

SGN Engage

Shaping our plan together - GD3 Business Plan update

Webinar

24 October 2024



SGN

Your gas. Our network.

Event Overview – Agenda

Thursday 24th October, 10:30 – 12:00

Item	Topic
01.	Welcome, introduction & housekeeping
02.	Shaping Our Plan Together - SGN Business Plan Engagement
03.	Q&A
04.	GD3 Business Plan Initiatives
05.	Q&A
06.	Wrap up and close

Before we get started

Housekeeping



REC

We are recording today's session



Please keep your camera off when not speaking



Please mute your microphone when not speaking



Use the Q&A channel to ask questions or



Raise your hand during the Q&A segments

Aims for the day



To share our updated plans & initiatives



To hear your thoughts



To respond to your feedback & answer any questions

Shaping Our Plan Together

Ged Egan

Senior Stakeholder Strategy Manager

SGN



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Your gas. Our network.

Our four-stage stakeholder engagement & research programme

Objective

Research

Domestic,
Fuel Poor,
Future & SME
customers

STAGE 1

Listening

To understand customer and stakeholder priorities to shape decision-making

Online deliberative workshops with 100 customers over 3 weeks + online survey with 3,000 customers

STAGE 2

Test & Iterate

To support the development of detailed elements of our draft business plan

Willingness to Pay - online survey with 3,000 customers

STAGE 3

Consult

To shape a draft of the business plan and understand any areas of concern

Online deliberative workshops with 100 customers over 4 weeks

STAGE 4

Refine

To test any further amendments proposed by customers, stakeholders, Ofgem & ISG (Independent Stakeholder Group)

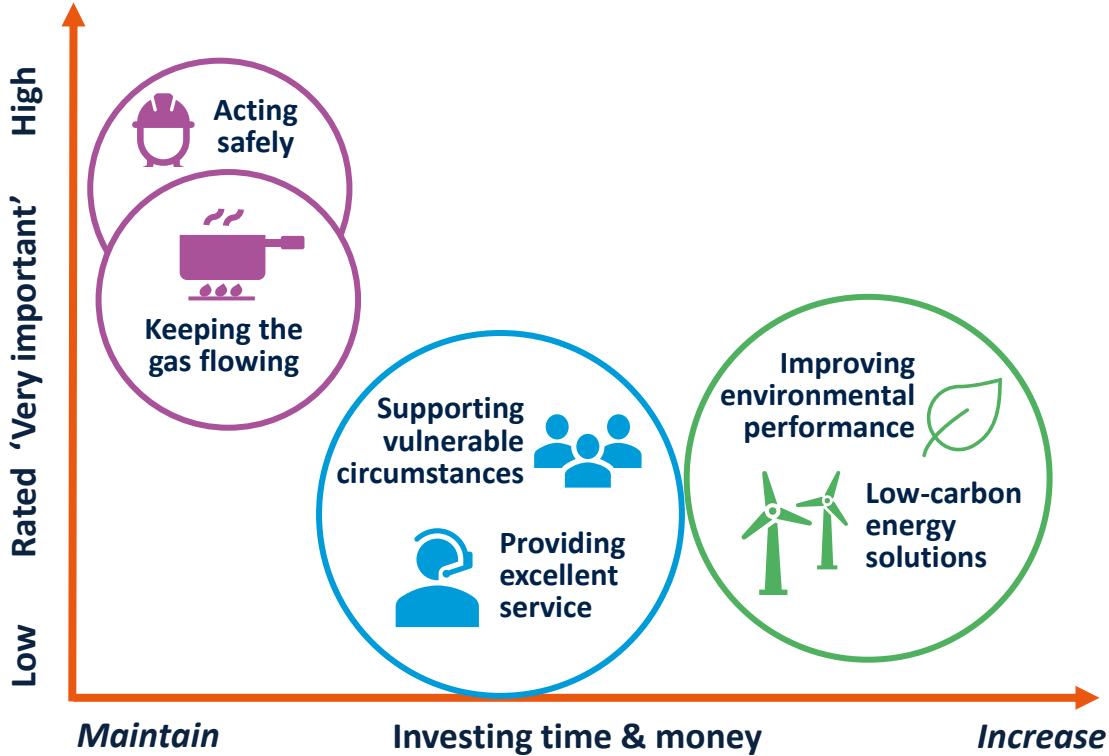
Acceptability testing with informed customer panel

