

SGN Engage

GD3 Stakeholder Workshops – Spring 2024



To ensure the workshop is interactive,
we will be using Slido

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or

Option 2. Go to **www.slido.com** and enter
the event code **SGN**



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SLIDO POLL RESULTS

Before we get started

Housekeeping



We are not expecting a fire alarm



Mobile phones on silent



There are dedicated Q&A sections before each discussion



Share your thoughts, we want to hear all your opinions and ideas

Aims for the day



To share our plans



To hear your thoughts



To gather your insights to help shape our business plan

Today's Agenda

Start	End	Topic	Presenter
09:30	09:45	Welcome	Rhuari Bennett 3KQ
09:45	10:15	Overview from SGN CEO	Mark Wild
10:15	10:30	Business plan planning overview	David Handley
10:30	10:45	What we've heard from customers and stakeholders	Ged Egan
10:45	11:00	Break	
11:00	12:10	Vulnerability	Kerry Potter
12:10	13:00	Lunch	
13:00	14:10	Environmental performance	Carolina Karlstrom
14:10	14:30	Break	
14:30	15:40	Future of energy	Tony Green
15:40	15:55	Listen and act	Kerry, Carolina & Tony
15:55	16:00	Next steps & close	Joss Clarke

The questions to keep in mind today

Do you think our plans are going in the right direction?

Do you think our plans are ambitious enough?



These icons on slides mean we'll discuss the topic and / or ask you a poll question on it **after** the session



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Shaping our plan together

Mark Wild

Chief Executive Officer

SGN

Submit questions
through Slido



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Our 2026 - 2031 Business Plan

David Handley

Director of Strategy & Regulation

SGN



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Preparing our business plan



5 year
planning cycle



Review and
plan



Draft Plan
Submission



Acceptability



Final Plan
submission



Draft to Final
Determination

Key themes within the consultation and development of the plan

Safety and resilience
are at the heart of our
plan and a top priority

This will be the case all the time that customers are on the network, and the network is energised

This is independent of the scenarios for decarbonisation set out in the Future Energy Scenarios



