

Gas to the West project update



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Your gas. Our network.

Agenda

- Introductions
- The story so far
- Planning permission
- HP construction what's involved
- HP Construction Programme
- IP construction what's involved
- IP Construction programme
- Main Contractors and Suppliers
- Gas on Programme and downstream roll out

Paddy Larkin

Danny O'Malley



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Project partners

Scotland to NI pipeline
Belfast Gas Pipeline
Moyle Interconnector



- Brings a low cost of capital
- Established transmission system operator
- Local market knowledge and expertise

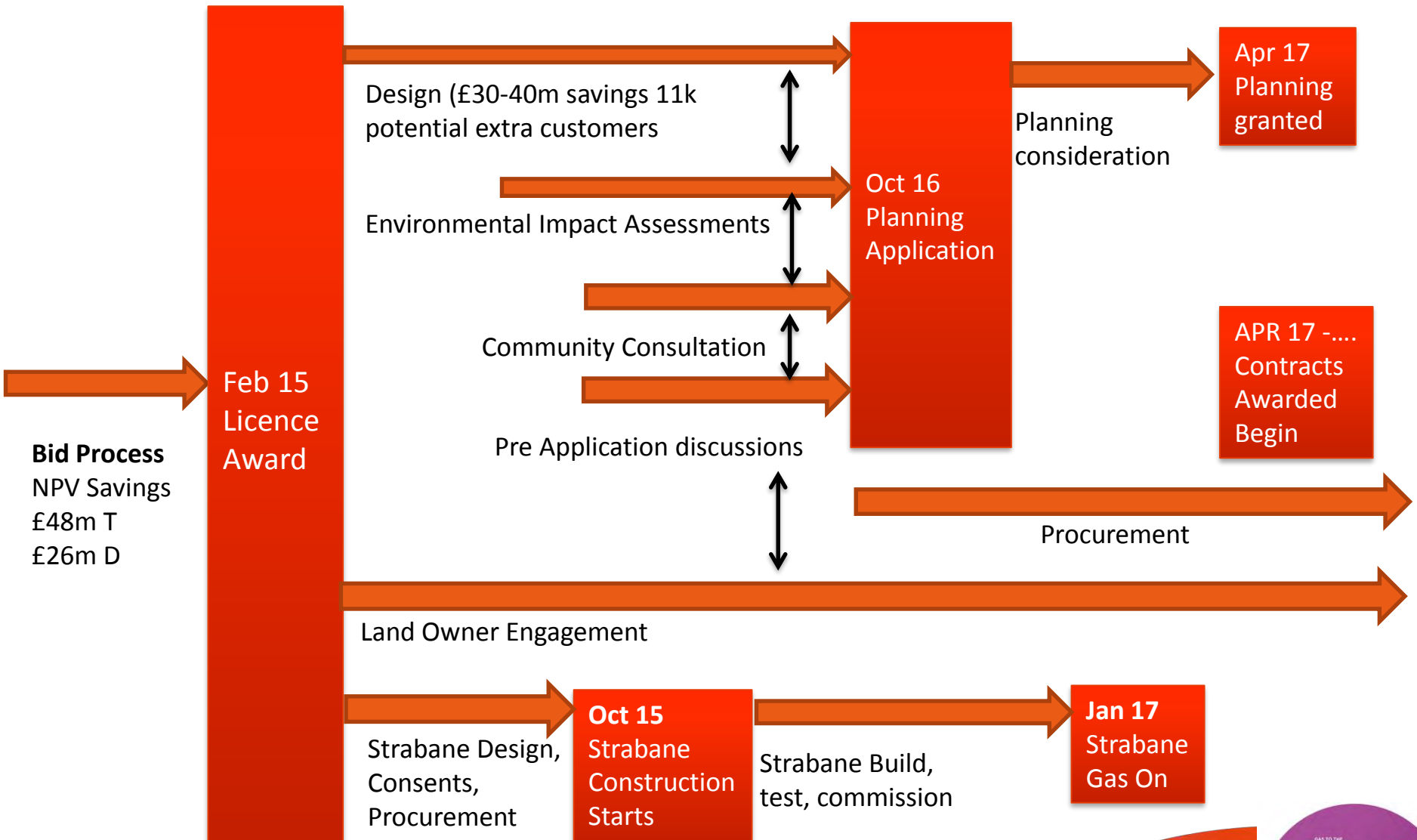
Scotland gas network
Southern gas network



- Established connection with NI
- Economies of scale
- Successful in Construction and Innovation



The story so far



Ground Investigations



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Environmental Assessment

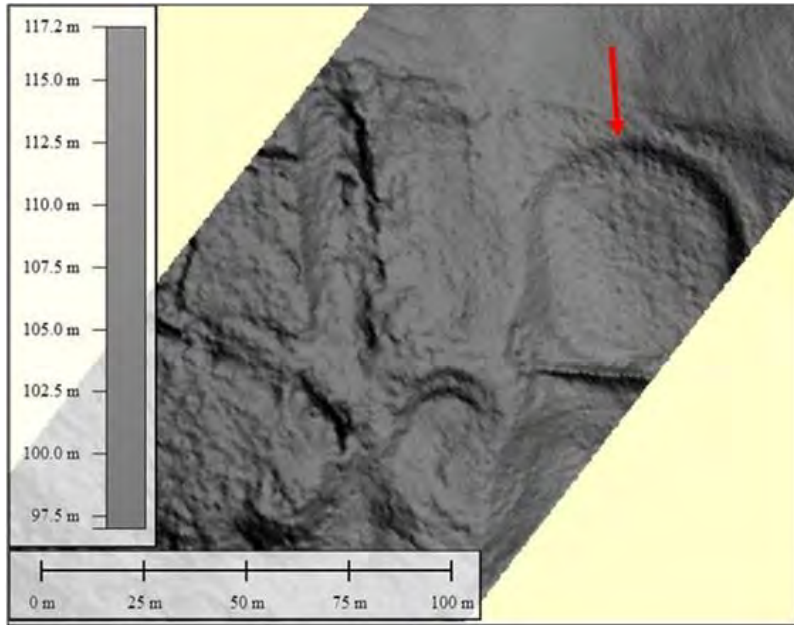


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Archaeology



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Community Consultation



Two programmes

Portadown

Dungannon

Augher

Magherafelt

Omagh

Enniskillen

Plus unmanned
displays



Pre Application Discussions

- Chief Executive of each Council
- Environmental Health Department of each Council
- NIEA (Landscape, Water Management Unit, Historic Monuments, Natural Environment, Waste Management)
- Transport NI
- Rivers Agency
- DAERA Inland Fisheries
- HSENI
- NIE
- Systems Operators Northern Ireland (SONI)
- NI Water
- DfE: GSNI
- DfE: Energy Branch
- RSPB
- DAERA: Forest Service
- DAERA: Fisheries
- Council for Nature Conservation And The Countryside
- Loughs Agency
- DAERA Veterinary Division
- DARD Environmental Policy Division
- Northern Ireland Tourist Board
- Northern Ireland Housing Executive



Planning Application Consideration

Brilliant achievement in timeframe with no compromise on quality

- 185km pipeline crossing 364 farm enterprises covering 978,000 Hectares with a construction footprint of 234 Hectares
- Pipeline crosses
 - 85 roads including M1 plus 56 laneways
 - 215 watercourses including River Blackwater and Upper lough Erne

Documents filed

- 104 Impact assessments and statements
- 136 Plans, Maps and drawings
- 39 Consultations issued
- 134 Planning decisions and reports
- 1629 Neighbourhood notifications

Local Assembly collapse and assembly election



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Planning Approval Granted 04/04/17

Thanks to all those involved in the process

NOTICE OF OPINION APPROVAL OF PLANNING PERMISSION

Planning Act (Northern Ireland) 2011

Application No: LA08/2016/1328/F

Date of Application: 3rd October 2016

Site of Proposed
Development:

High Pressure (HP) gas transmission pipeline (approx. 78km in length) between the proposed Above Ground Installation (AGI) opp. 64 Derryhale Rd Derryhale Portadown and 300m NW 371 Belfast Rd Tullykenneye Fivemiletown. Intermediate Pressure (IP) gas pipelines approximately 107 km in length from HP line to serve Cookstown Magherafelt Coalisland and Omagh; Enniskillen and Derrylin. AGI sites: (i) opp. 64 Derryhale Rd Derryhale; (ii) 150m N of 39 Moss Rd Derrycoose; (iii) 50m W of 27 Old Moy Road Donnydeade; (iv) opp 10 Culnagrew Rd Culnagrew (v) 150m S of 59 Dergenagh Road Dergenagh (vi) 200m N of 23 Ballymagowan Road Tullybroom; (vii) 300m NW 371 Belfast Rd Tullykenneye.

Description of Proposal:

Construction of an underground gas pipe line and associated infrastructure comprising: a new 85 bar High Pressure (HP) cross-country gas transmission pipeline, approximately 78km in length and varying between 300-400mm diameter; New Intermediate Pressure (IP) gas pipelines, (approximately 107km and varying between 250-315mm diameter) laid primarily in the public road, 7 Above Ground Installations (AGI) and 8 District Pressure Governors (DPG); temporary ancillary development comprising temporary construction compounds, temporary pipe storage areas and temporary construction accesses.

Applicant: SGN/MEL Ltd

Agent: RPS

Address: C/O St Lawrence Street
Station Approach
Horley
RH6 9HJ

Address: Elmwood House
74 Boucher Road
Belfast
BT12 6RZ

So What's next?