Monthly engagement with informed panel set up at stage 1

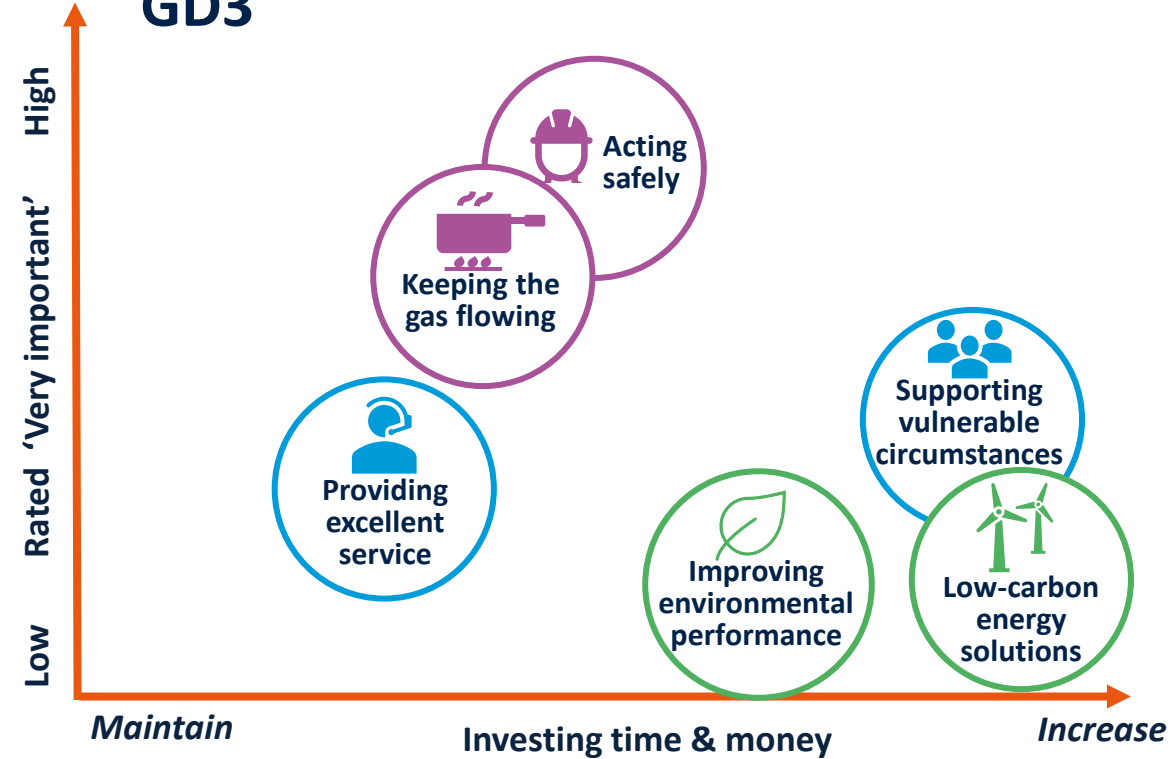
Stakeholder events and surveys (broad & specialist)

