
Measurement and Management of CV

Summer time - off peak demand



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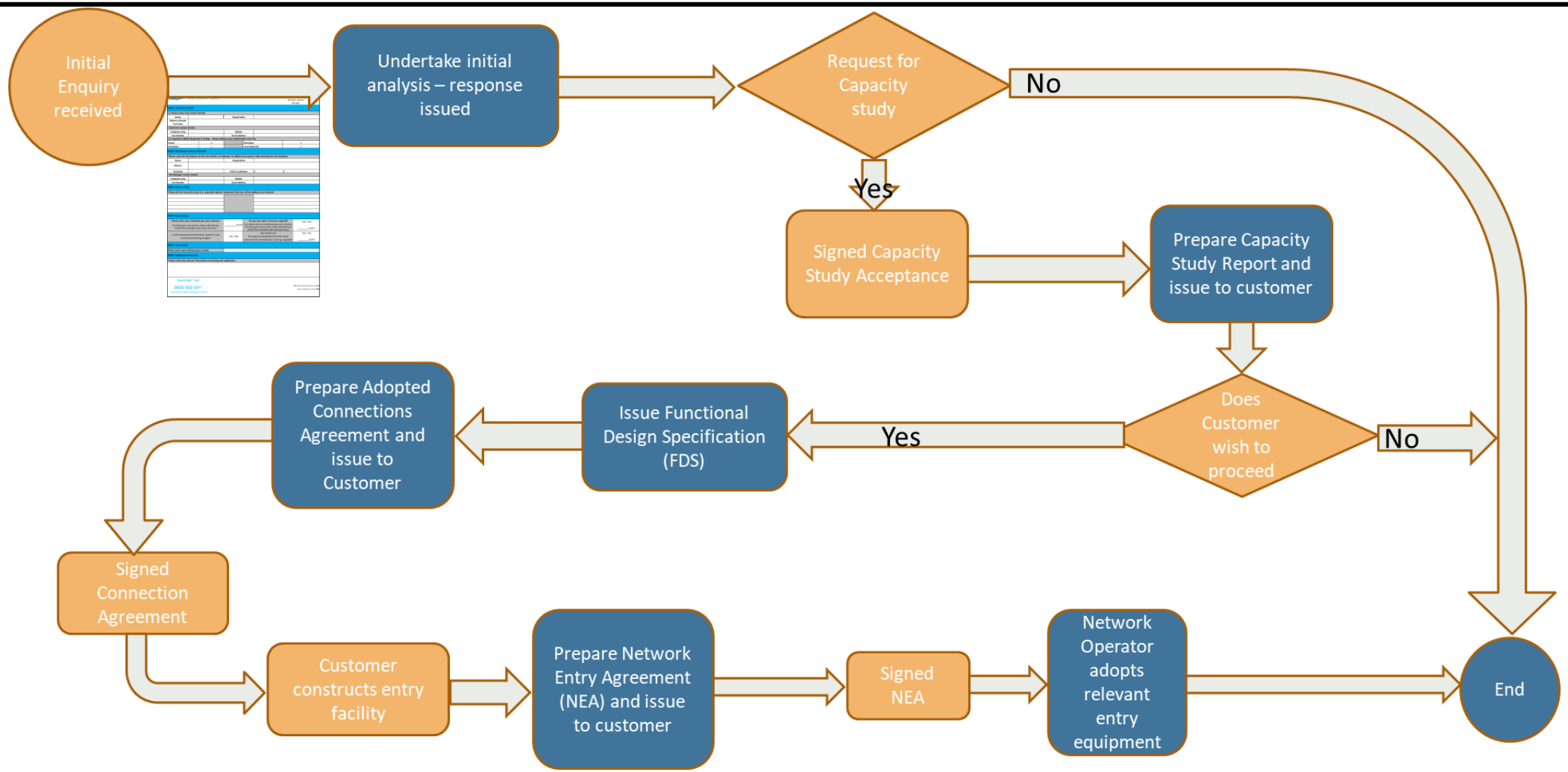
Application Process



Indicative Costs to Connect

***** Cost under review*****

- £1.5k-£2.5k

1)Capacity Study

Connection

- £65k-£75k

•**Site Specific**
•250mm MP pipe (500m)
•General C/W = £125k
•Unmade = £90k
•Open Trench = £60k

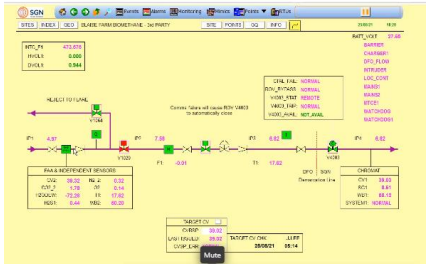
Delivery Pipeline

Ongoing Management
SCADA & DNO

- £30k - £50k
- [Annual Charge]

•£25k – £30k
•[Annual charge]

24:7/365 MERC for NOF



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The Delivery Pipeline

Who lays the pipeline from the BNEF to the gas network?

