

Gas
Networks
Ireland

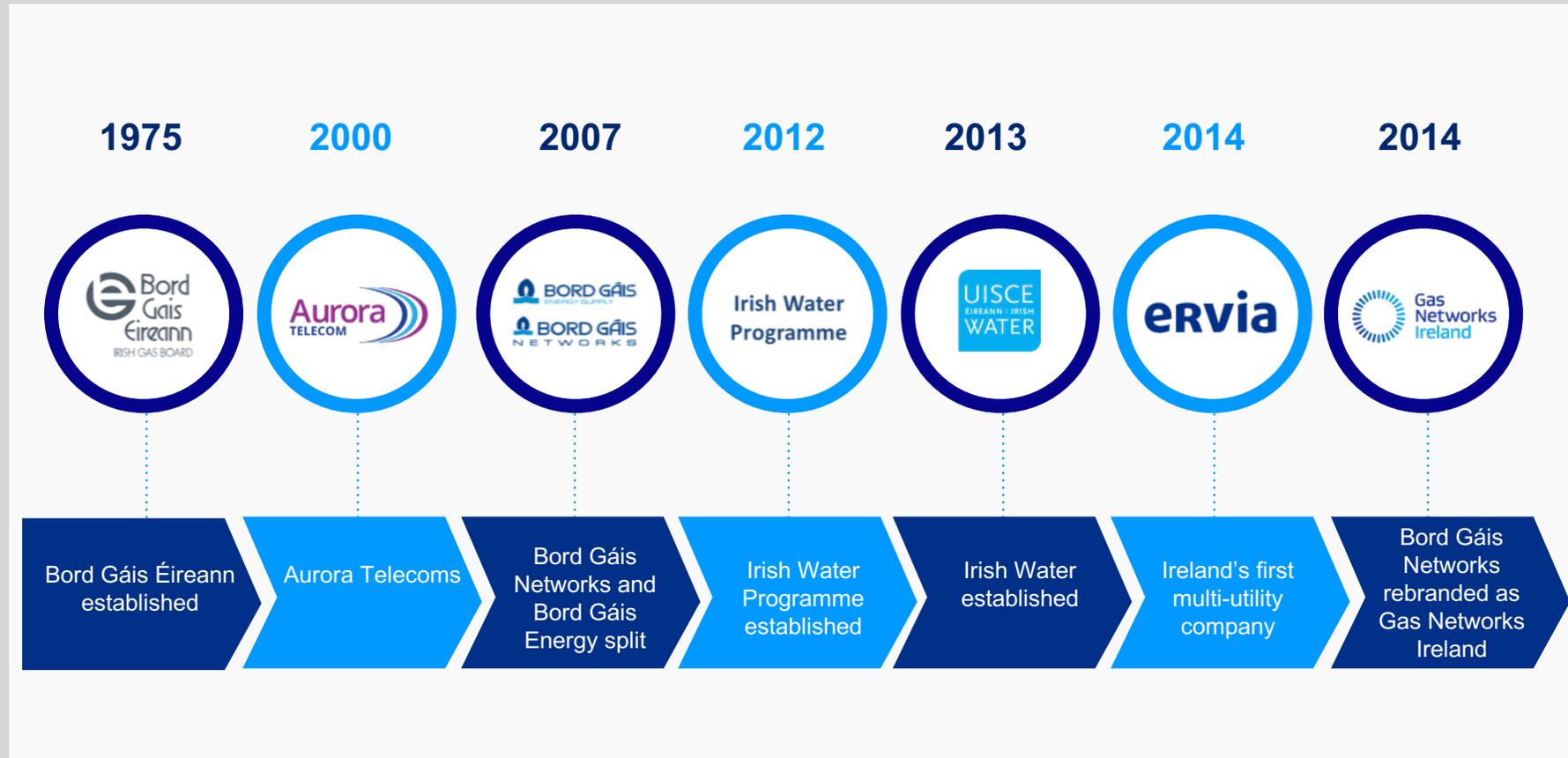
Gas Networks Ireland System Overview

February 2018

Who are we?