Safety and
Resilience



Repex



Decommissioning



Customer and
Vulnerability



Environmental
Action Plan



Future of Energy
and Innovation

What we've heard from customers and stakeholders

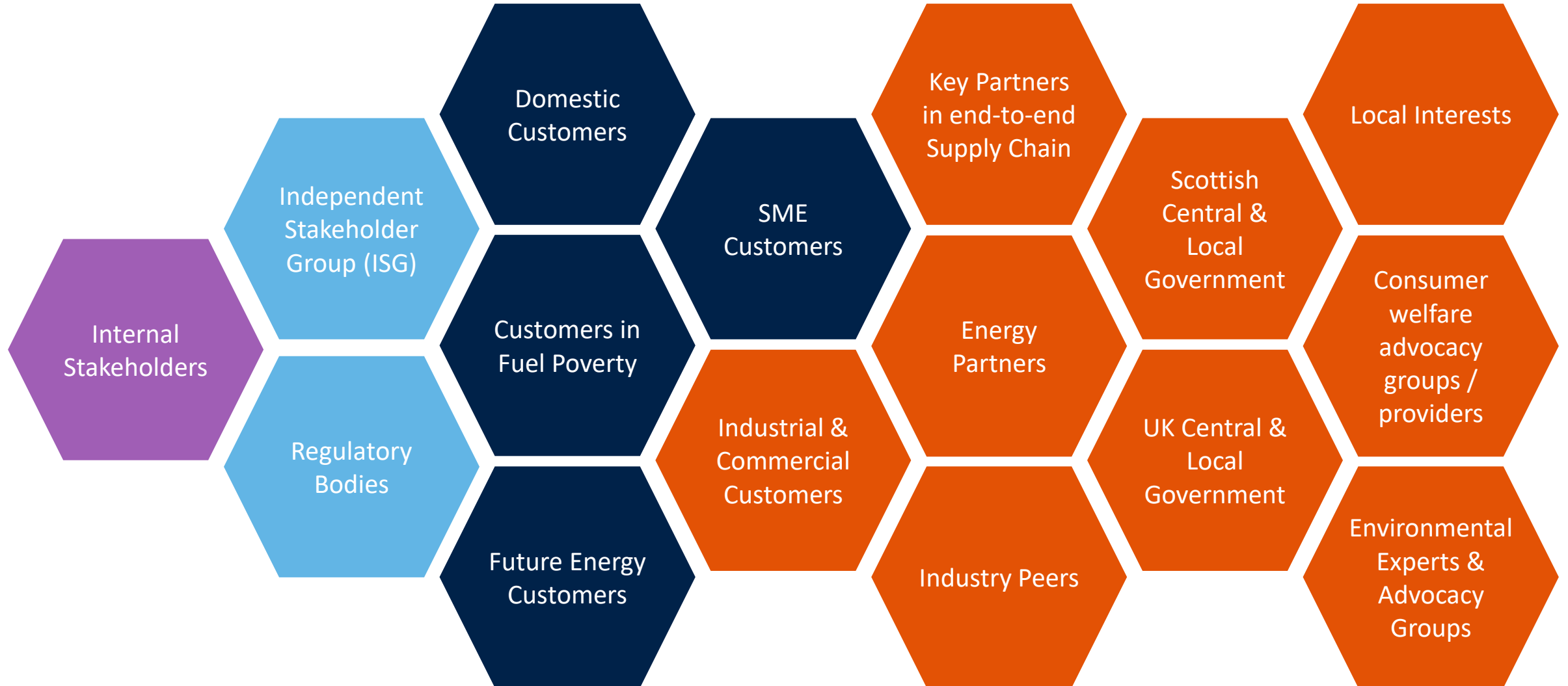
Ged Egan

Senior Stakeholder Strategy &
Research Manager
SGN



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Defining and mapping our stakeholders



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

- Acting safely
- Keeping the gas flowing
- Providing excellent service
- Supporting vulnerable circumstances
- Improving environmental performance
- Low-carbon energy solutions