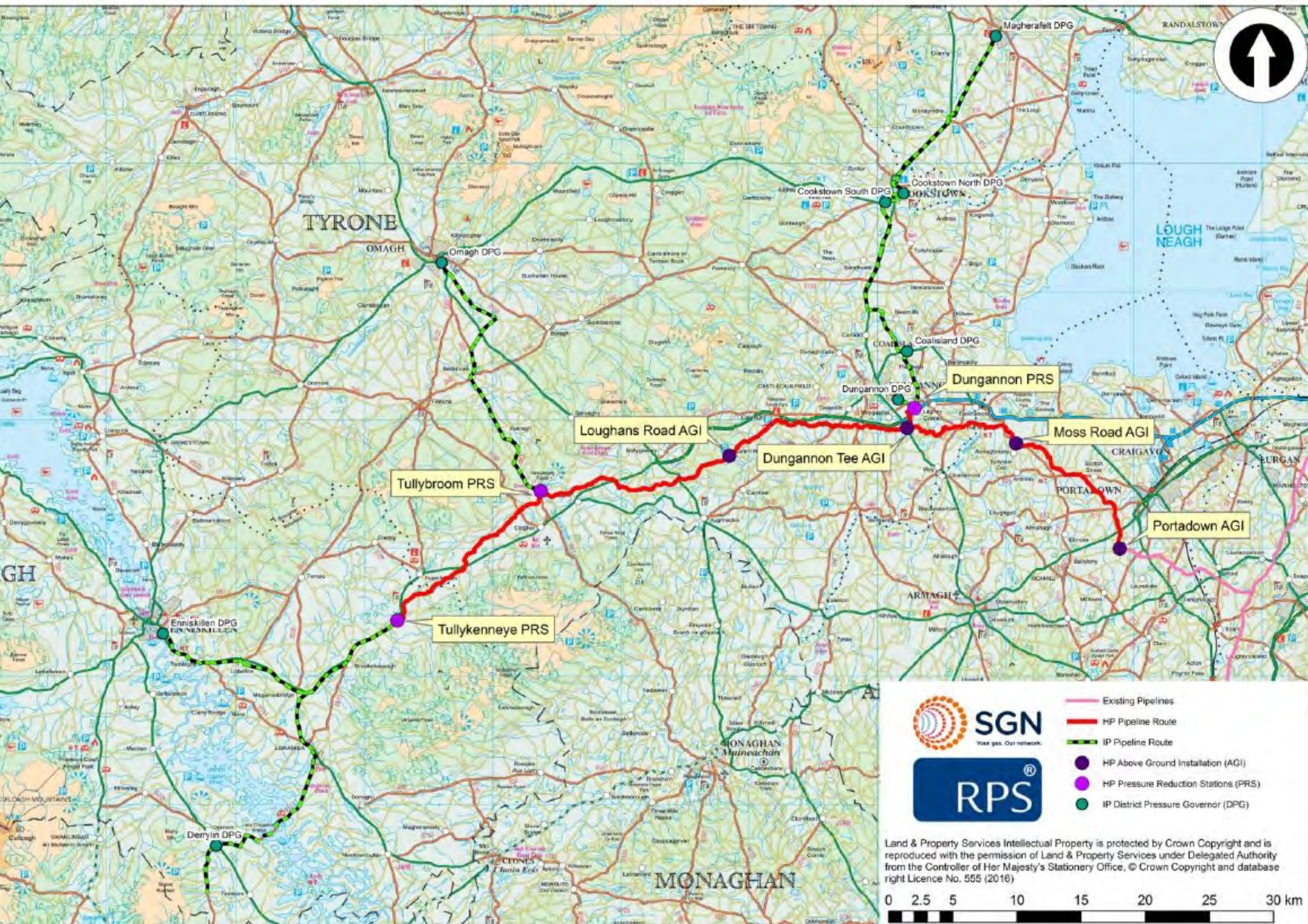
- Secondary consents and planning conditions compliance
- Land access ongoing but well advanced
- Procurement of main contracts well advanced - many placed already
- Mobilisation beginning
- Construction works split across 2017 and 2018
- 2017 works to start in coming weeks

Other Live Items

- DfE grant award and compliance monitoring
- Ureg to set build cost allowance
- Long term financing



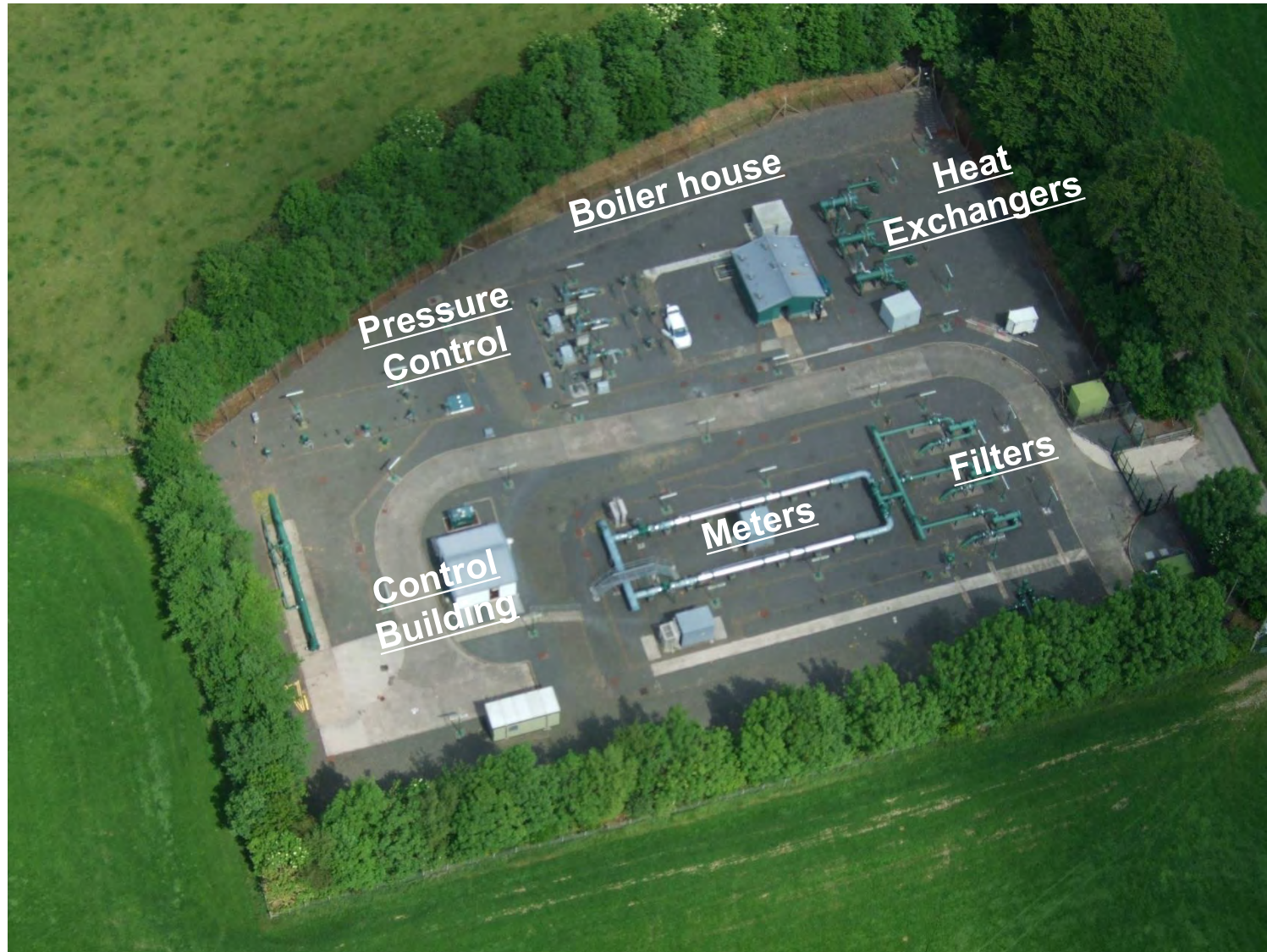
The Route and main project components



Typical Above Ground Installations



Above Ground Installation – typical example



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Typical High Pressure Pipeline construction



Working with topsoil removed
Fencing
Access points



Steel Pipeline 300/400mm diameter
Delivered
Strung out along route



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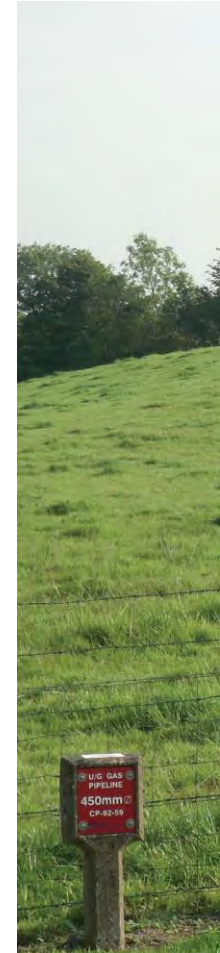