Our story so far



Ervia is a business of real scale



**1.7 m gas, water
and wholesale
broadband
customers**



**1,600 people in
20 locations**



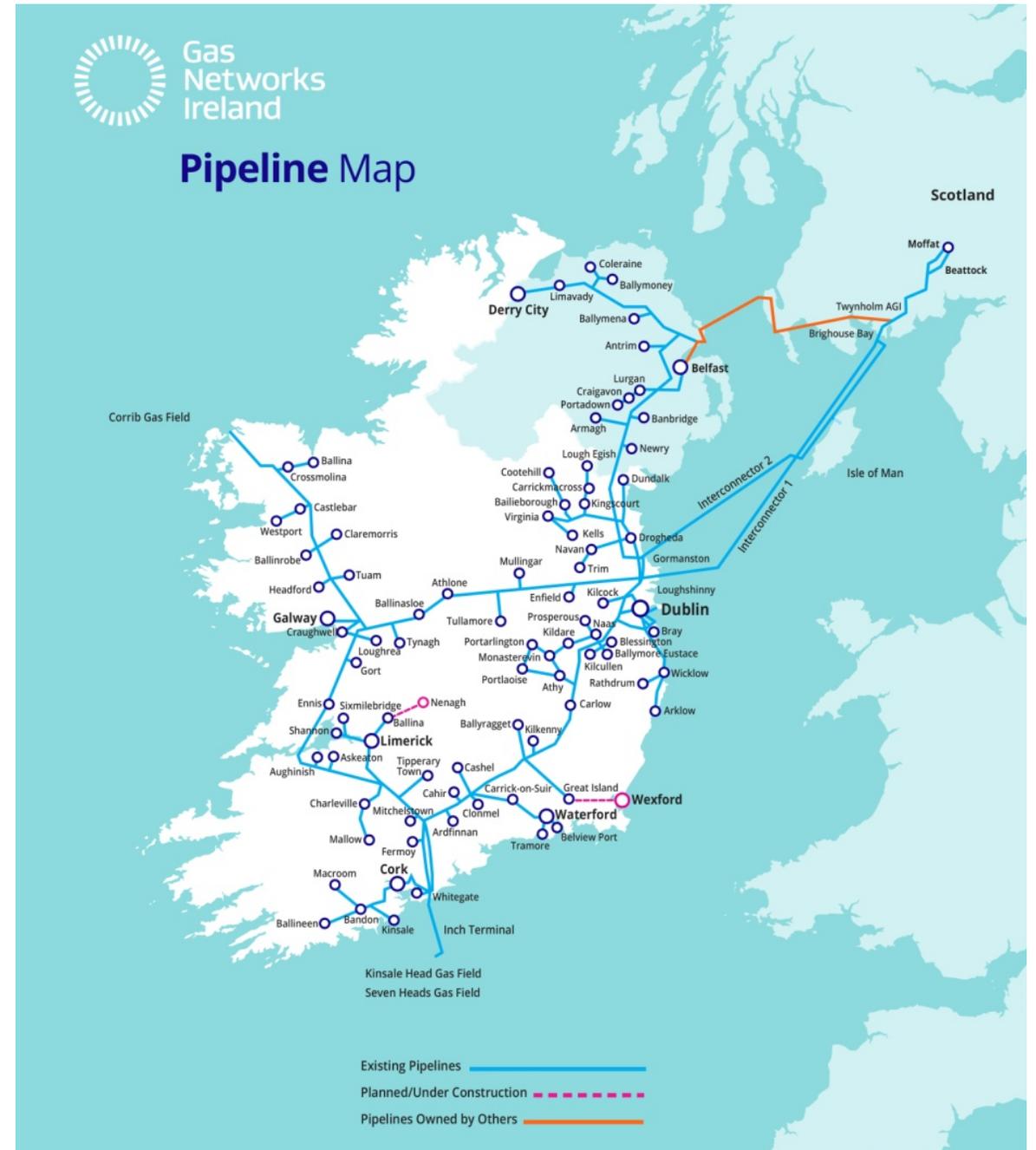
**2015 Ervia
Revenue
€1,342m**

Cash Generation Growing Annually



GNI Network Overview

- 2,433 km Transmission pipeline
- 11,339 km Distribution pipeline
- 680,000+ Connected premises
- 3 Compressor stations
 - Beattock
 - Brighthouse Bay
 - Midleton
- 3 Entry points
 - Moffat [IP]
 - Corrib [CS]
 - Inch [CS]
- 3 Exit points
 - Twynholm [CS]