What our customers and stakeholders said



Domestic customers



Future Energy customers



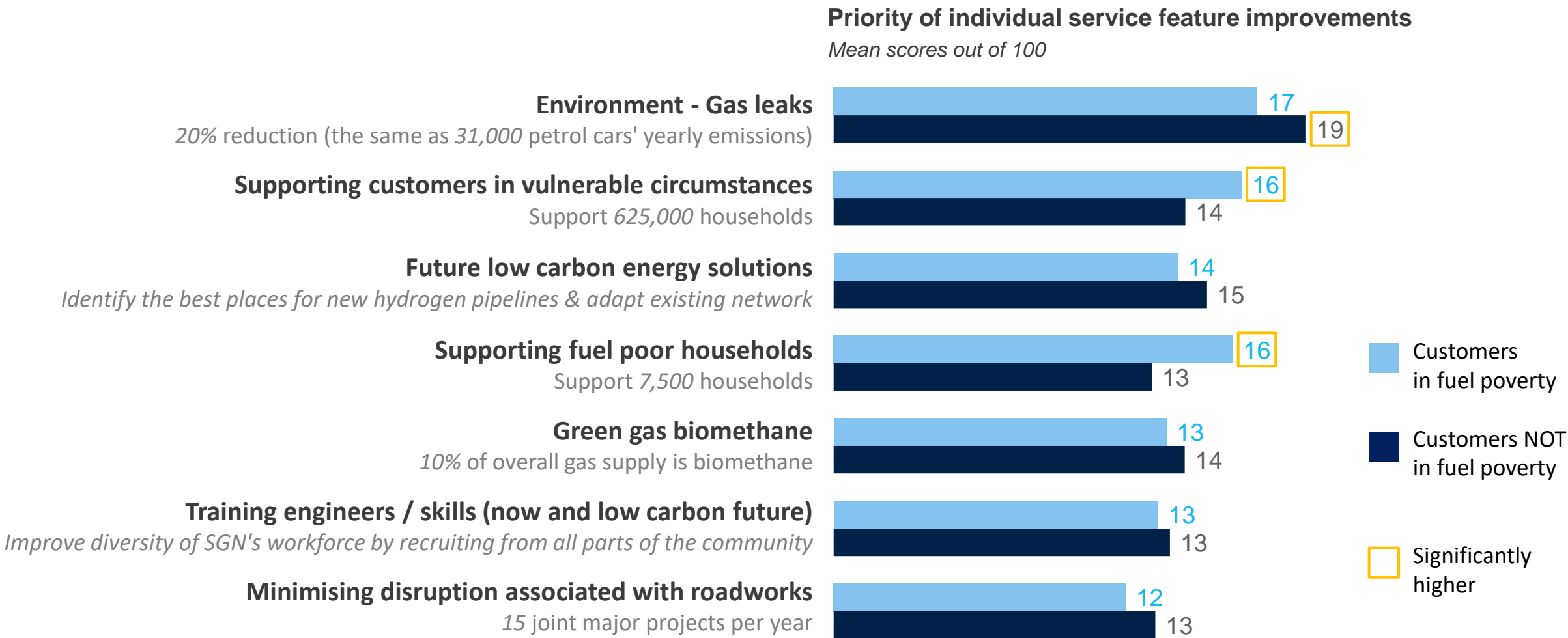
SME customers



'Shaping our plans together' Stakeholders

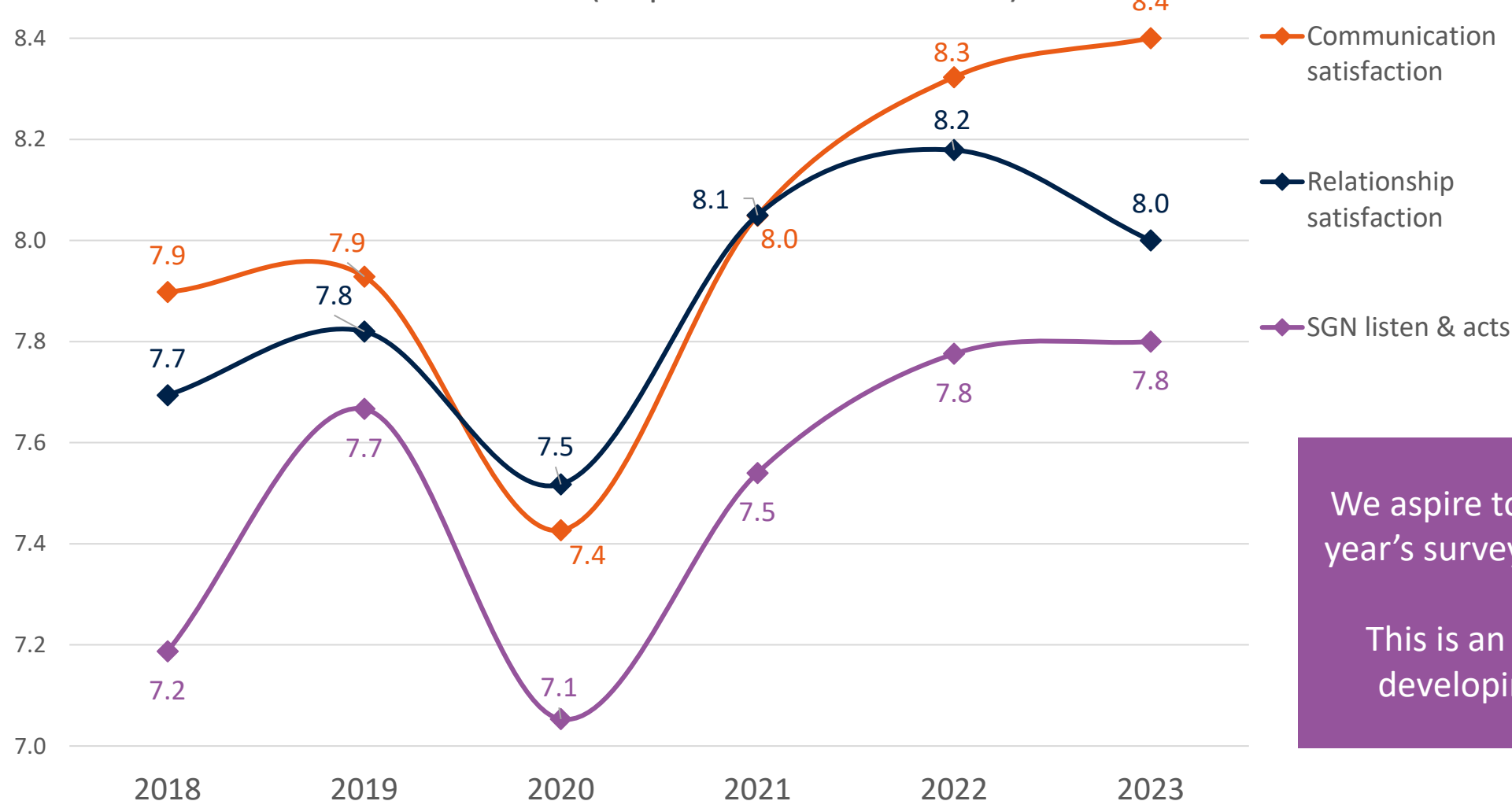
We tested 7 specific business plan elements

Customers in fuel poverty are more likely to prioritise supporting fuel poor and vulnerable households, whereas customers NOT in fuel poverty are more willing to pay for environmental improvements



Annual stakeholder satisfaction survey

Trended KPIs (10 point satisfaction scale)



Communication satisfaction has reached an all-time high of 8.4

Although relationship satisfaction decreased slightly this is not statistically significant

All-time high for 'SGN listens & acts' has been maintained

We aspire to achieve above 8 in this year's survey for 'SGN listens & acts.'

This is an important element of developing our business plan.

Supporting customers in vulnerable circumstances

Kerry Potter

Group Social Impact &
Vulnerability Manager

SGN



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Our objectives

Provide a great service for Priority Services Register (PSR) Customers
9/10

Helping 250k vulnerable households to use energy safely efficiently and affordably

Identifying and supporting fuel poor households with our Help to Heat scheme

Exceed stakeholders' expectations delivering our VCMA programme and showcase event

Deliver a portfolio of funded innovation projects designed to help vulnerable customers

Ensure that vulnerable households are not left behind in the clean gas transition