Pipeline welded in situ



Trench opened and
Pipeline lifted into position

Reinstatement



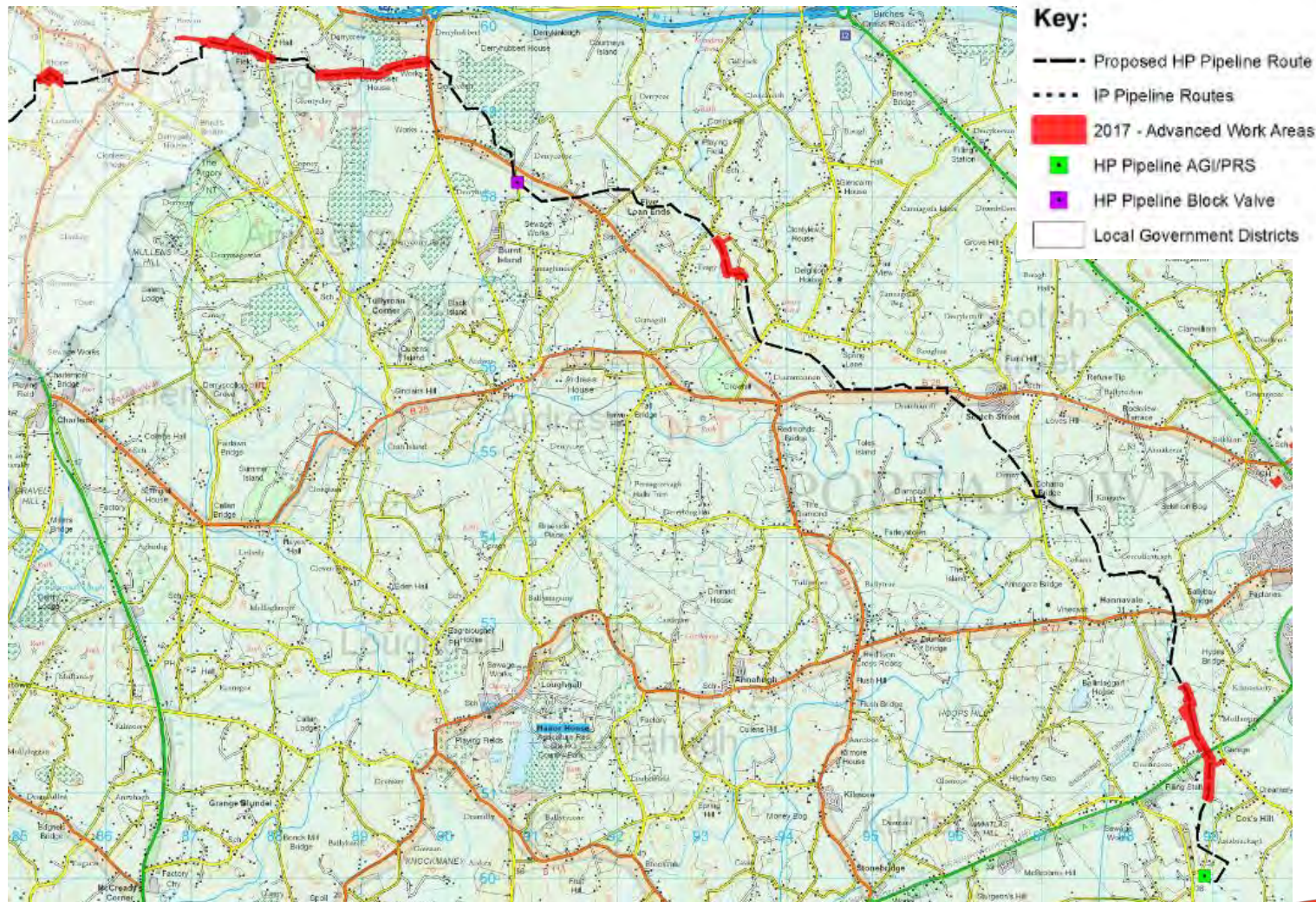
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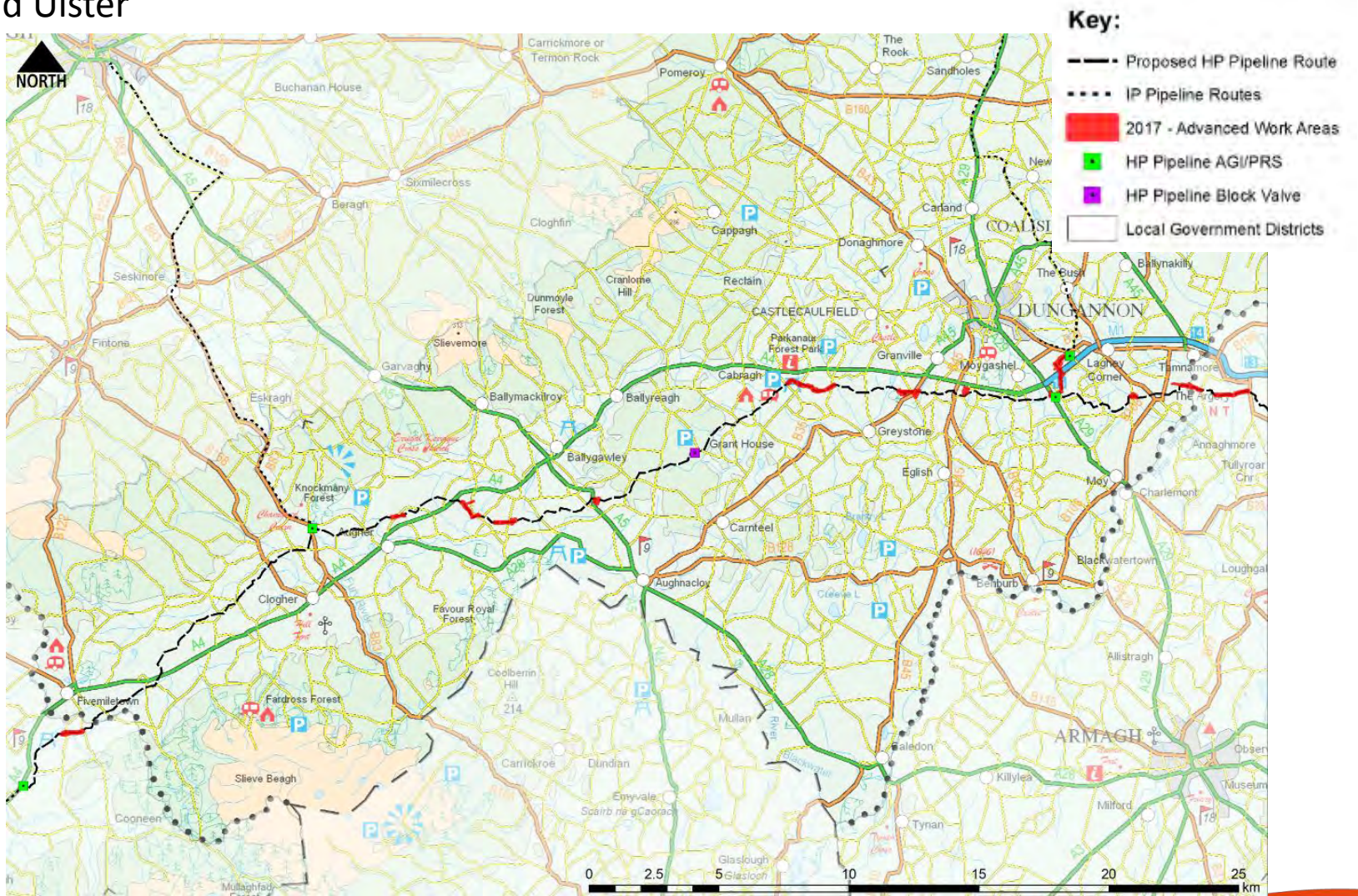
GttW – 2017 Works

Armagh-Banbridge Craigavon



GttW – 2017 Works

Mid Ulster



Procurement

Main Contracts awarded/ to be awarded

HP steel pipe ✓

AGI Materials ✓

Design Services

Inspection Services

Electrical and Instrumentation works

Electrical and Instrumentation materials

HP pipeline construction

IP pipeline construction ✓

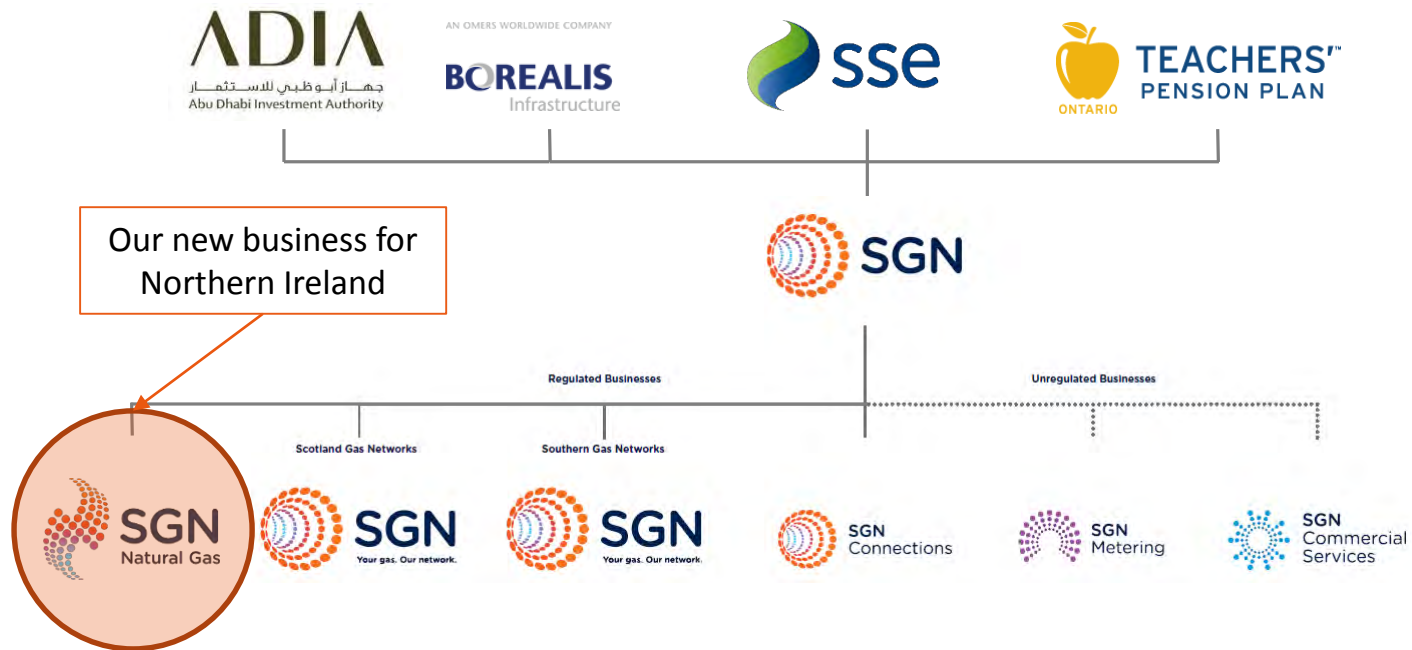


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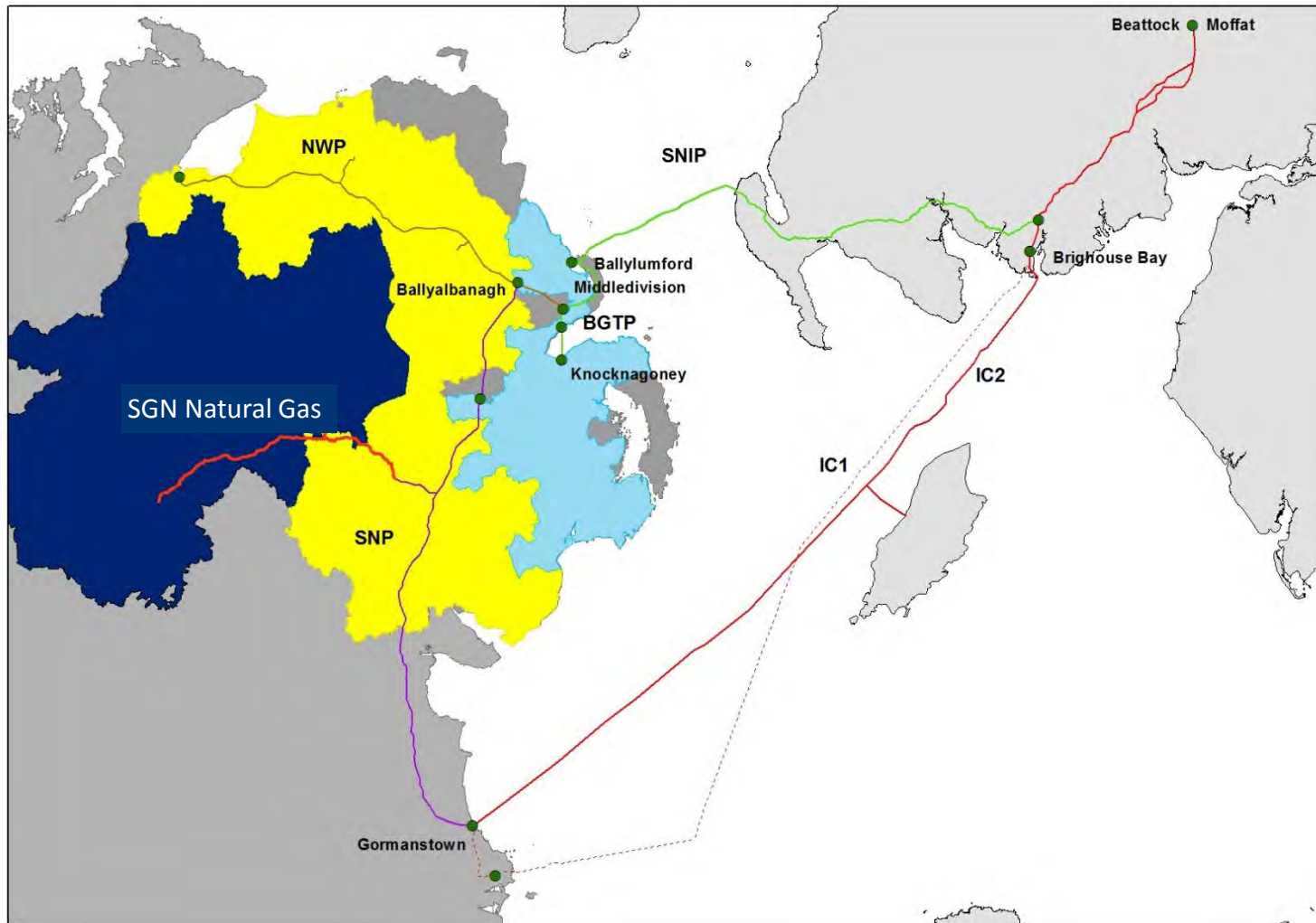