 - Gormanston Phase 2 [IP]
 - Glen Moor [CS]

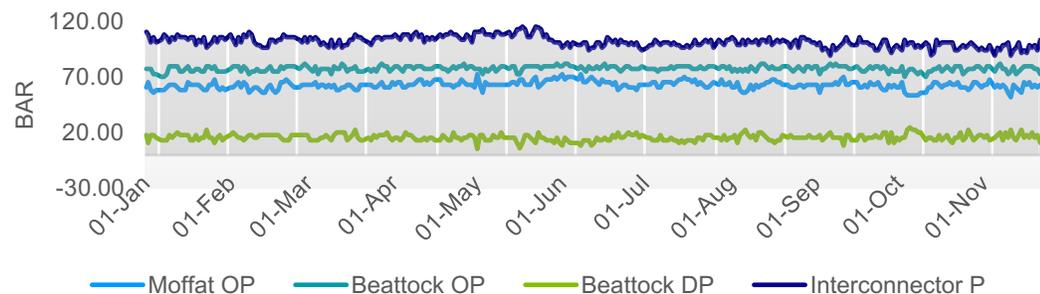


Network Operational Summary

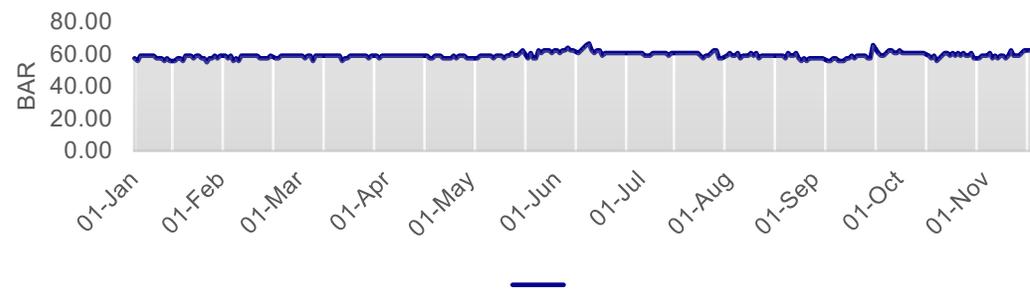
- 192 installations
- Infrastructure
 - Transmission
 - Steel mains
 - Above 16 Bar
 - Distribution
 - PE mains
 - Below 16 Bar (Typical < 4 Bar)
- Entry Capacity
 - Moffat 31 mscm
 - Corrib 9.59 mscm and declining
 - Inch <2 mscm and declining
- Fully odorised network
 - Transmission odorised
 - External odorisation
 - Moffat
 - Corrib
 - Internal odorisation
 - Beattock AGI
 - Inch