SGN's Priorities have changed in five years

GD2

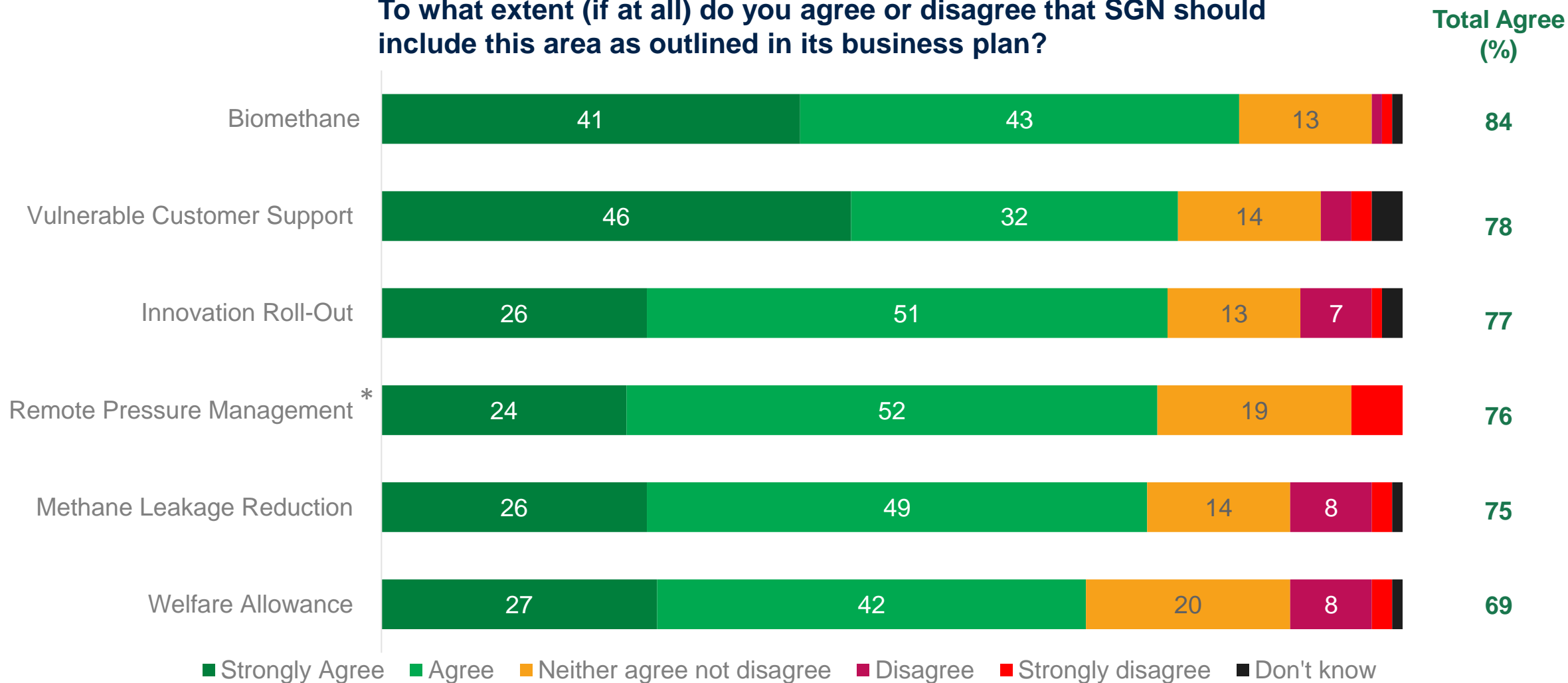


GD3



Key initiatives tested with informed customer panel

To what extent (if at all) do you agree or disagree that SGN should include this area as outlined in its business plan?



Base: Total sample n= 92

* Only tested with customers in Southern (base size 42)



Q&A

Our 2026 - 2031 Business Plan

John Richardson

Head of Regulatory Business Plan Delivery

SGN



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Your gas. Our network.

Biomethane



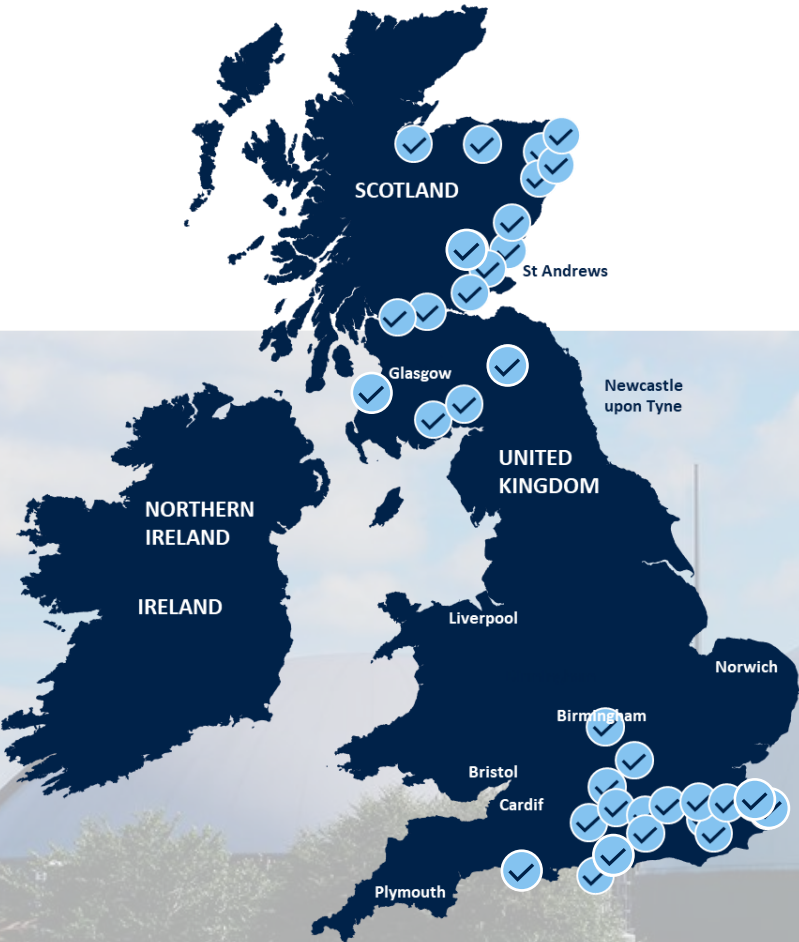
Low-carbon
energy
solutions

Greening our networks - Biomethane

Developing the infrastructure to deliver more biomethane

Equivalent homes heated with biomethane:

Scottish Independent Undertakings (SIUs):
Low carbon biomethane solution



450,000 by 2026

1 million by 2031



We will transport more decarbonised gas than any other network in GD3

Future of Energy



Low-carbon
energy
solutions

Our strategic areas and commitments

UNDERSTANDING OUR CONSUMERS' NEEDS

Understand our consumers' needs and preferences in greater depth and breadth.

Mature our engagement and understanding of our consumers and network users. Allowing us to maintain strong relationships that support their forecasting and decarbonisation plans, whilst using our assets to preserve their energy security.