SGN Natural Gas - IP Construction

SGN – the structure



SGN Natural Gas Licence Area



Gas Pressure Tiers for Gas to the West

- Transmission
 - Up to 85bar pressure
 - Power Stations



Gas Pressure Tiers for Gas to the West

- Transmission
 - Up to 85bar pressure
 - Power Stations
- Intermediate (IP) Pressure
 - Up to 7bar pressure
 - Large Industrial Customers

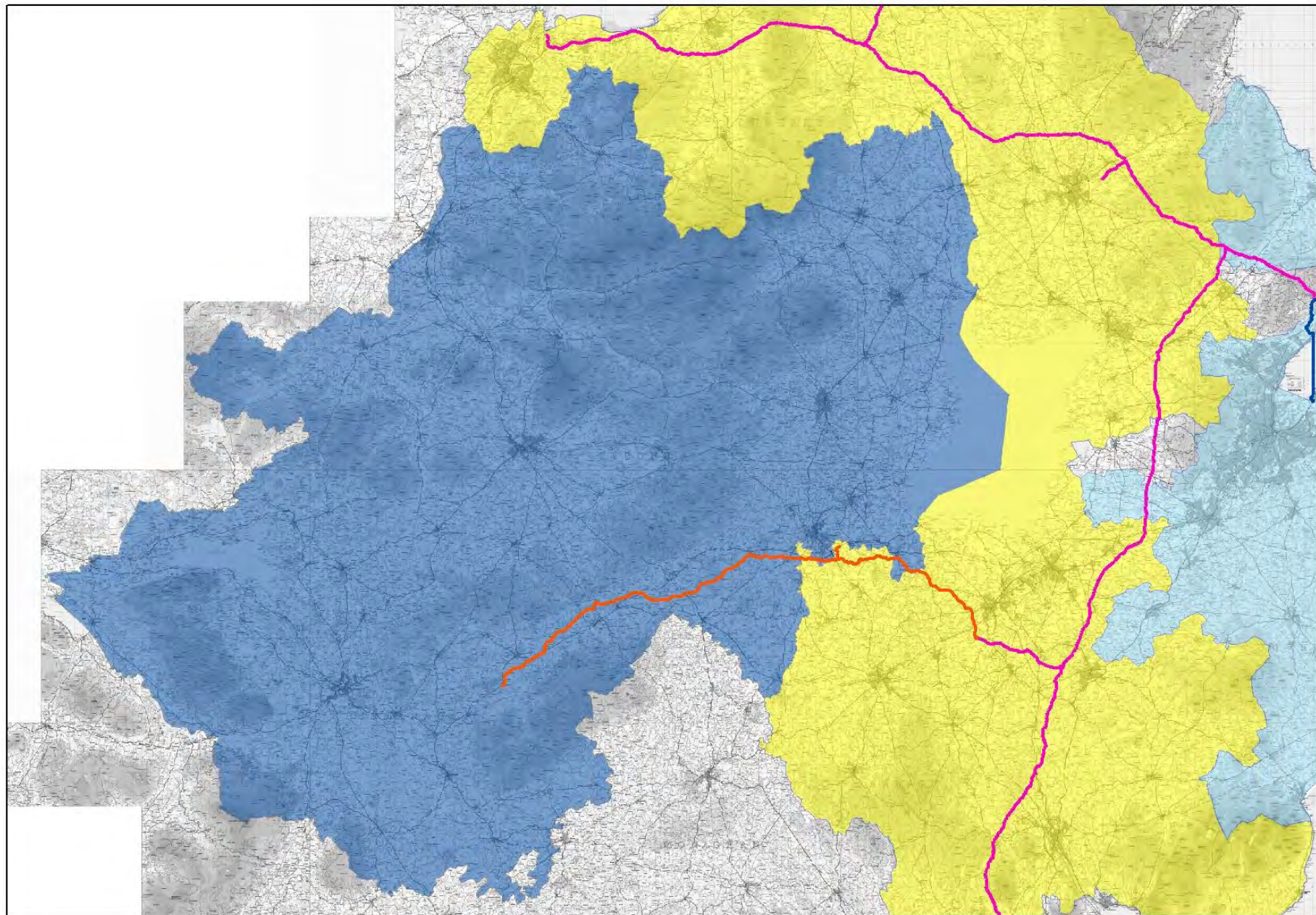


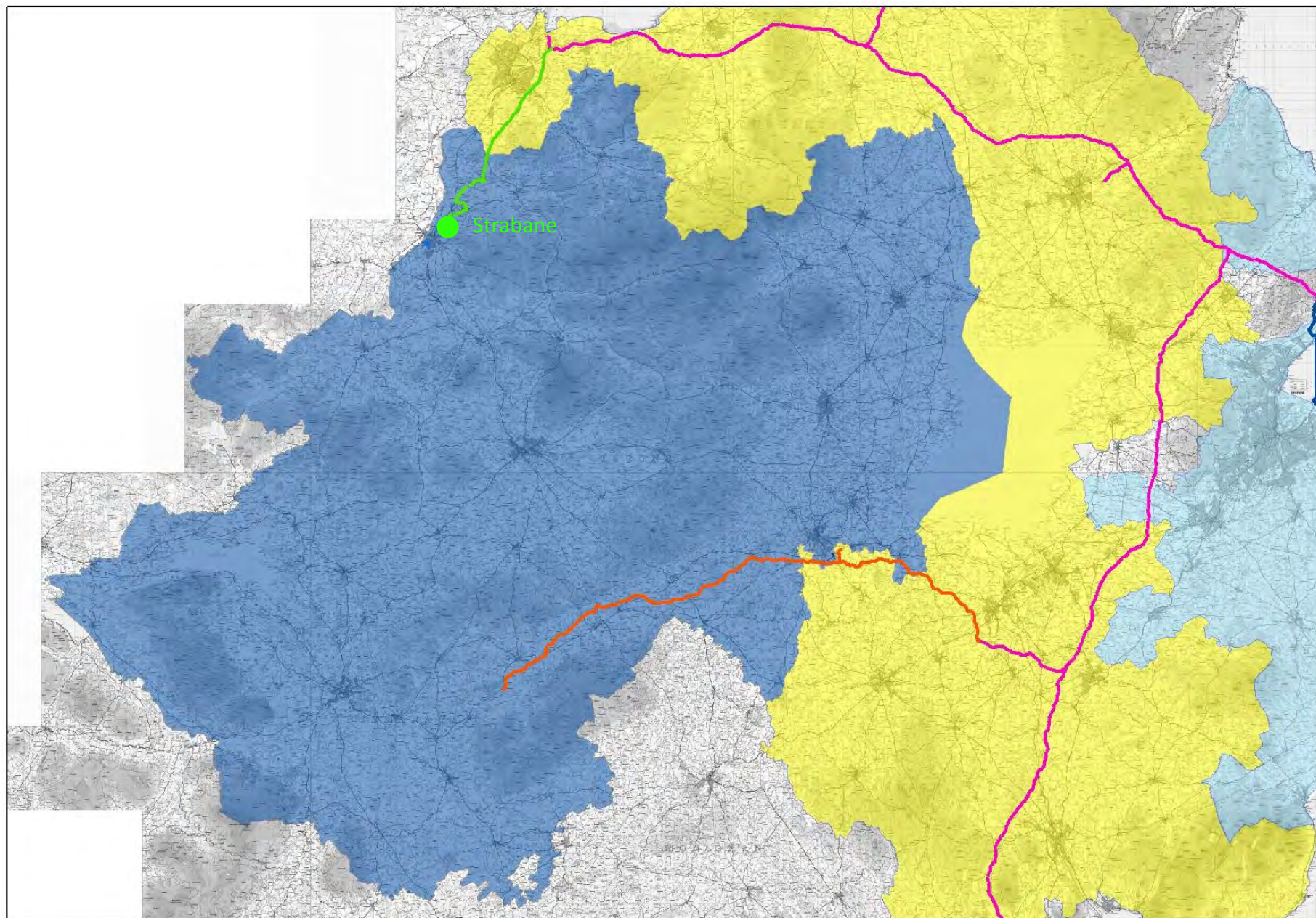
Gas Pressure Tiers for Gas to the West

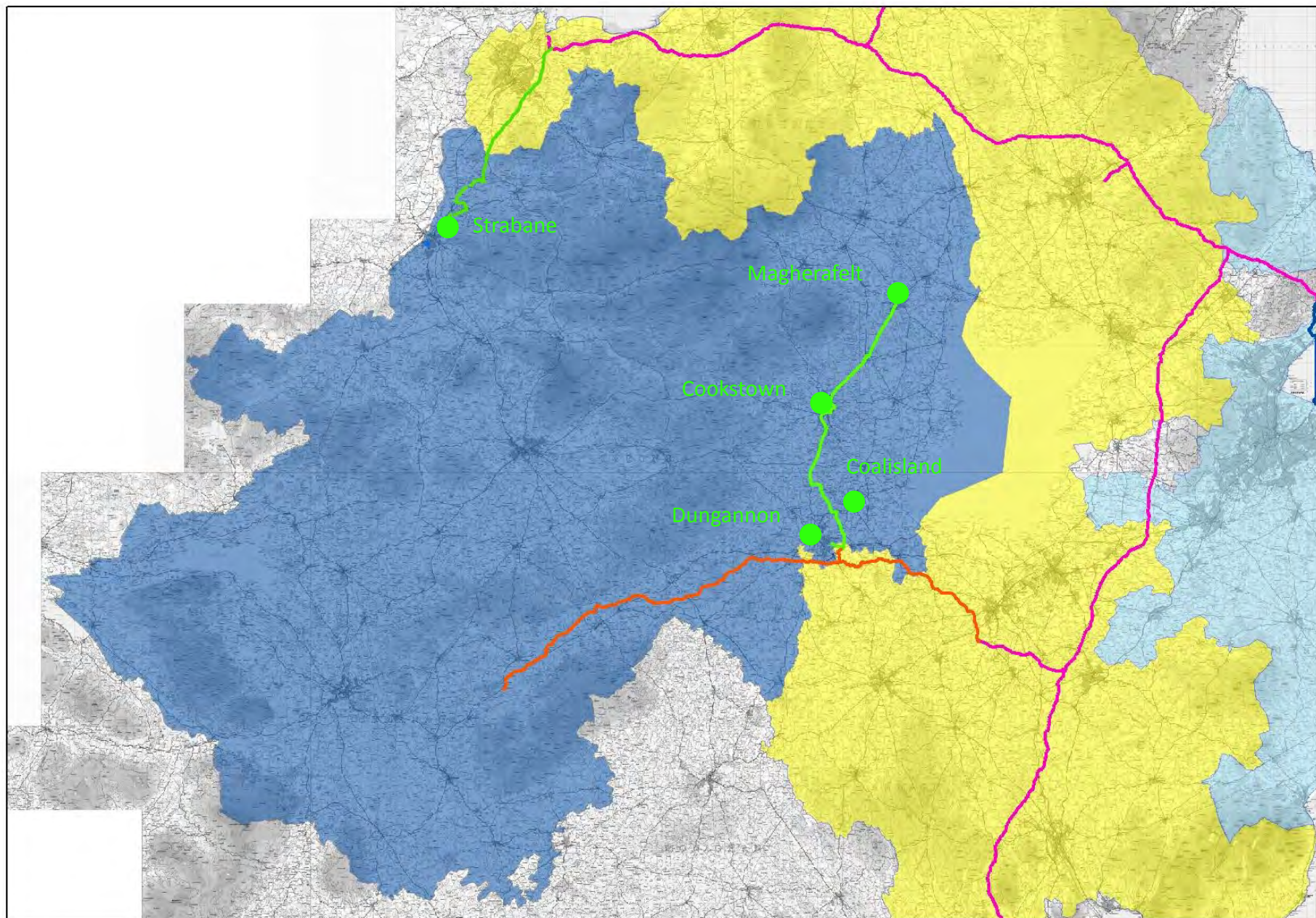
- Transmission
 - Up to 85bar pressure
 - Power Stations
- Intermediate (IP) Pressure
 - Up to 7bar pressure
 - Large Industrial Customers
- Medium (MP) and Low (LP) Pressure
 - Up to 2bar (MP) and 75mbar(LP)
 - Smaller Industrial
 - Commercial
 - Domestic