Network Pressures

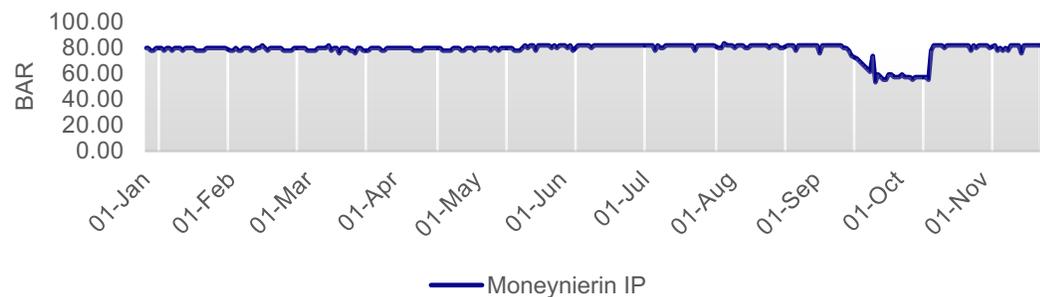
UK Pressures



Ringmain Pressures



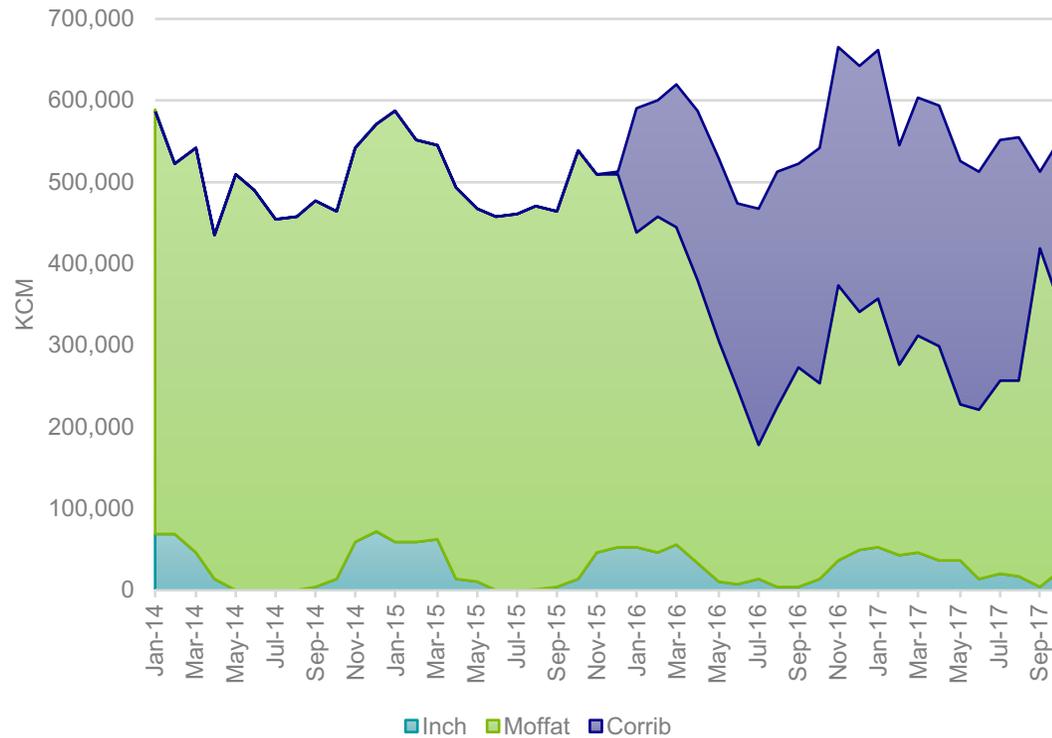
Linkline Pressures