Adapting to great change



Covid pandemic



**Energy and cost of
living crises**



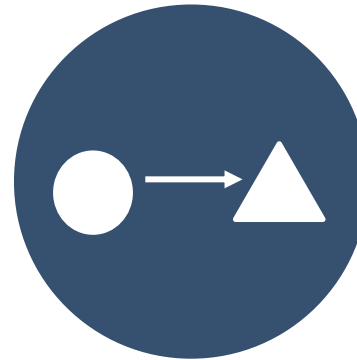
**Climate change
emergency**



**Built strong
partnership network**



**Worked together,
sharing insights**



Adapted to need



**Grew stakeholder's
trust and confidence**

Supporting Vulnerable Customers 2021 - 2026

SGN can utilise a Use it or Lose it allowance to deliver vulnerable customer initiatives

**Vulnerable
and Carbon
Monoxide
Allowance**

£16.3m

Original funding:

£59.0m

Revised funding
2023 - 2026

£40.9m

Southern
England

£18.1m

Scotland

9 / 10

Or above customer
satisfaction score in all
regions

250,000

Support vulnerable households to
use energy safely, efficiently and
affordably

18,000

Fuel Poor customers
connected to the gas
network

Core outputs for vulnerable customers



£34,766,022
Social Value



403,717
Households supported &
765,122 unique
services provided



59,880
Eligible households
registered on PSR



2,359
fuel poor gas
connections



46,622
Proactive care via
Safe & Warm teams



72,081
energy advice
sessions



68,572
crisis funds



139,521
income max checks



**PSR Customer
Satisfaction**
Scotland at 9.48
Southern at 9.23



1,609
Care & Repair
scheme



29,891
carbon monoxide
alarms



164,895
carbon monoxide
safety sessions

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carbon monoxide
safety sessions

We've recently held several engagement activities to hear what matters most to our stakeholders

Initiatives that stakeholders support



Helping vulnerable customers is a high priority due to increased number meeting criteria



More should be done to identify vulnerable customers earlier



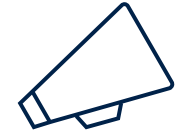
More should be done to help customers access the help they need



Partnering with charities



Helping those in severe need to access energy for safe and reliable heating



There's strong support to continue existing funding mechanisms and levels of award



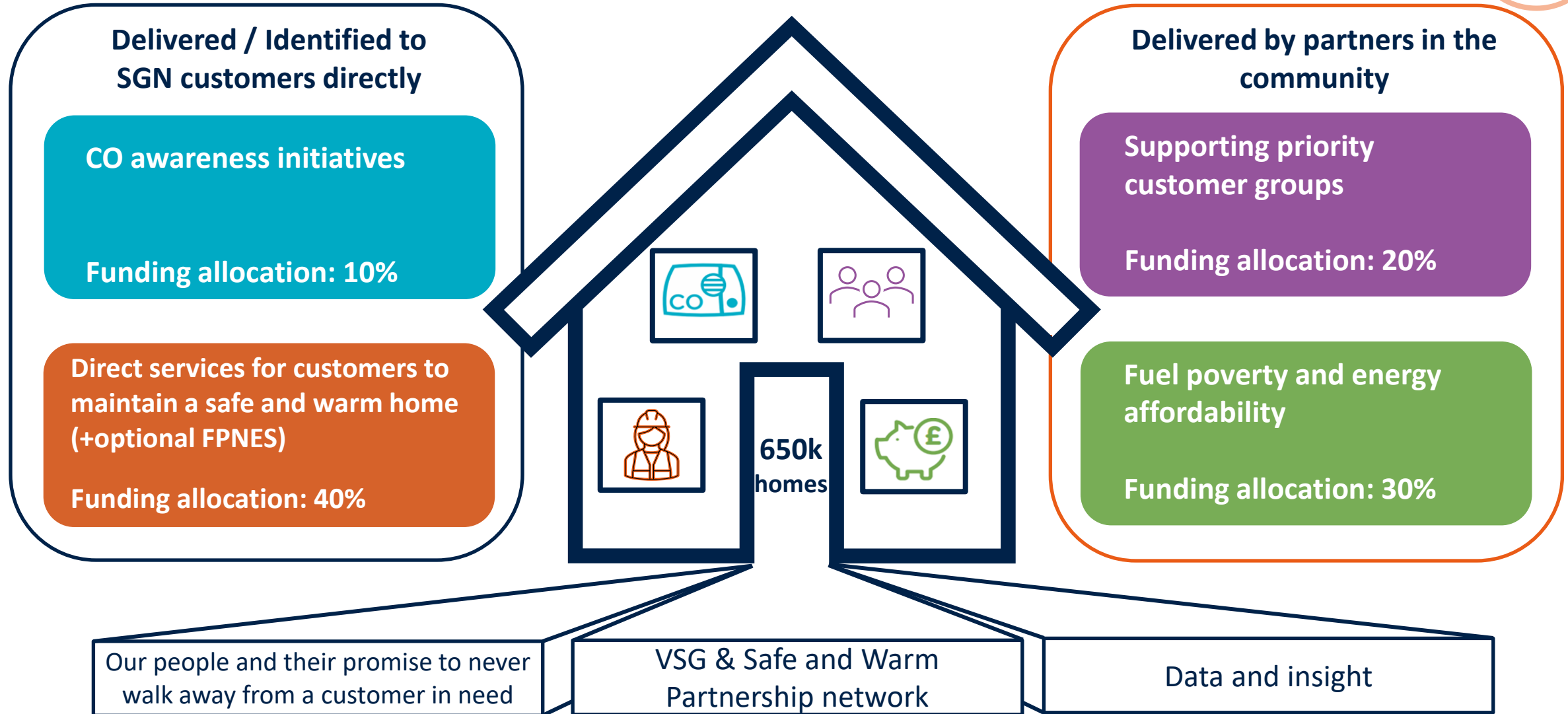
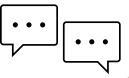
A broad response to fuel poverty is required, with energy companies being just one of many contributors