TODAY'S NETWORK

Responsible investment into research & innovation to maintain a safe, resilient, and reliable network, that benefits all our customers & stakeholders.

- Drive innovation that enables us to be more efficient, safer, resilient, and sustainable.
- Develop a detailed understanding of the changing nature of vulnerability and prepares us to respond to our customers' needs when they require us to.
- Research, develop, and introduce solutions that enable our customers to decarbonise their energy use under a whole energy system approach.

NETWORK TRANSITION

A coordinated whole system approach, advancing and demonstrating carbon reductions for our consumers now.

- Maximise biomethane injection, working collaboratively with the biomethane industry to enhance the gas networks' role in greening energy supplies.
- Progress hydrogen blending evidence from GD2 to consolidate 'no regrets' verification, supporting its viability.
- Deliver technical verification, and validation of our operating models to enable hydrogen blending.
- Progress the decarbonisation opportunities for consumers', by blending hydrogen into our network.
- Demonstrate alternative decarbonisation solutions for high-rise multi occupancy buildings transitioning from natural gas, thereby supporting a just net zero transition for vulnerable customers.
- Establish the capability and capacity to work collaboratively with stakeholders for a whole system approach to decarbonise energy systems.

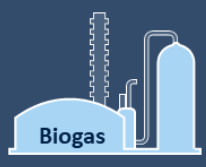
FUTURE NETWORK

Networks that support a low carbon energy system, a key component of a system transformation.

- Support decarbonisation of the whole energy system through effective and productive re-purposing of assets regardless of Heat Policy decision.
- Understand the impact of network decommissioning on our customers, network operation, policy, and regulatory frameworks as part of a credible plan for viable net zero transition.

Future of Energy funding proposition


Strategic innovation area	Funding Type	Amount (£m)
Understanding our consumers' needs	Totex	1.40
	NIA	0.20
Today's network	Totex	3.65
	NIA	1.25
Network Transition	Totex	6.40
	NIA	19.25
	NZARD	1.60*
	CNIA	6.75
Future Network	Totex	0.38
	NIA	10.00
Total		50.87




Biogas
Potential for 6m plus homes



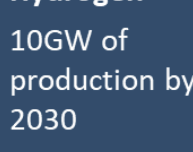
Hydrogen
10GW of production by 2030




Heat pumps
600k per annum target by 2028



Heat networks
20% heat demand by 2050



Hydrogen
10GW of production by 2030



Hydrogen blending
20% blend (9TWh for SGN)



Hybrid heat pumps

Opportunities to explore



Waste heat

Working together to deliver a stakeholder led approach for the transition to net zero