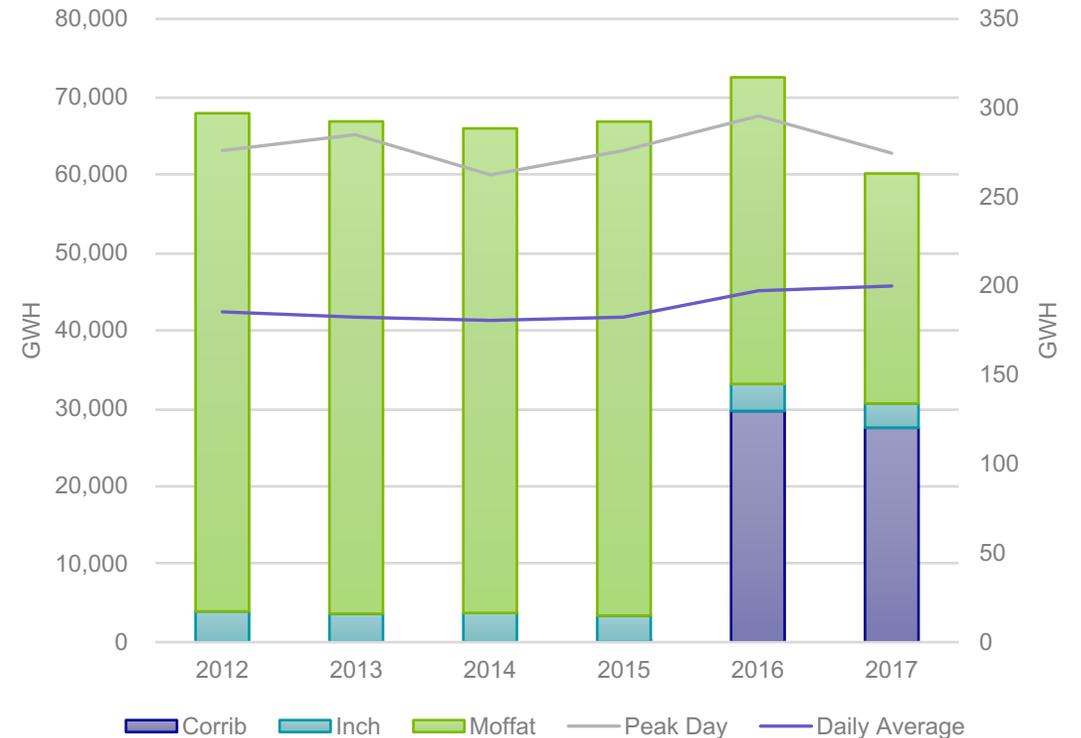
- Scotland
 - Moffat 50-75 Bar
 - Onshore 70-83 Bar
 - Interconnector 95-115 Bar
- Ireland
 - Ringmain 57-62 Bar
 - Linkline 80-85 Bar