- This is known as the Delivery Pipeline and must be laid by the Gas Distribution Network Operator (DNO)
- The cost of the pipeline is chargeable to the producer – similar to GB practice
- The gas network adopts the Delivery Pipeline and take responsibility for it
- 3rd party damages will follow the normal procedure of being chargeable to liable party

What will the Delivery Pipeline cost?

- Each route is bespoke and depends on your flow/output request (m3/hr), length & type of road
- May also have special engineering difficulties that need accounted for (e.g. water / bridge crossings)
- A bespoke quotation for this part of the connection process will be provided by the DNO

Can we go across fields?

- Yes. We can work with you on the Delivery Pipeline route
- You will need to assist with any Easements required and pay associated costs

Can the Producer provide the trench?

- Yes, but only on private land – the networks must carry out excavations under licence in the public highway
- The networks will provide you a trench specification but the network must lay the pipeline

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Current Position

Ongoing Actions	Comment	Indicative Target Date
HSENI Exemption Certificate (Oxygen content up to 1%:up to 38bar)	Submission for application complete Exemption already in GB	April
Safety Case submission to HSENI	Required by each with HSENI approval Awaiting Exemption	13 weeks turnaround
Initial enquiries	Formal enquiries welcomed	n/a
Capacity Studies	DNO specific	March/April (Contact DNO)
Service provider contract	Awaiting	April / May
Bio2 – Functional Design Specification for the BNEF	95% complete Pending Service Provider contract	April / May / June
Network Entry Agreement	Specific to NI Currently undergoing legal review	SGN NG (April) PNGL/fe – (May/June)
Network Connection Agreement	DNO reviews complete Awaiting NEA completion	Similar to NEA
Local Operating Procedures (site)	Site Specific Closer to final connection / commissioning	n/a

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SGN Natural Gas

NI Gas Transmission System Biomethane Readiness Update

Biomethane Industry Briefing

4th March 2022

Transmission Biomethane Connection Readiness Update

- No formal requests to inject biomethane into the NI Transmission networks have been received at this point
- Higher CAPEX + compression costs mean focus initially will be on connecting at distribution level, with options such as Central Injection Hubs more suited to transmission scale
- Currently undertaking a Gap Analysis, reviewing what would be needed to facilitate connections at transmission level
- Aim to bring to a point where we have draft documentation and a plan in place to mobilise should a request be received
- More onerous tasks such as safety case approvals, finalising functional specifications etc. will not be completed until a formal enquiry to connect is received

GNI (UK) Ltd.

GMO Northern Ireland

mutualenergy

Changes to Regulatory Framework

Update on changes to regulatory framework

Distribution Network Code

Introduction

- Each Distribution Network Operator (DNO) in NI is responsible for managing the conveyance arrangements relevant to their network, in accordance with their Licence and Distribution Network Code.

- The Distribution Network Codes are (to a large extent) aligned and there is a requirement for DNOs to align on any future proposed modifications to receive Utility Regulator approval.

- A full review of the Distribution Network Code was conducted in 2021.

- A set of Business Rules, setting out the proposed amendments the Distribution Network Code, were published for industry consultation in Dec 2021.

- DNOs are currently collaborating to develop the Distribution Network Code modifications. Proposed Modification will be published for consultation in the coming weeks, aiming for regulatory approval in Q2 2022.