Vulnerable customer support

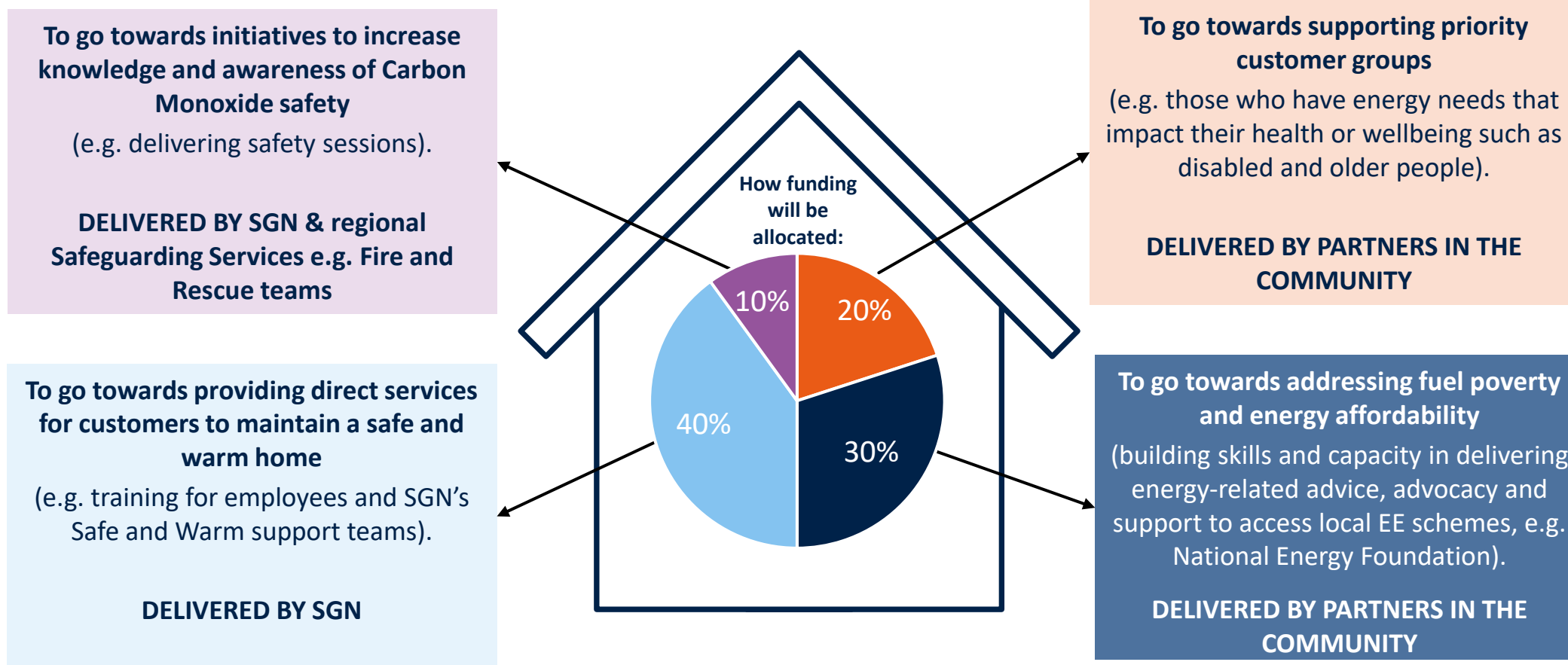


Supporting
vulnerable
circumstances

GD3 Ambition – a sustainable ‘whole house’ approach

We intend to identify the 650,000 households most in need of support by taking a ‘whole house’ approach

We’ll do this by improving our own processes and procedures, and by partnering with organisations who already work with vulnerable customer groups



SGN's Proposed Plans for 2026 - 2031

SGN's plans will:

Provide training to all frontline employees to help identify and support Vulnerable Customers

Help up to 650k vulnerable households to use energy safely, efficiently and affordably

Aim to maintain a positive SROI (Social Return On Investment), prioritising support to the specific needs of our most vulnerable customers

Develop and grow the reach of our Safe and Warm partnership community network

Champion a fair and affordable clean energy transition leaving no customer behind

Based on Sector Specific Methodology Decision (SSMD) and engagement with Ofgem and other GDNs we have moved some of our expenditure into Baseline allowances

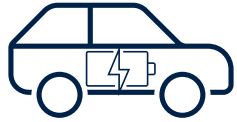
Environmental Action Plan (EAP) and supporting initiatives (including innovation roll-out)



Improving
environmental
performance

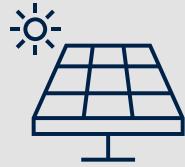
EAP initiatives to be completed in 2026

Decarbonising our business



Electric vehicles

Focussing on our non-frontline, small vehicles that can be used effectively and reliably with current infrastructure



Property

Continue installation started in GD2 to increase solar panel generation by an additional 2MW
Increasing battery capacity and installing Smart Tech and SMART building technology, to maximise efficiency

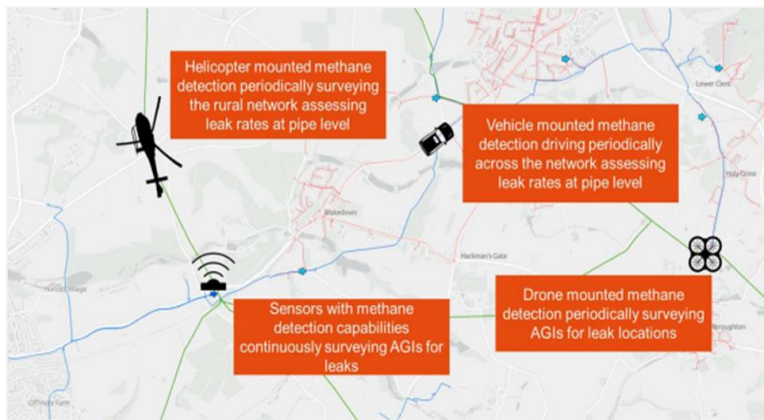


Climate change resilience of assets

Proactive surveying of network to identify risk, particularly of washouts, and carrying out interventions to protect customers' gas supplies.

Further innovation projects to be completed in 2026

Digital Platform for Leakage Analytics (DPLA)



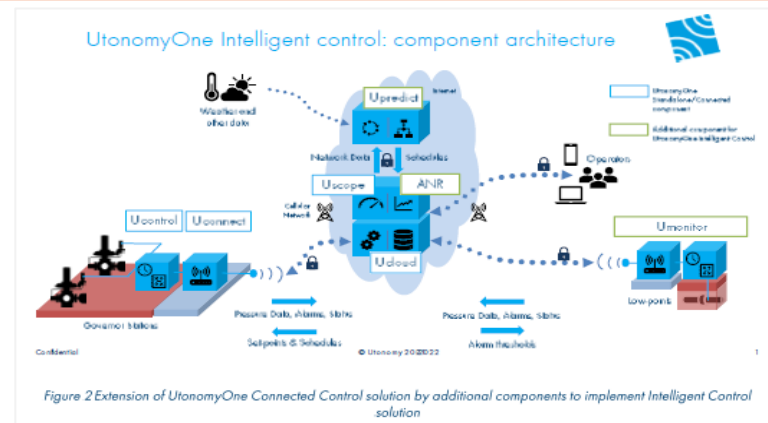
- DPLA will use sensors on vehicles, helicopters and drones coupled with machine learning and AI to enable real-life monitoring of assets to reduce leaks.