SGN's help doesn't have to be financial in nature

GD3 Ambition – a sustainable ‘whole house’ approach

DISCUSSION



Our objectives

Provide a great service for Priority Services Register (PSR) Customers
9.25/10

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

Support households in a holistic way, connecting them to sustainable and affordable energy efficiency solutions

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

Discussion points

Do you think SGN's **vulnerability plans** are going in the right direction? Why?

How ambitious do you think SGN's **vulnerability plans** are... about right, too ambitious or not ambitious enough?

Join Slido to submit
your responses

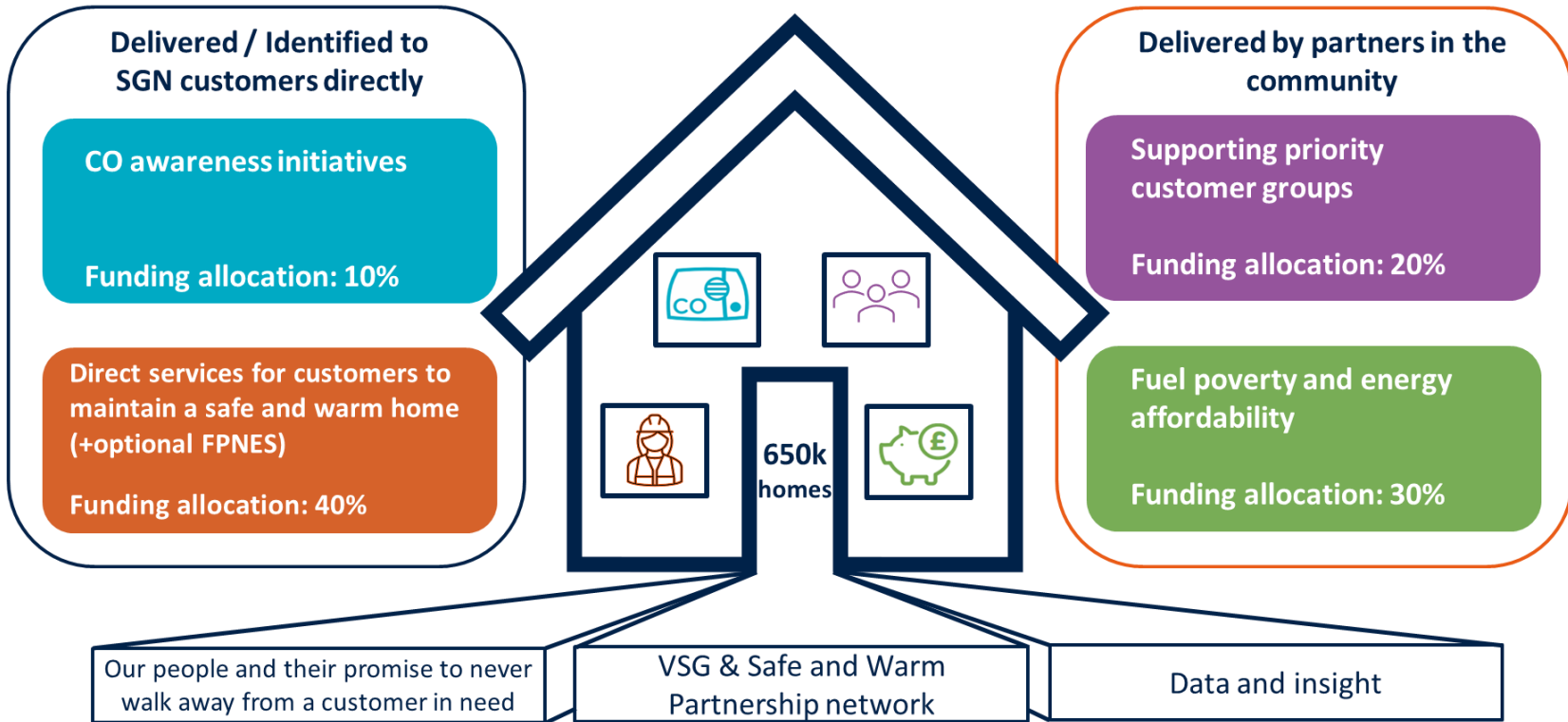


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Vulnerable customer ambition on a page GD3