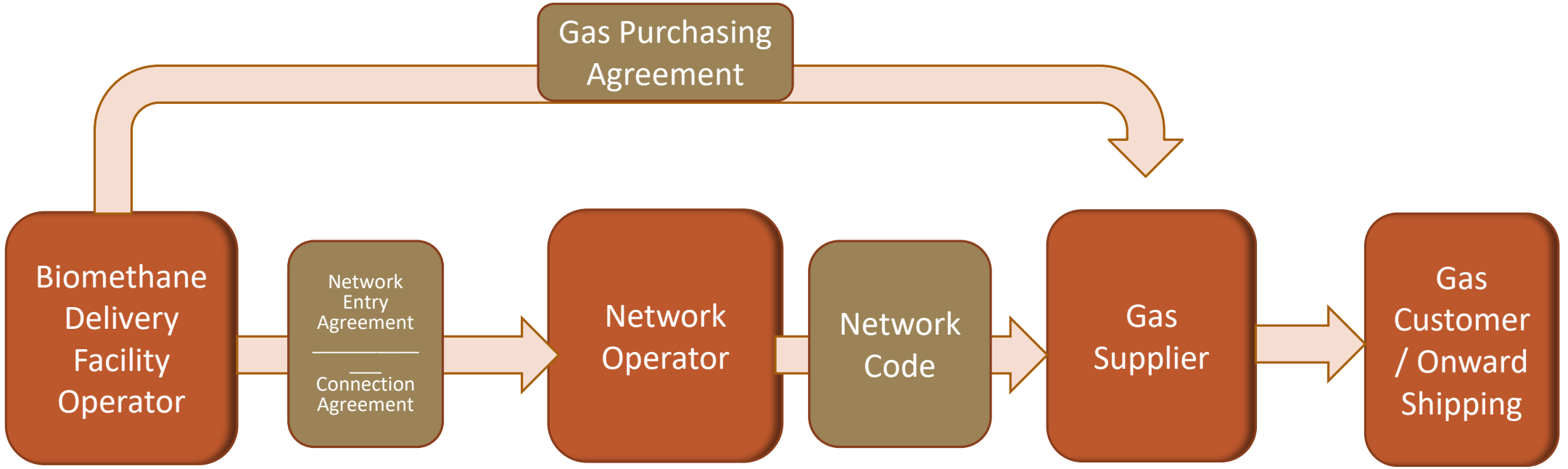
- The DNOs have been working closely with GMO NI to develop the industry arrangements.

Supplier Arrangements

- The Distribution Network Code facilitates a simple entry / exit regime, i.e. gas is delivered to the network by Gas Suppliers (via the NI Transmission System Entry Point or a Biomethane System Entry Point) and is off taken at a customer's premises connected to the network.

- The Distribution Network Code refers to a User (Gas Supplier). To deliver gas to an entry point you must be a Gas Supplier with a Supplier Licence (granted by the Utility Regulator), acceded to the applicable Distribution Network Code, and completed a market assurance process.

- Producers will be required to contract with an active Gas Supplier on the applicable Distribution network to take receipt of any biomethane injected into the network.



Current Gas Suppliers in Northern Ireland

Contact details for each Gas Supplier are provided on the next slide

Gas Supplier	firmus energy	PHOENIX NATURAL GAS	SGN Natural Gas
electric Ireland	✓	✓	✓
firmus energy	✓	✓	✓
FLO GAS	✓	✓	✓
GO POWER	✓	✓	✓
FLO GAS Energy for Enterprise	✓	✓	
sse Airtricity	✓	✓	✓

Gas Supplier Contacts

David Fusco	Terry Rice	Kevin O'Kane	David Arias	Brian Hennessy	Mo Cloonan
david.fusco@electricireland.ie	trice@firmusenergy.co.uk	Kevin.OKane@budgetenergy.co.uk	david@gopower.energy	bryan.hennessy@flogas.ie	Mo.Cloonan@sse.com
T: 028 9025 7207 M: 075 8426 1007	T: 028 9442 7845 M: 079 7389 5257	T: 028 9590 2321	T: 028 9079 0000 M: 077 1581 4880	T: +353 (0)1 884 9400 M: +353 (0)86 826 2586	T:+353877150377

Biomethane Conveyance Arrangements

- DNOs have considered the changes required to the conveyance arrangements to facilitate the injection of biomethane into the Distribution networks

- The changes include (but not limited to):
  - Modification of nomination and allocation processes –
    - Gas Suppliers will be required to provide the DNO with daily forecasted volumes for any Biomethane System Entry Point.
    - This information will be used in the demand forecasting processes and provided to GMO NI for network management and balancing purposes.
    - The DNO must have access to the daily metered volumes recorded at the Biomethane System Entry Point. These volumes will be used in the daily volume allocation processes.