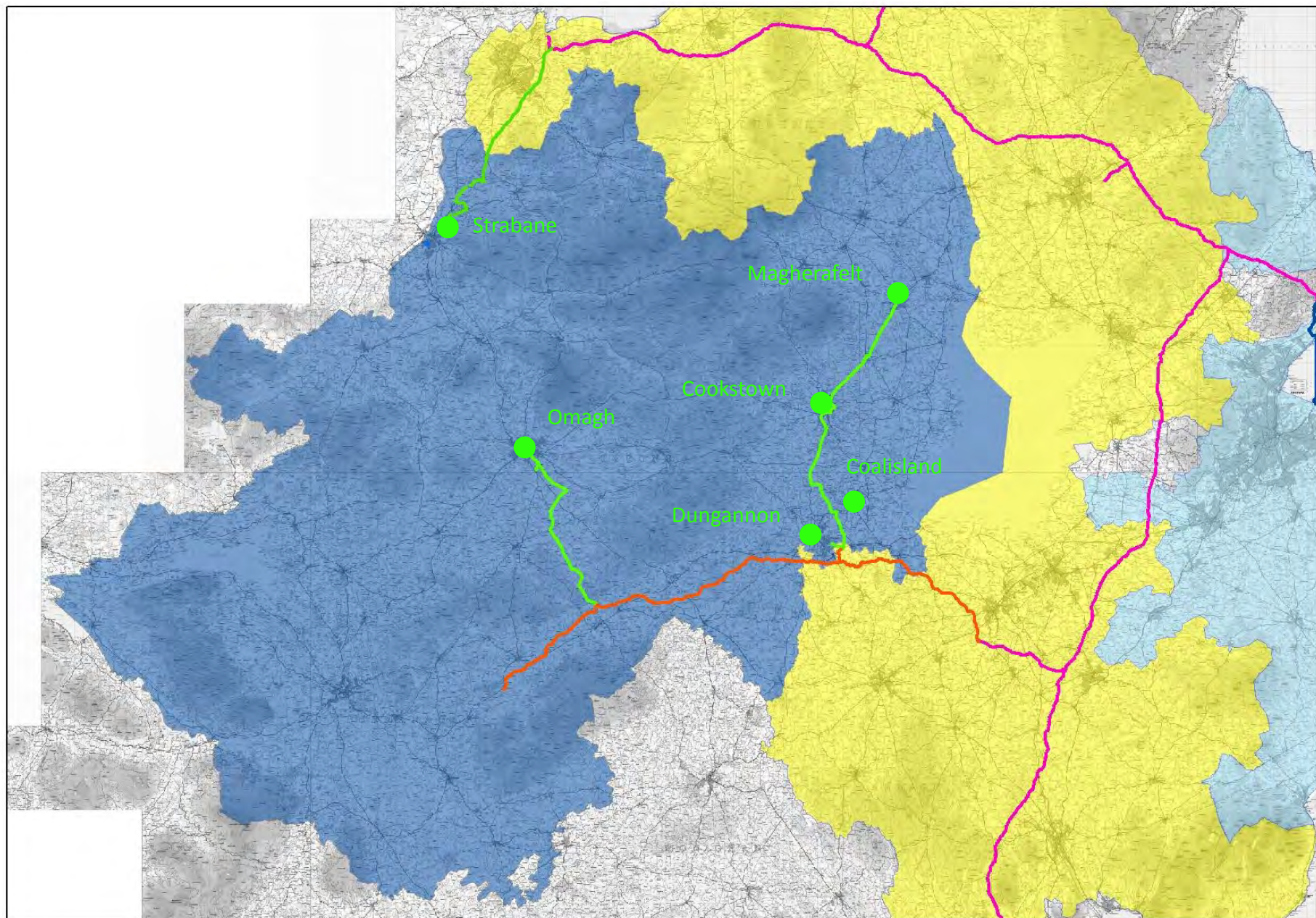


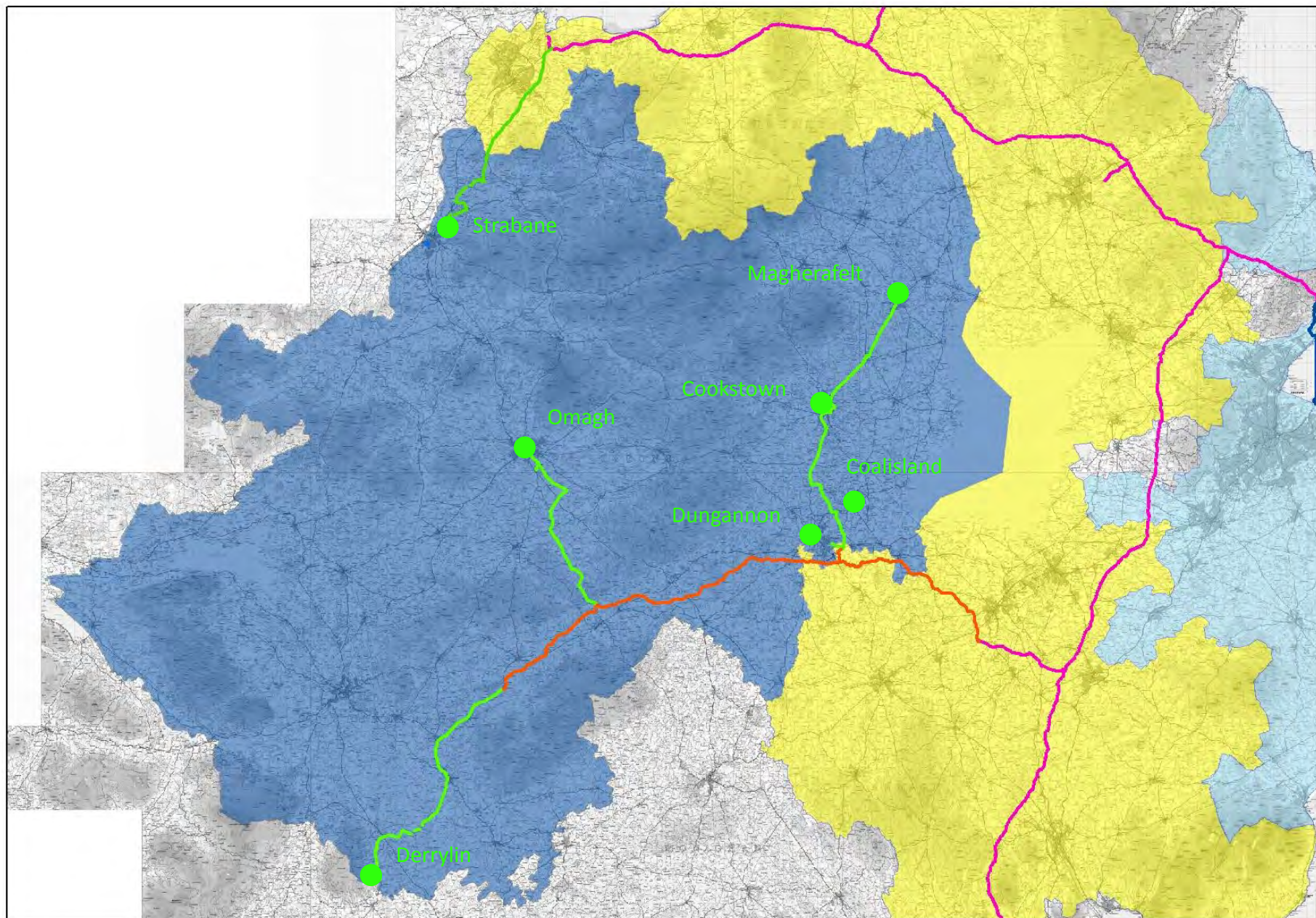
Gas to the West - IP Network

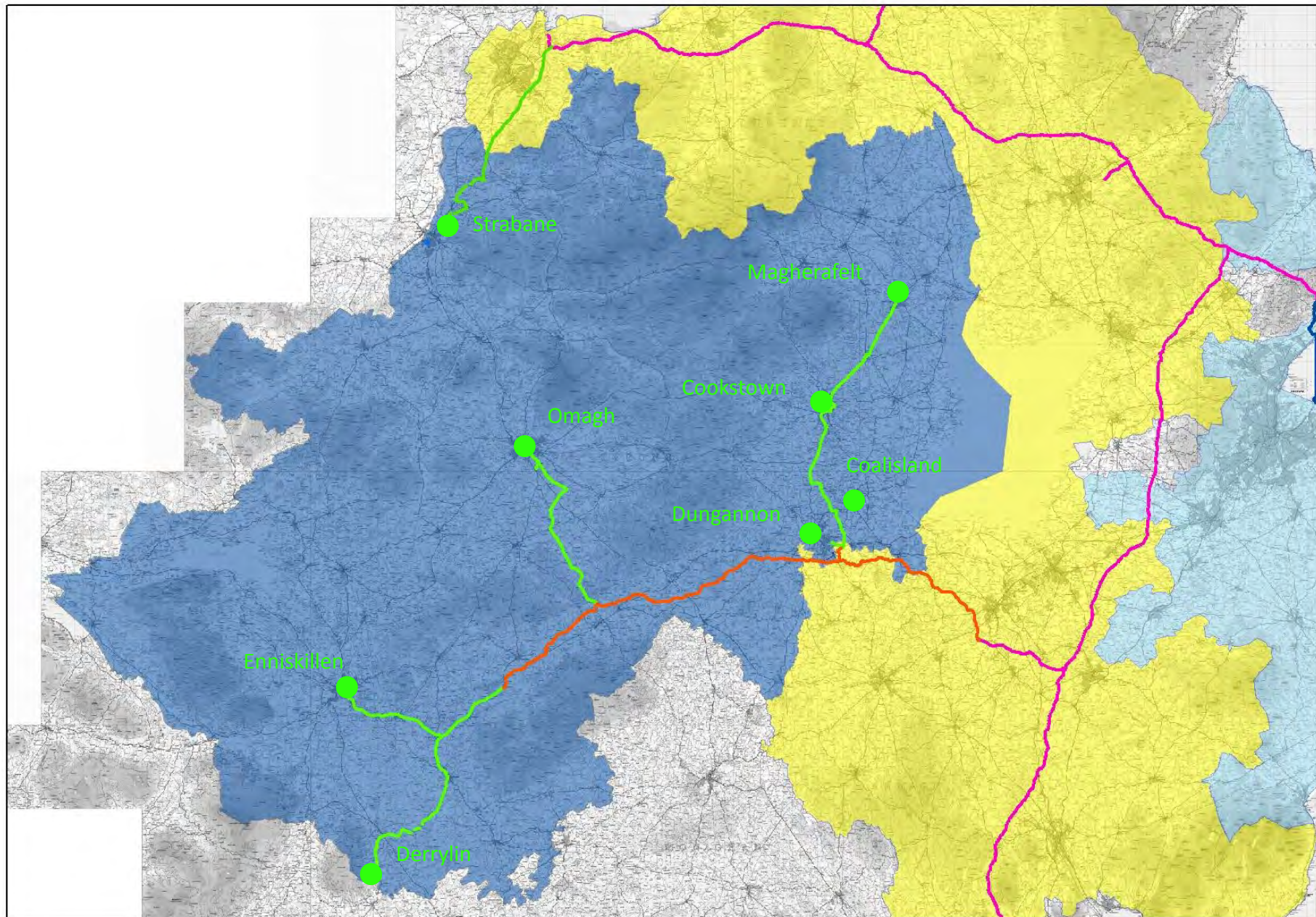












Outline IP Construction Programme

Outline IP Construction Programme

141km of Intermediate Pressure Pipeline (up to 7bar)

- 400mm/315mm PE Pipe
- 300mm/250mm Steel Pipe

Package	2015	2016					2017					2018				
IP01 Strabane																
IP02 Cookstown / Coalisland																
IP03 Derrylin																
IP04 Enniskillen																
IP05 Omagh																
IP06 Magherafelt																
IP07 Dungannon																

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Maydown to Strabane IP Pipeline

30km of Intermediate Pressure Pipeline (up to 7bar)

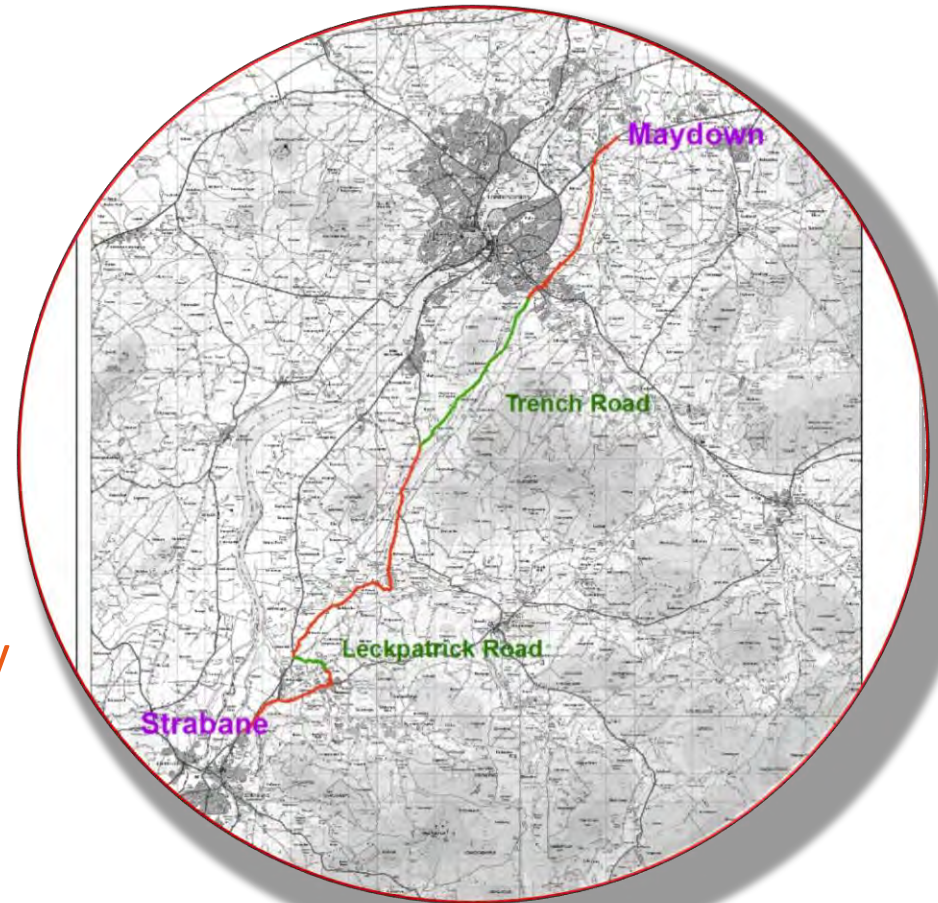
- 315mm PE Pipe
- 250mm Steel Pipe

Started