Whole house approach

Growing on-site community support

Helping to maintain, repair and replace appliances

Provide a great service for Priority Services Register (PSR) Customers
9.25/10

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

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SLIDO POLL RESULTS

Improving our environmental performance

Carolina Karlstrom

Head of Sustainability

SGN



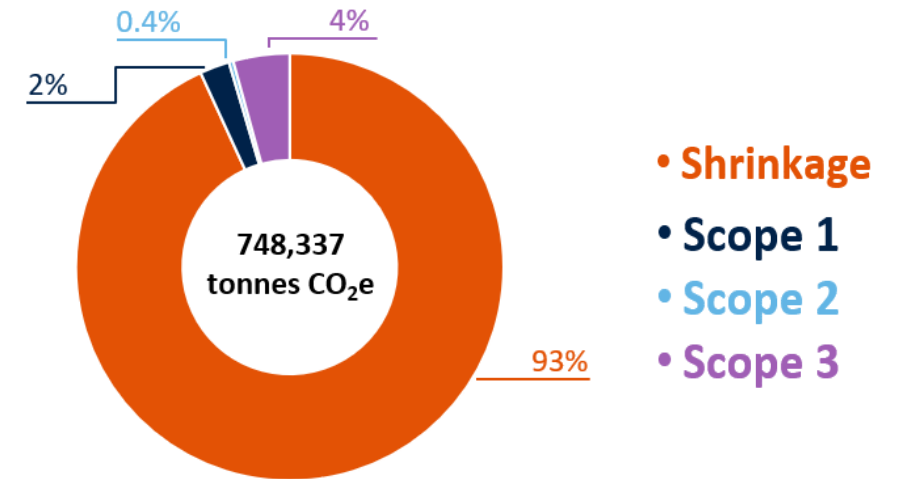
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Analysing our biggest environmental impacts

Biggest contributor to our business carbon footprint is shrinkage which comprises *Leakage, Own Use Gas* and *Theft of Gas*



Our strategy is a multi-pronged approach



Net zero business carbon emissions



Biodiversity net gain



Supplier partnerships



Support greener fuels like hydrogen

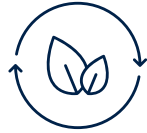


Circular economy transition



We've recently held several engagement activities to hear what matters most to our stakeholders

Initiatives that stakeholders support



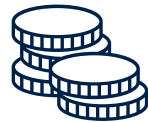
Improving environmental performance is a high priority



Updating the network to plastic pipes is necessary for to reduce leaks



Strong support to accelerate leak reduction given the environmental benefits to be gained



Support for investment in innovations that generate measurable impacts



Addressing the impact of climate change on assets is highly supported



SGN should lead and encourage partners to implement environment initiatives and innovations



A biodiversity improvement programme is good business practice but is low impact compared to leak reduction

=/+

At least maintain current efforts but could be more ambitious

The loss of gas from our network

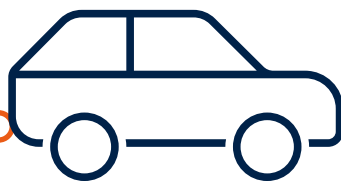
We call overall gas loss **SHRINKAGE**

95% of shrinkage is caused by leaks

5% The rest is made up from **gas theft** and **own-usage**

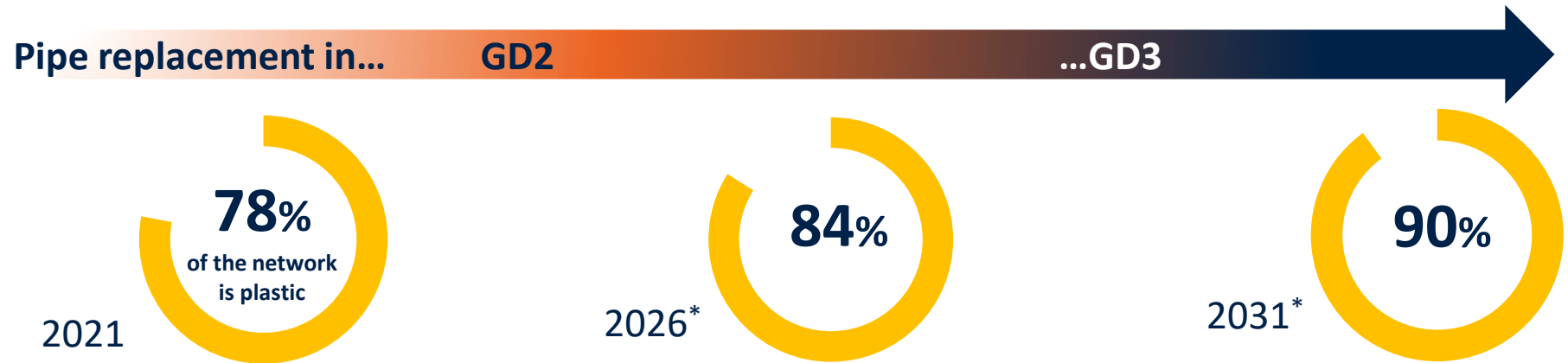
So reducing gas leaks has the biggest influence in curbing our impact on the environment