Example:

Reducing leaks from Above Ground Installations

- Above Ground Installations currently all have the same leakage rate
- Continuous monitoring will allow us to find and address the assets that have higher emissions

Intelligent Gas Grid (IGG)

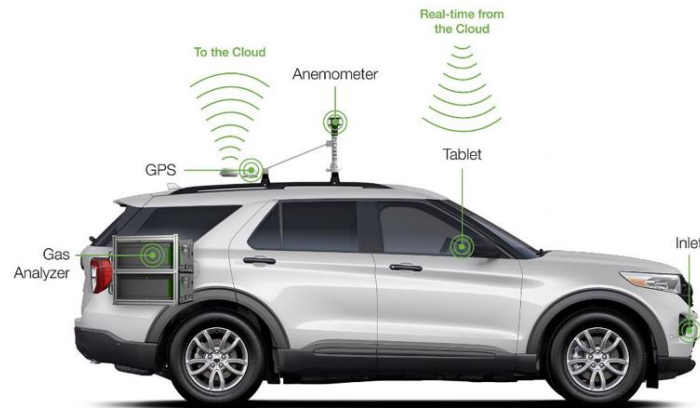


Investigating whether **Machine Learning and Artificial Intelligence (AI)** techniques can:

- Accurately predict daily demand and optimise pressures further
- Predict network issues through pressure anomalies
- Enable Bio-Methane plants to inject all year (even at low demand periods)



Vehicle-based methane detection that supports:



- Leakage Reduction Strategy Development
- Pipe Replacement Optimisation
- Reduction in Public Reported Escapes
- Risk Reduction and Monitoring

Small Scale Survey

10% of pipes over 5 years, minimal additional resource

Medium Scale Survey

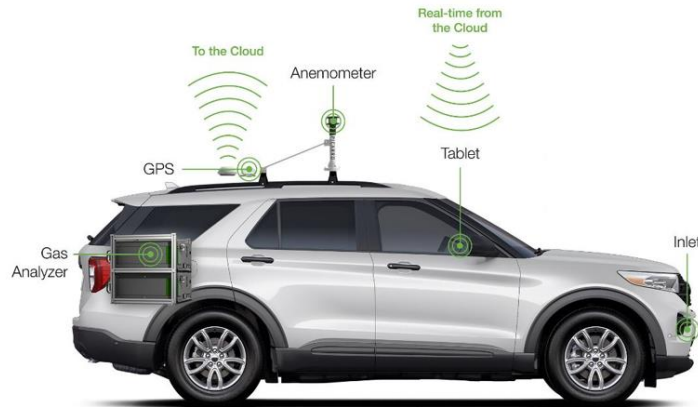
20% of pipes over 5 years, additional resource

Large Scale Survey

100% of pipes over 5 years, large resource requirement



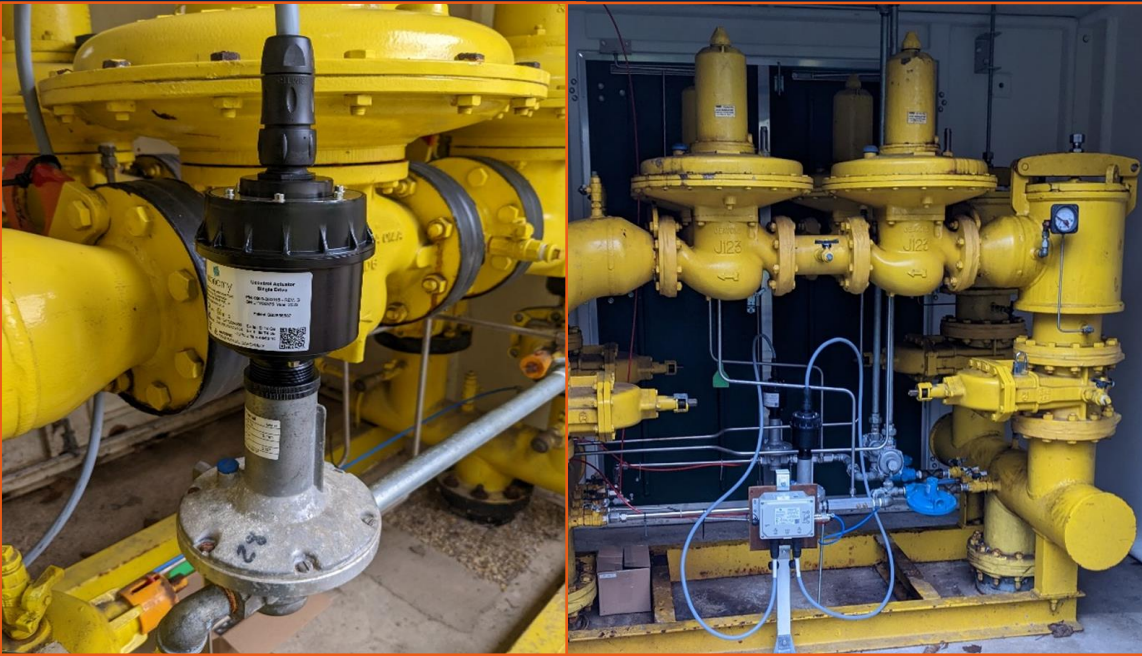
Vehicle-based methane detection that supports:



- Leakage Reduction Strategy Development
- Pipe Replacement Optimisation
- Reduction in Public Reported Escapes
- Risk Reduction and Monitoring

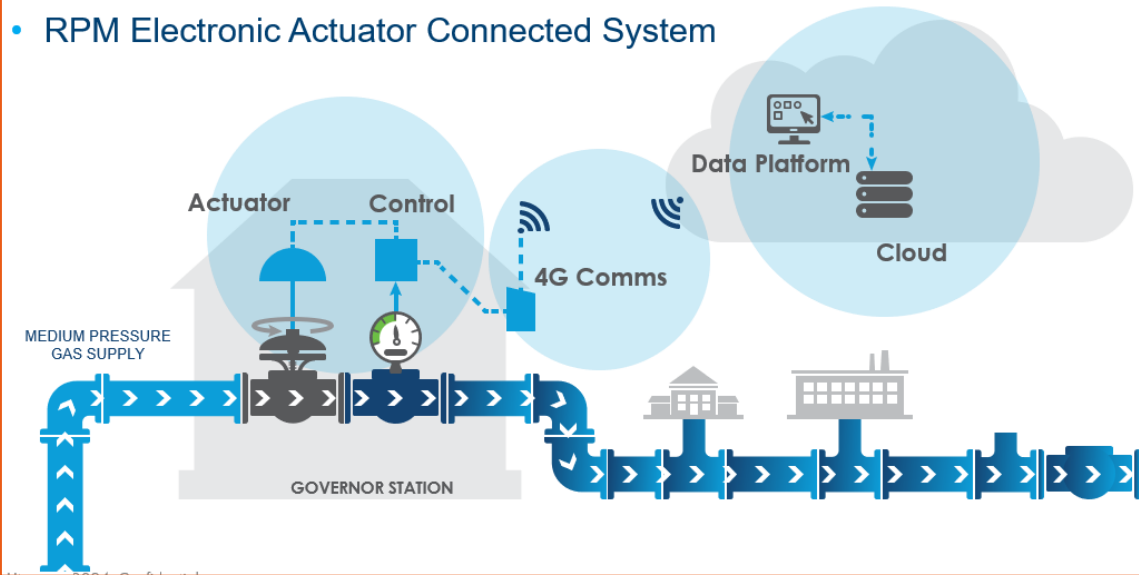
- ✓ Listening to extensive stakeholder feedback, we will be applying for funding for the 'Large Scale Survey' option. This means we'll aim to survey the equivalent of **100% of the network (approx. 72,000km)** over the five years of RIIO-GD3 to identify priority areas to remediate leaks
- ✓ **Circa £12.4m** – likely application through Ofgem's Use It Or Lose It (UIOLI) allowance

Remote Pressure Management



Intelligent Control

- RPM Electronic Actuator Connected System



Project Scope:

- Original Licence stipulated **702 systems** to be installed for **£2.6m** (18/19 prices)
- **Due to price increases** as technology developed under GD1 NIA project, following draft determinations the project was re-evaluated to **265 sites agreed with Ofgem** to be installed within the South of England region

Project Progress:

- We have installed **141 remote pressure management systems** to date, with **100 more planned** by April 2025
- The remaining **24 sites** are more complex, with field trials planned to enable all sites to be completed by **2026**

Project Finances:

- **£2.6m** in 18/19 prices
- We are forecasting a spend of **£2.1m**, with all necessary equipment ordered and completion on budget

Network Pressure Performance:

- Low-Pressure networks selected for installation have seen lower average pressures, equating to an **additional 1.2 GWh** of leakage reductions per annum so far
- Once fully complete, we estimate to achieve **3.4 GWh** of leakage reduction/annum across South LDZ