System Overview

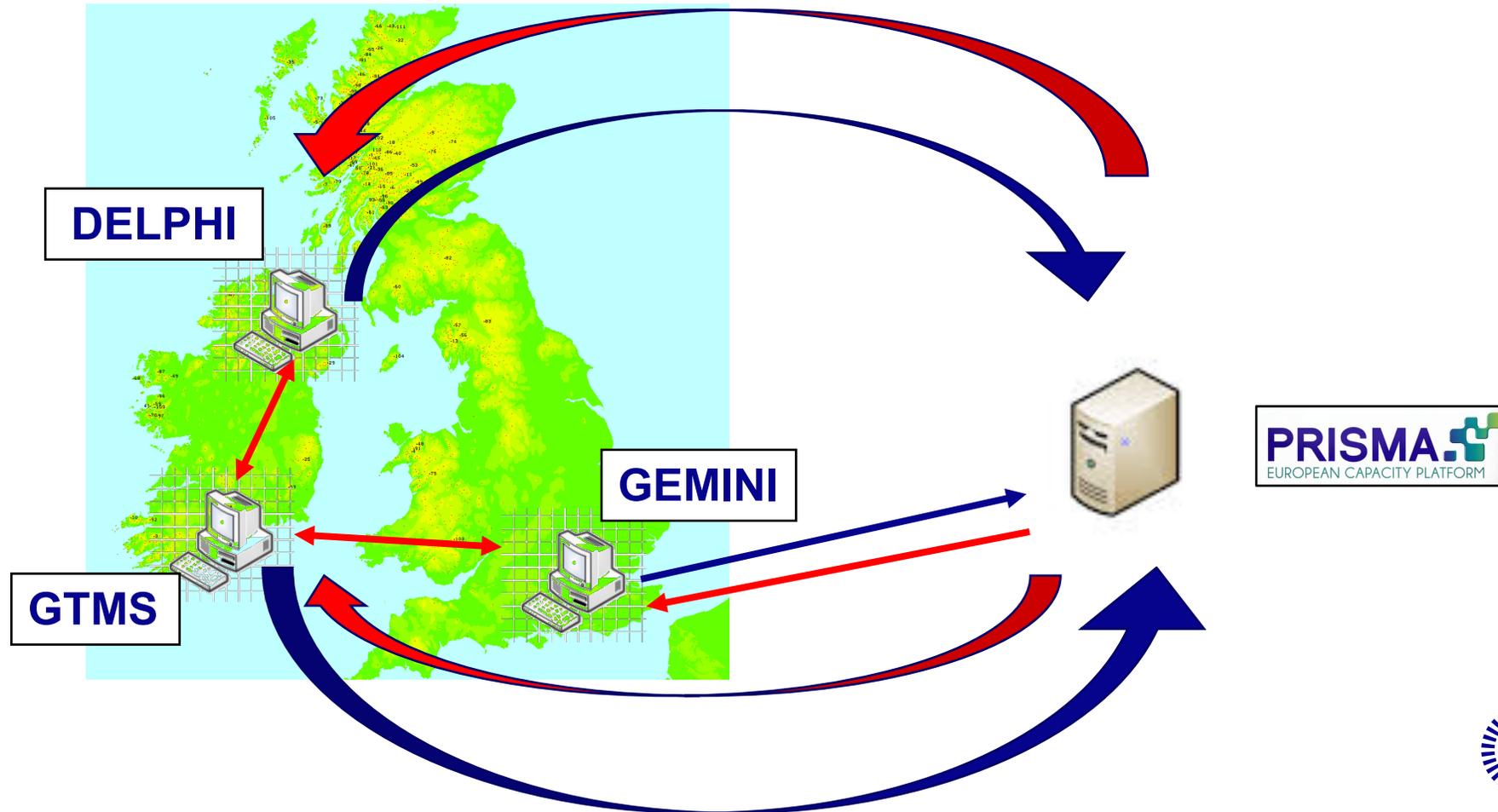
GNI Gas Supplies



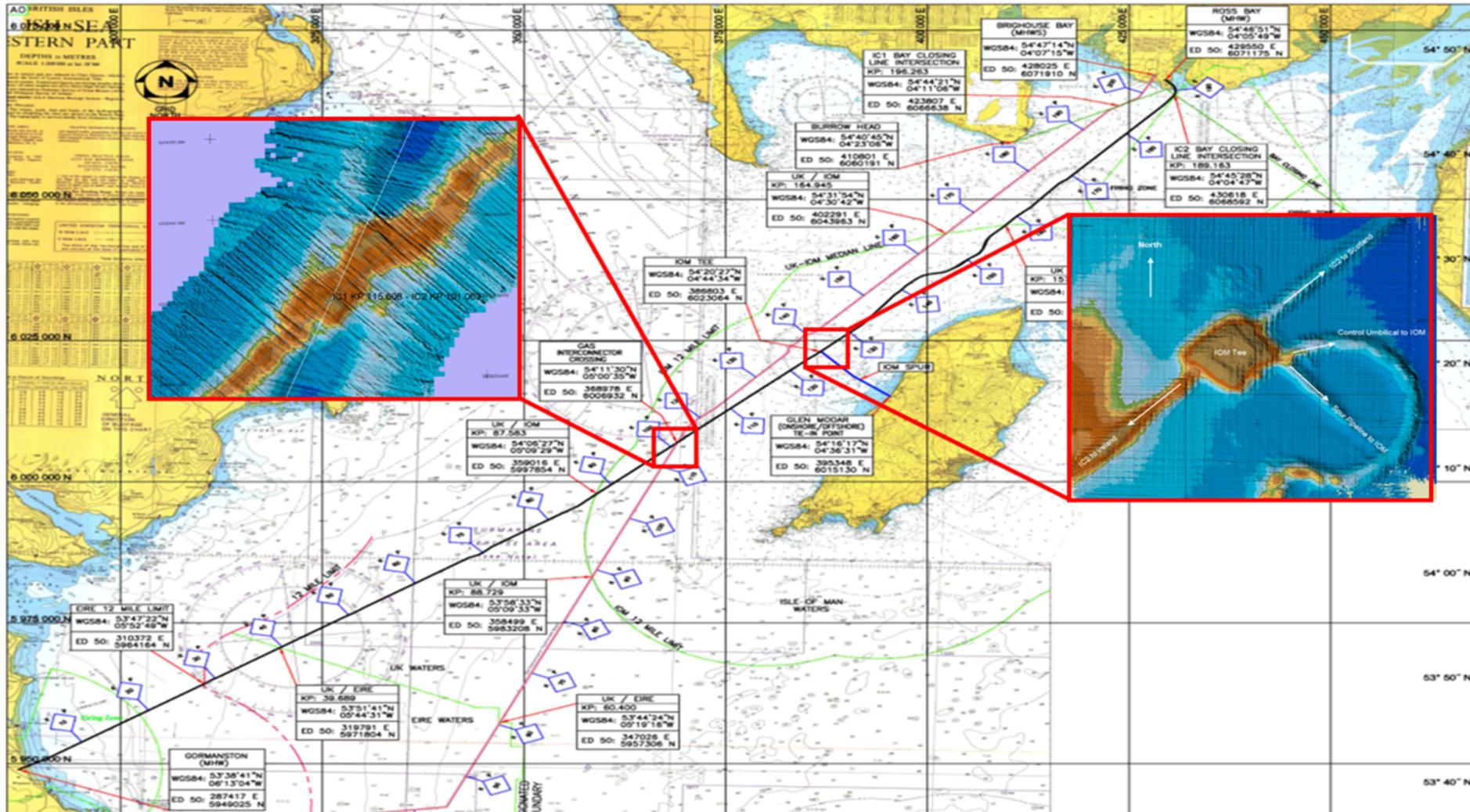
GNI System Throughput



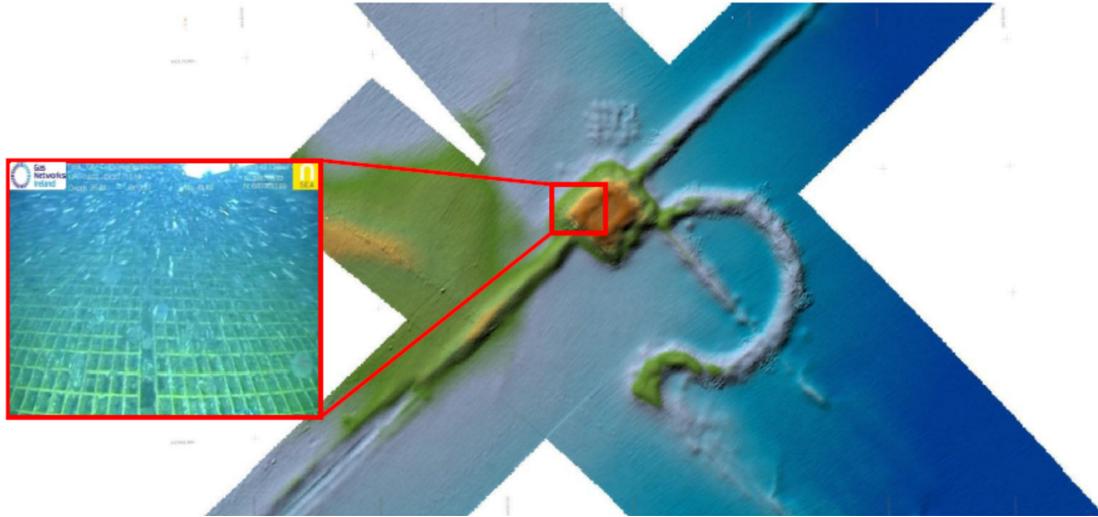
Commercial Operations



Gas Interconnector System



Isle Of Man



- IOM Tee - a subsea Tee and protection structure, 11km, 250mm diameter pipeline from offtake on IC2 to Glen Mooar landfall on the Isle of Man and a control umbilical connecting the IOM with the Tee.