Since 2013, we've reduced leaks by 314 ktCO₂e, equivalent to 75,000 petrol cars' combined yearly emissions





Replacing old metallic pipes with modern, plastic ones has the biggest impact on leak reduction



We're upgrading 9,900Km of metallic pipework to **plastic**

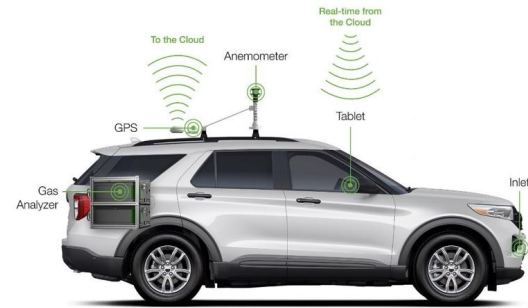


Approximately the distance from London to Cape Town

A new leakage reduction strategy

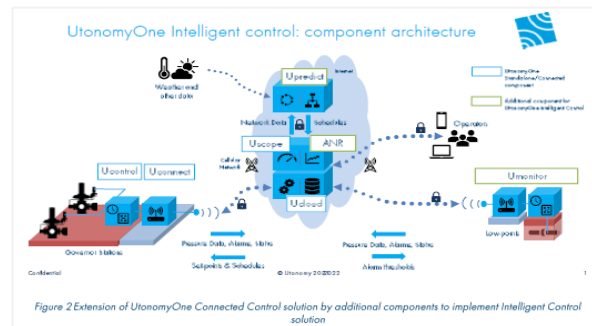
We're upgrading
9,900Km of metallic
pipework to **plastic**

With so much of the network converted to plastic, new ways to detect and reduce leaks are required:



Advanced Methane Detection

Digital Platform for Leakage Analytics (DPLA)



Intelligent Gas Grid (IGG)

2021

78%
of the network
is plastic

2026*

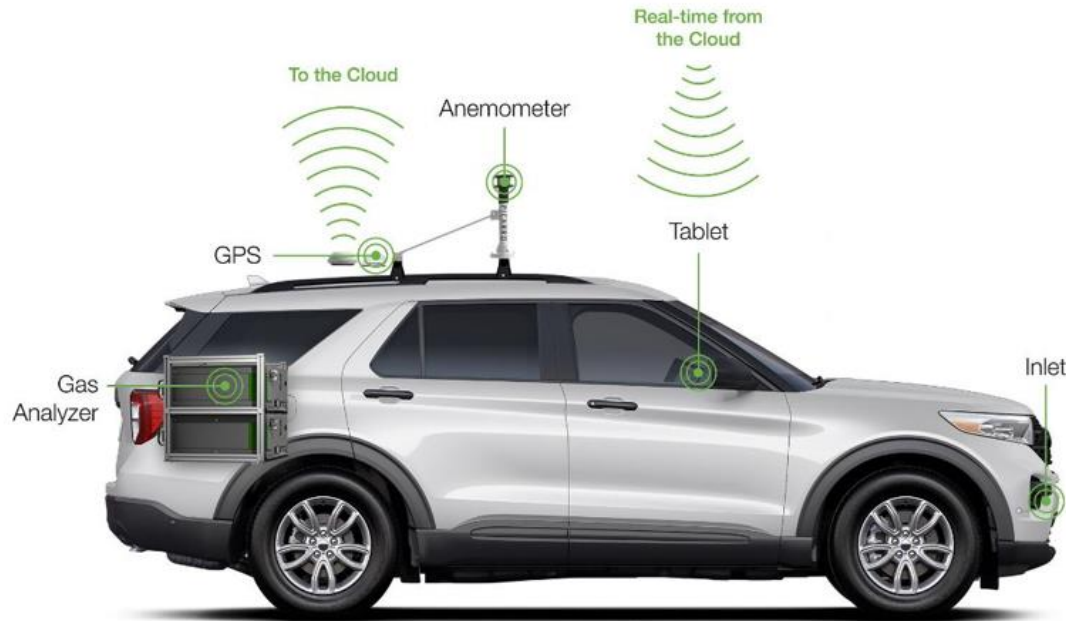
84%

2031*

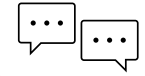
90%

*Target percentage of the total
network converted by these years

Vehicle-based methane detection that supports:



- **Leakage Reduction Strategy Development**
- **Pipe Replacement Optimisation**
- **Reduction in Public Reported Escapes**
(Less fatigue / improved resource planning)
- **Risk Reduction and Monitoring**