- November 2015

Commissioning

- Maydown to Artigarvan – January 2017
- Artigarvan to Strabane – April 2017



Strabane pipeline



Remaining Contracts

111 km of Intermediate Pressure

- 300mm Steel
- 250mm Steel
- 400mm PE
- 315mm PE

Contractor Appointed

Joint Venture between:

- Murphy International Limited
- GMC Utilities Group Limited

Construction Start – July 2017

Completion Q4 2018



Network Development

Network Development

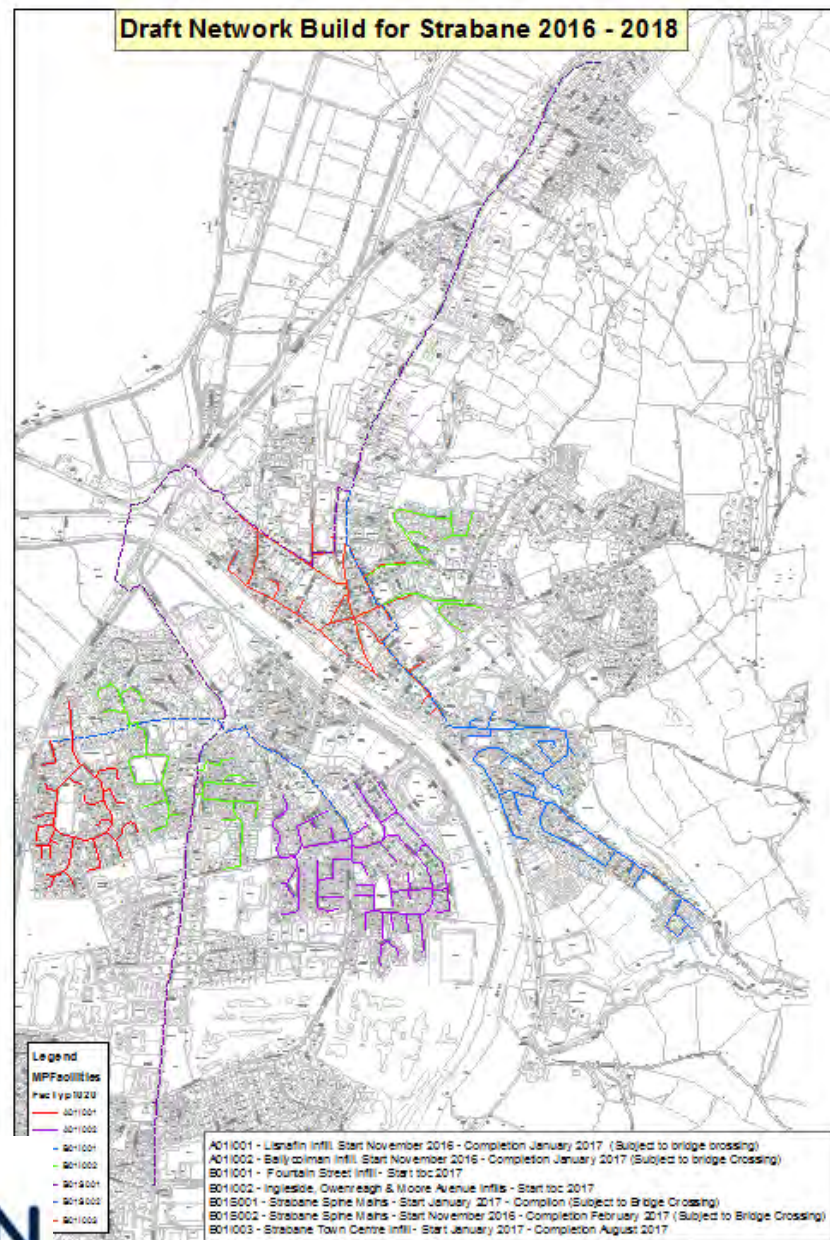
Distribution Network Build

Distribution Build	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027
Strabane	■	■	■	■	■	■	■	■	■	■	■
Cookstown	■	■	■	■	■	■	■	■	■	■	■
Derrylin	■	■	■	■	■	■	■	■	■	■	■
Enniskillen	■	■	■	■	■	■	■	■	■	■	■
Omagh	■	■	■	■	■	■	■	■	■	■	■
Magherafelt	■	■	■	■	■	■	■	■	■	■	■
Dungannon	■	■	■	■	■	■	■	■	■	■	■
Coalisland	■	■	■	■	■	■	■	■	■	■	■