Remote Pressure Management

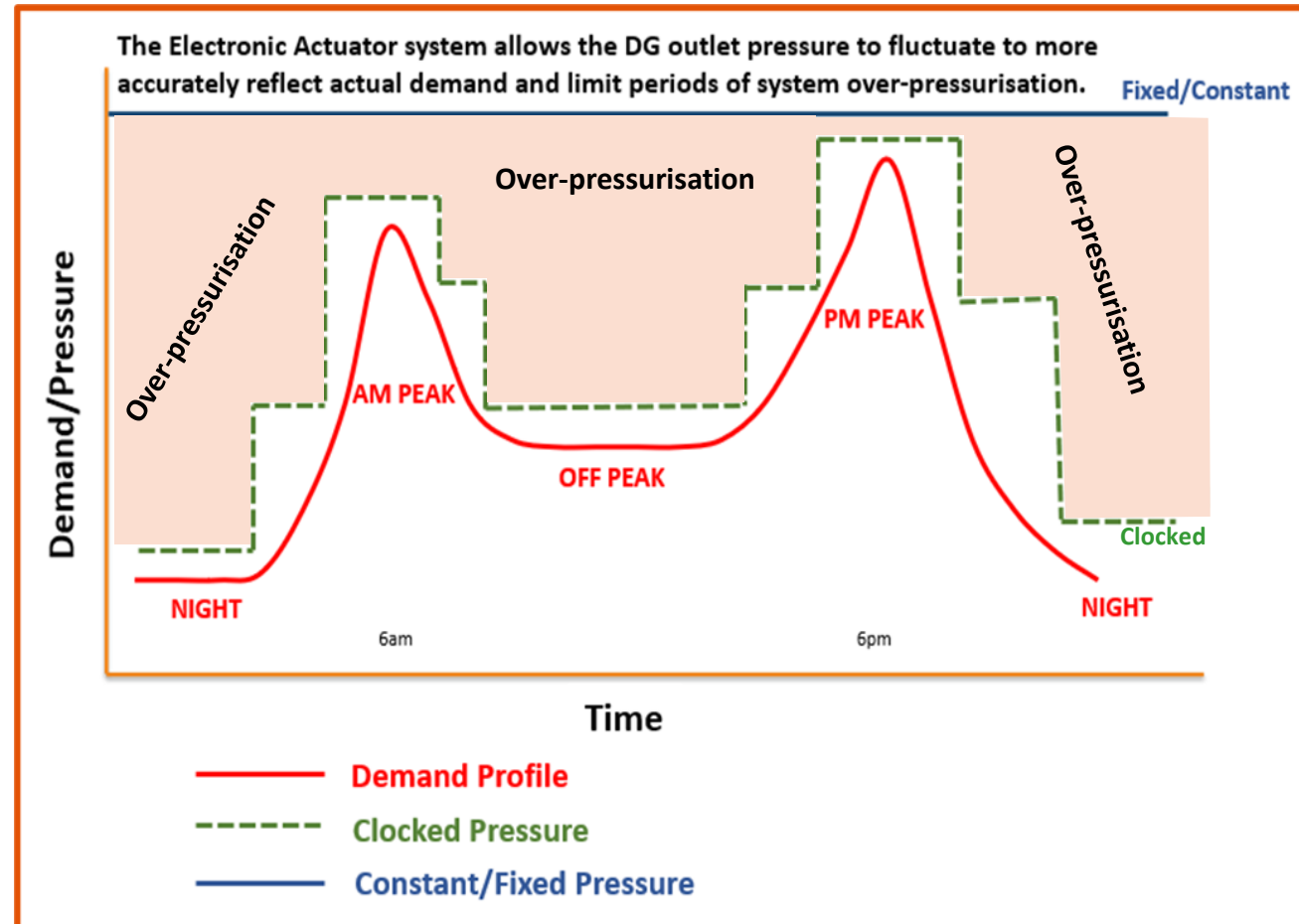
Experience To Date:

The Remote Pressure Management system was innovative technology and new to the market at the beginning of GD2

The project has thrown up several engineering challenges during rollout

We're working with the manufacturer to develop solutions for these challenges

Fixed Pressure vs Multi-Stage Clocked



Project Benefits:

Once completed the system can be remotely set to reflect actual daily gas demand more accurately

This will limit over-pressurisation of the system (shown in the graphic), reducing leakage from SGN's mains assets

The Remote Pressure Management system will provide the UK gas industry with a flexible, adaptable and reliable technology



Q&A

Summary

John Richardson

Head of Regulatory Business Plan Delivery

SGN



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60 Second Survey

We'd love to hear your thoughts
about today's webinar

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Event code SGN

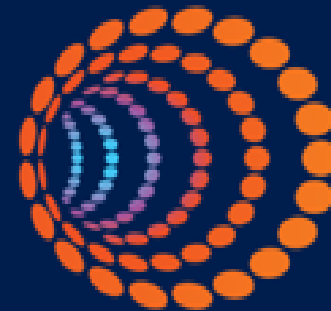


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Thank You



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