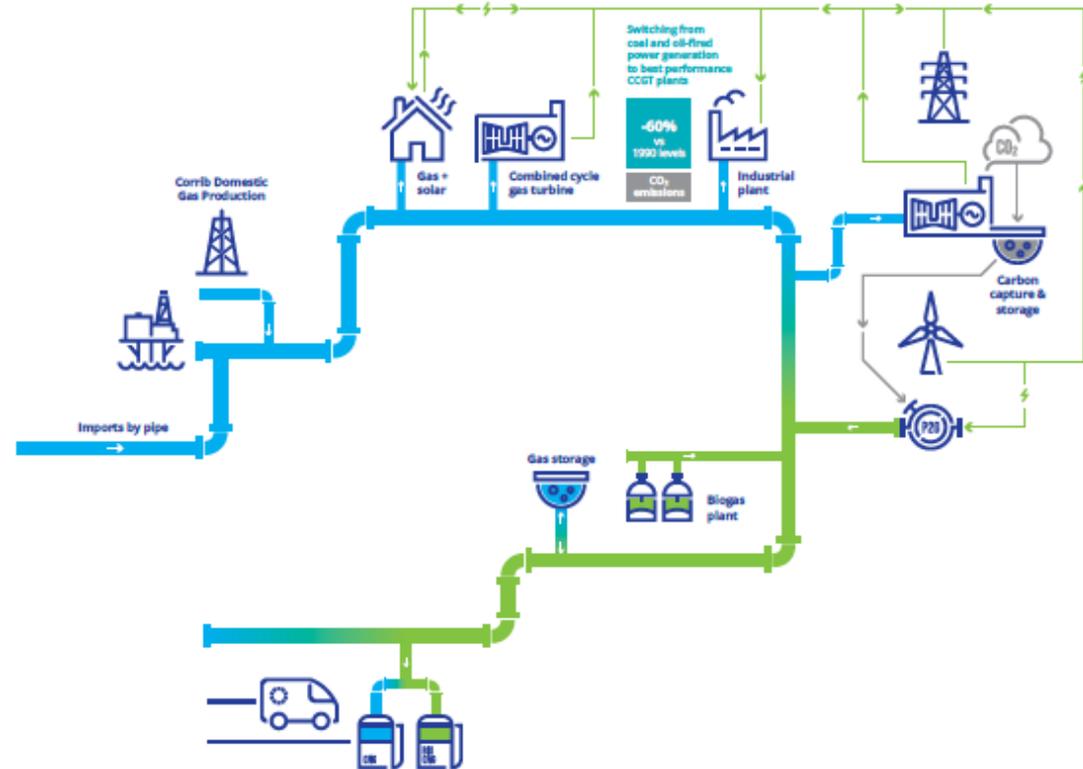


Glen Mooar AGI - IOM

The Long Term Role of the Gas Grid

- GNI is committed to the decarbonisation of Ireland's energy system.
- The gas grid and the electricity grid infrastructure are complementary. Natural gas has helped decarbonise the electricity grid by providing flexible gas fired generation to back up intermittent wind energy.
- GNI are actively investigating key transformational technologies to decarbonise the gas sector by 2050. These technologies include:
 - Renewable Gas
 - Carbon Capture and Storage for electricity and industry
 - Power-to-Gas
 - Hydrogen for heating and transport.
- GNI is also investing in CNG which has the potential to decarbonise the transport sector and contribute to Ireland's climate change targets.

Figure 9-2: 2050 - Gas System Transformation to Support Ireland's Decarbonisation Targets



Questions