Strabane Spine and Infill Mains Construction

Key Elements

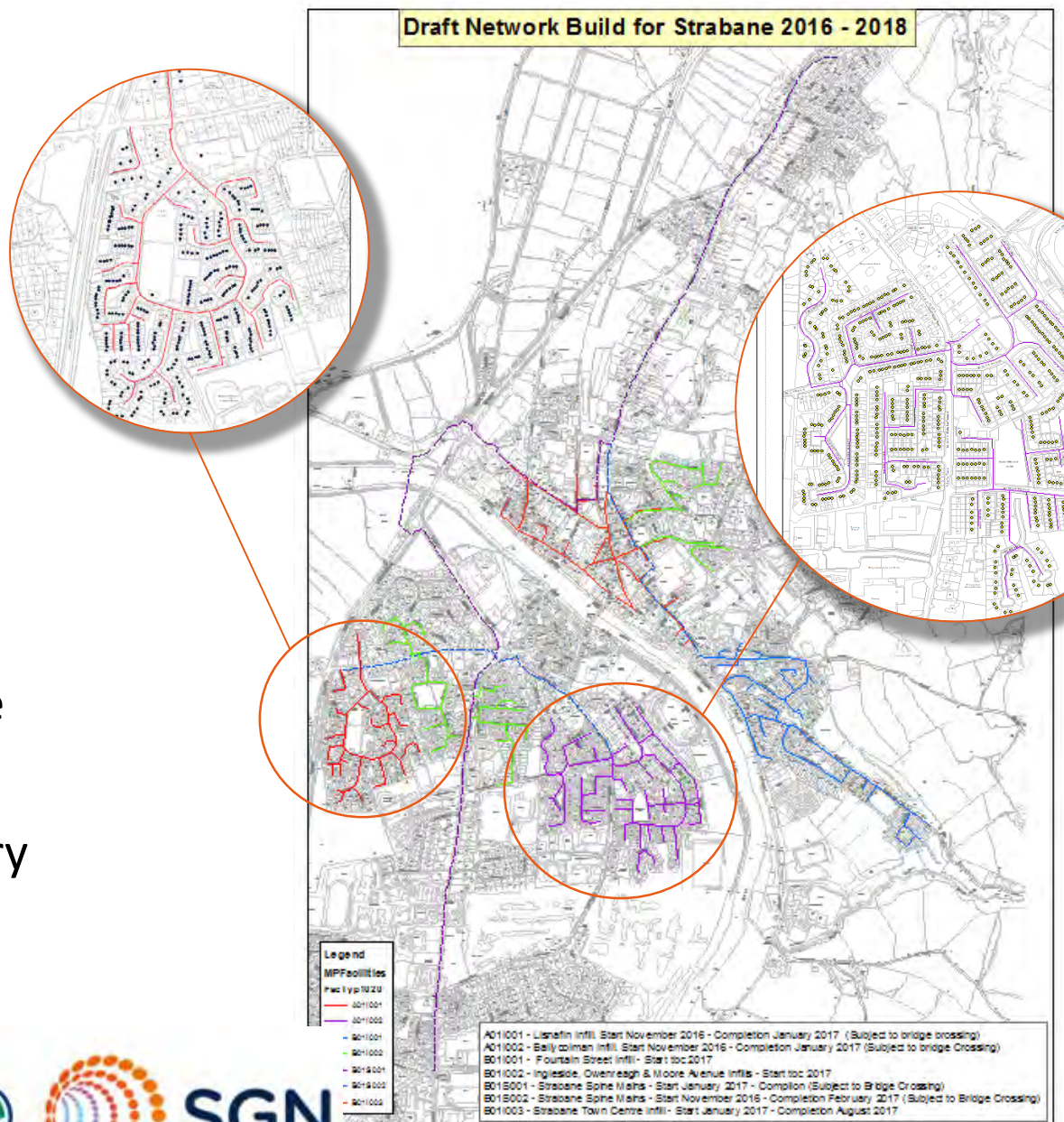
- Construction started November 2016
- 24km of Spine and Infill mains over 2 x years – to pass 2,500 properties



Strabane Spine and Infill Mains Construction

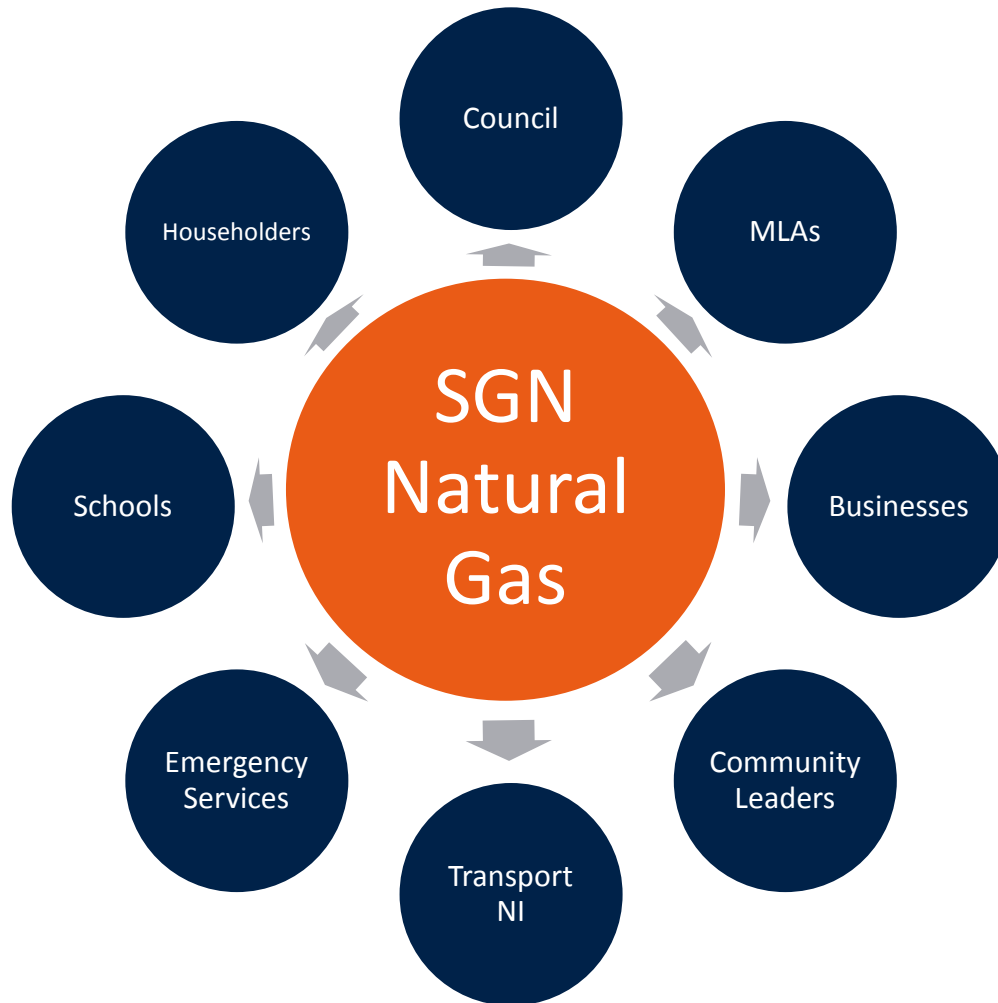
Key Elements

- Construction started November 2016
- 24km of Spine and Infill mains over 2 x years – to pass 2,500 properties
- 1st Infill Packages to align with TNI Resurfacing Programme and to provide gas to fuel poor customer
- Spine mains started January after Christmas Trading Period