  - Inclusion of Gas Supplier registration process at a Biomethane System Entry Point

  - In conjunction with GMO NI, development of arrangements for Gas Supplier energy balancing arrangements, referred to as 'Aggregate Balancing' arrangements:
    - Gas Supplier's exit quantities from the Transmission network will be deemed to be the same as their offtake quantities from the Distribution networks less any biomethane injection quantities they are allocated for Distribution networks, and
    - the 'Aggregate Imbalance' of the Gas Supplier will be determined under the NI Network Gas Transmission Code.

Update on changes to the regulatory framework

Transmission Network Code

Introduction

- There are 4 Transmission Network Operators (TSO) in NI:
  - GNI (UK) Limited
  - Premier Transmission Limited*
  - Belfast Gas Limited*
  - West Transmission Limited*

  ** Part of the Mutual Energy group*

- The TSOs are required to manage the conveyance arrangements relevant to their network, in accordance with their Licences and the single Transmission Network Code

- Gas Market Operator for Northern Ireland (GMO NI) is a joint team made up of staff from the TSOs and is responsible for the market related activities of the TSOs including management of the Transmission Network Code

- Similar to the DNOs, a full review of the Transmission Network Code was conducted in 2021

- A set of Business Rules, setting out the proposed amendments to the Transmission Network Code to facilitate both Transmission and Distribution injection, was published for industry consultation in Dec 2021
  - The business rules are available on the GMO NI website

Shipping Arrangements

- To facilitate the injection and onward travel of biomethane injected into the Transmission network, a Shipper is required

- When the Transmission arrangements are in place the Shipper will be required to:
  - Book Entry Capacity at the Injection Point
  - Nominate the entry of biomethane into and exit out of the network
  - Alternatively, the Shipper may trade the biomethane with another Shipper at the NI Balancing Point
  - Place credit and pay the relevant transportation charges (different from connection costs)

- A Supplier who plans to inject into the Distribution network will also be required to be a Shipper on the Transmission network due to the Aggregate Balancing arrangements

- Producers will be required to contract with an existing or prospective Shipper or become a Shipper themselves

- At minimum this will require a Supplier Licence (granted by the Utility Regulator) and accession to the Transmission Network Code

- Please contact GMO NI should you require more detail on becoming a Shipper

Biomethane Conveyance Arrangements

- GMO NI have considered the changes required to the conveyance arrangements to facilitate the injection of biomethane into the Transmission network

- When required, the changes may include (but not limited to):
  - The creation of a new Entry Point
  - The introduction of new Entry Capacity products
  - Modification of nomination and allocation rules
  - Updated tariff and billing arrangements

- When there is a formal request to connect to the Transmission network the arrangements outlined in the Business Rules will be incorporated into the Transmission Network Code and the Delphi IT system shall be modified accordingly

Biomethane Conveyance Arrangements

- There will be some changes made to the Transmission Network Code and Delphi IT system to support the injection of biomethane into the Distribution network

- These are referred to as the ‘Aggregate Balancing’ arrangements

- Under the Transmission Network Code, a Shipper’s daily imbalance position is calculated using their inputs and outputs:
  - If a Shipper leaves gas on the system it is credited for that gas using a published rate
  - If a Shipper takes extra gas from the system it is invoiced for that gas using a published rate

- The proposed Aggregate Balancing arrangements add the Distribution injected biomethane to the input calculation and also use DNO determined exit quantities in the output calculation

- This will allow Shippers to use the biomethane to:
  - Contribute to balancing their NI exit demand / Supplying customers with ‘green gas’
  - Trade at the NIBP
  - Export to GB and ROI via Virtual Reverse Flow (subject to sufficient forward flow)
  - A combination of the above

Key Contacts

Key Contacts

Distribution Networks		
Phoenix Natural Gas	**Firmus energy (Distribution) Limited**	**SGN Natural Gas**
Christopher Doherty	**Neil Gallagher**	**Joel Martin (SGN)**
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christopher.doherty@phoenixnaturalgas.com	ngallagher@firmusenergy.co.uk	joel.martin@sgn.co.uk
https://www.phoenixnaturalgas.com/safety-environment/energy-transition/biomethane-for-producers		

Transmission Contacts

GNI (UK)

Tel: 00353 21 453 4072

Email: renewablegas@gasnetworks.ie

Mutual Energy

Tel: 028 9043 7580

Email: info@mutual-energy.com

GMO NI

Tel: 028 9590 9250

Email: info@gmo-ni.com

Questions and Answers