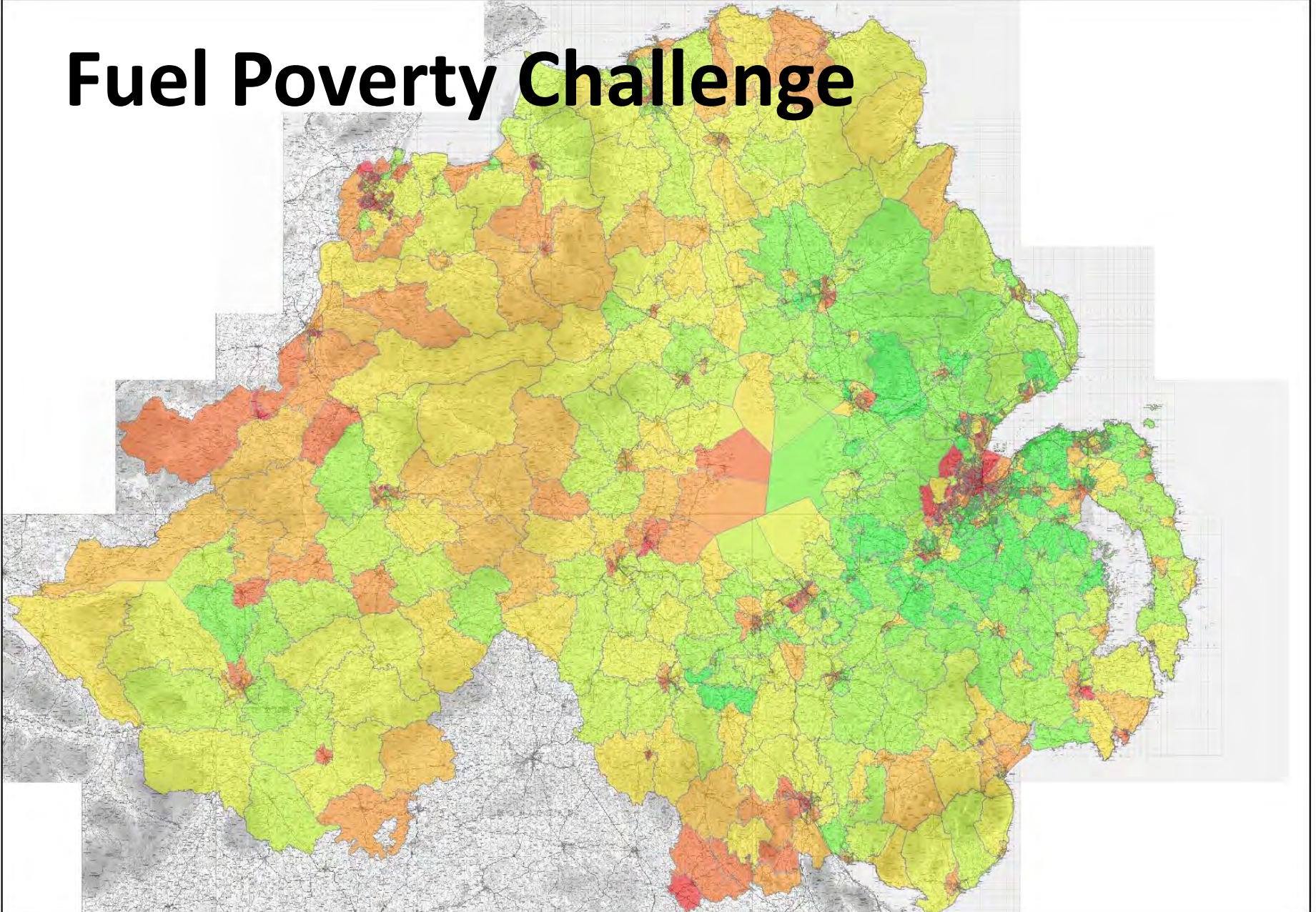


Distribution Mains Construction

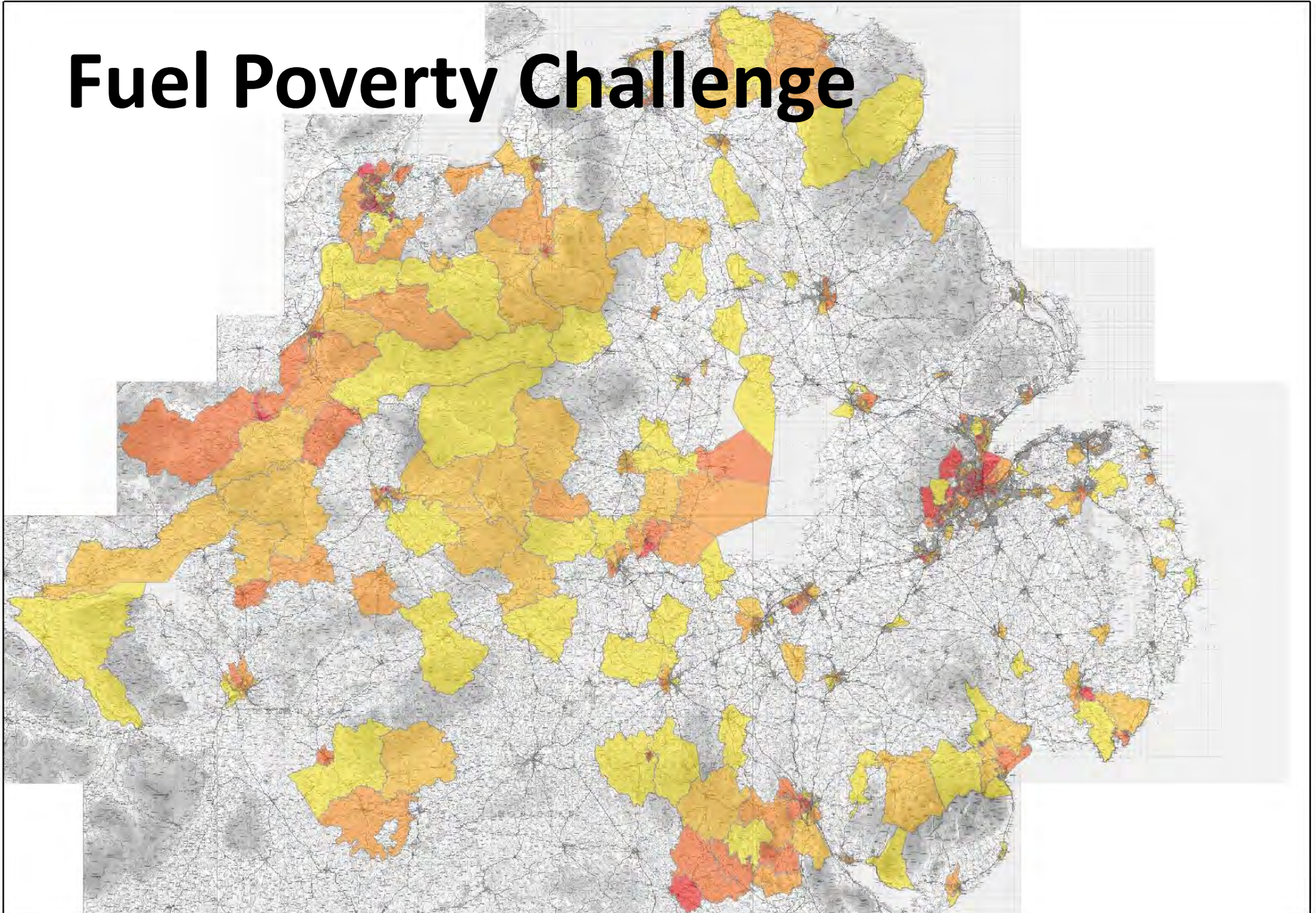
Continual Communication
with Stakeholders



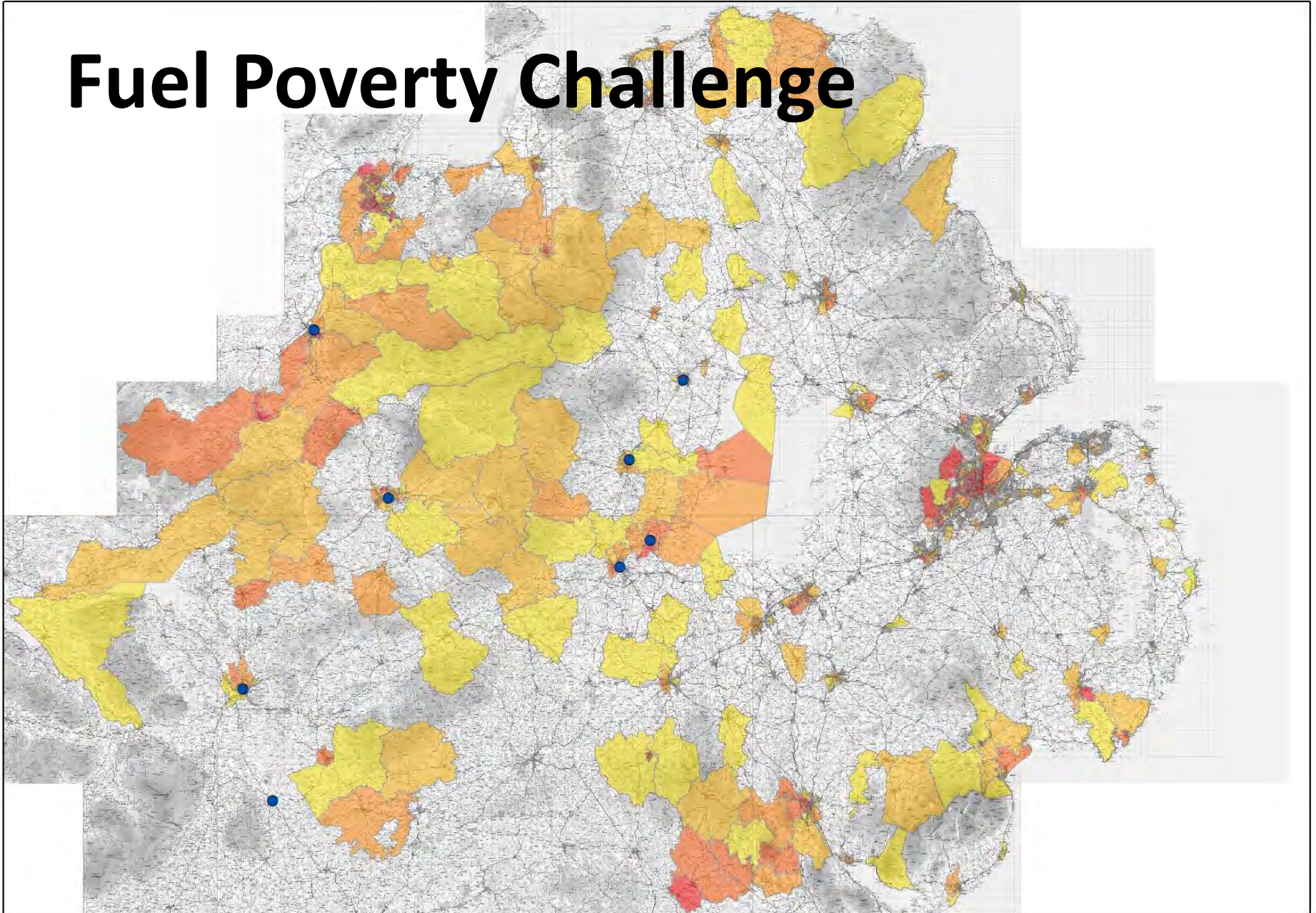
Fuel Poverty Challenge



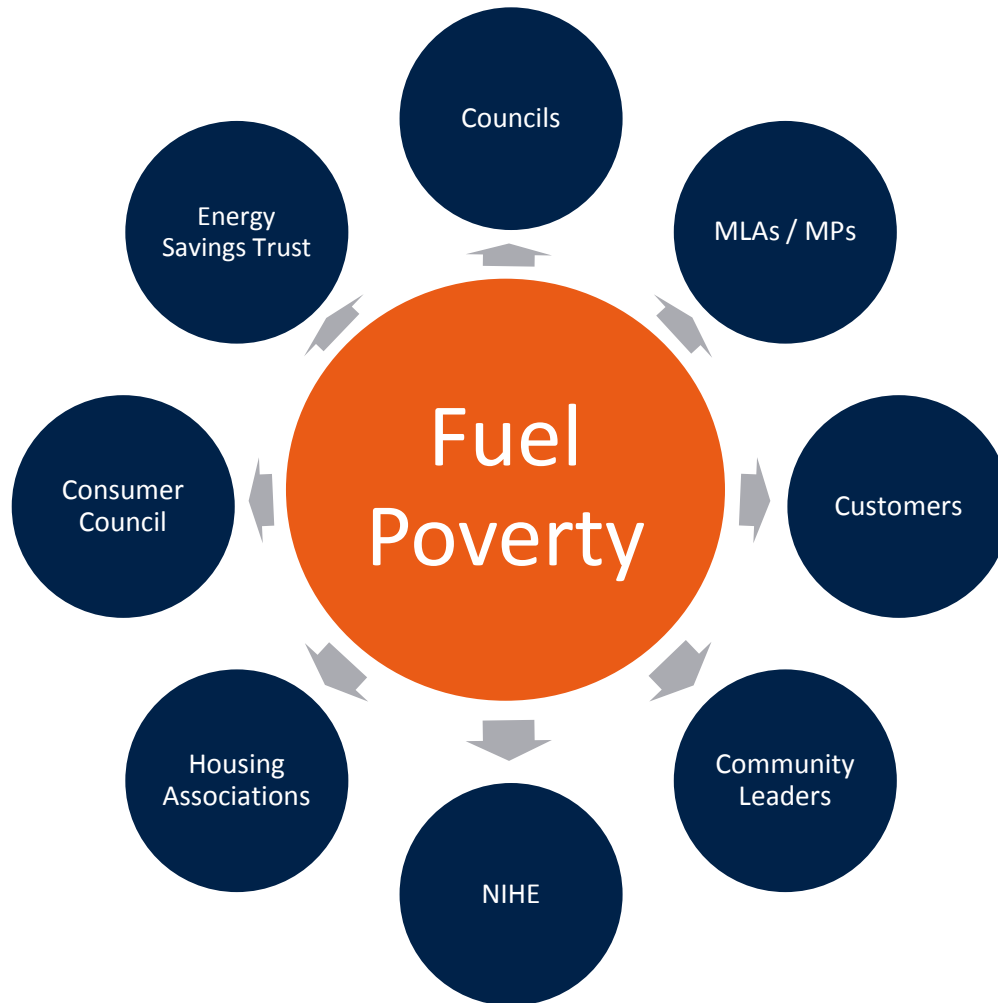
Fuel Poverty Challenge



Fuel Poverty Challenge



Fuel Poverty Challenge



Importance of Community involvement

Consumer Groups

Local Resident Advocates

Thank You

For coming and your attention

Project team available in room for discussions



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