Advanced Methane Detection Small Scale Survey

10% of pipes over 5 years, £800k, minimal additional resource



Medium Scale Survey

20% of pipes over 5 years, £1.4m, additional resource



Large Scale Survey

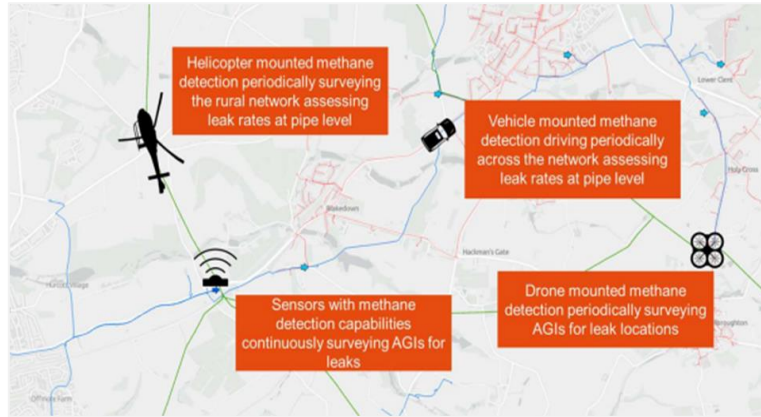
100% of pipes over 5 years, £7.8m, large resource requirement



Further innovation projects to be completed in 2026



Digital Platform for Leakage Analytics (DPLA)



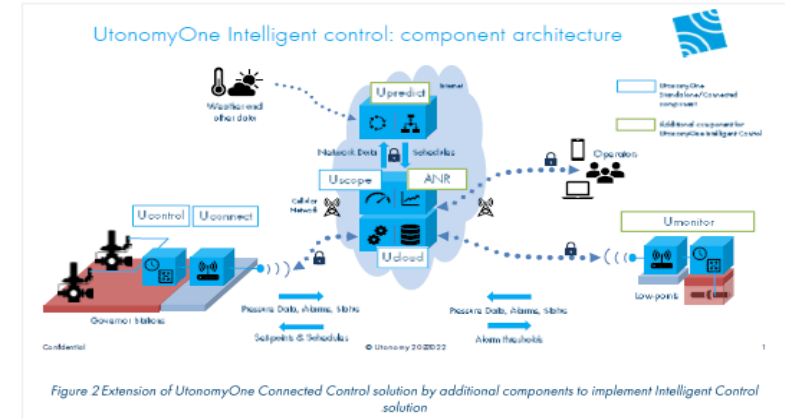
- DPLA will use sensors on vehicles, helicopters and drones coupled with machine learning and AI to enable real-life monitoring of assets to reduce leaks.

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)



Decarbonising our business - Fleet



25 Electric Vehicles (EVs) purchased...

...with plan to add another **100** by end of GD2

Challenges with infrastructure installation and availability of suitable vehicles to meet our specific operational model and safety requirements

Ambition for GD3:

55%

Plan to have 480+ EV's by end GD3

Equates to 55% of total available fleet suitable to transition

20%

Utilise transition fuel for remainder of fleet

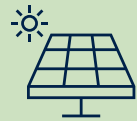
Accounts for 20% of total fuel consumed

Increased operational cost:

Cost of fuel and infrastructure to support plus operational downtime

Decarbonising our business - Property

For 2026 – 2031, we aim to continue and improve upon the environmental impacts of our property portfolio by...



Increasing solar power generation



Installing battery storage at main locations



Upgrading the insulation at key sites



Installing Smart Tech and SMART building technology

46%*
Reduction

in total Scope 2 emissions
by 2031, compared to
baseline 2019

Where we fall short, we'll consider engaging in reputable partnerships to tackle our residual emissions

Adapting to climate change



1. Developing climate resilience strategy for our network assets



2. Developing climate adaptation plan for our offices and depots:

- including nature-based solutions
- focusing on the highest risk locations first



Green roofs



Rain gardens

Decarbonising our business – Improving nature

19 Projects undertaken aimed at increasing biodiversity



180 trees and 500m of native hedging planted

 Wildflower seeds spread over almost 10,000m² 



Over 130 bird, dormouse and bat boxes, and 18 reptile shelters installed

Presents an opportunity to engage with others to increase our overall impact



Discussion points

Do you think SGN's **environment plans** are going in the right direction? Why?

How ambitious do you think SGN's **environment plans** are... about right, too ambitious or not ambitious enough?

Join Slido to submit
your responses



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Environmental Performance Business Plan Summary

Do you think SGN's **environment plans** are going in the right direction? Why?

How ambitious do you think SGN's **environment plans** are... about right, too ambitious or not ambitious enough?

Advanced Methane Detection

Small Scale

10% of pipes over 5 years, £800k, minimal additional resource

Medium Scale

20% of pipes over 5 years, £1.4m, additional resource

Large Scale

100% of pipes over 5 years, £7.8m, large resource requirement

Digital Platform for Leakage Analysis (DPLA)

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

Decarbonising our fleet

Replacing as many vehicles as possible within our fleet with electric options and where this is not viable, using a transition fuel to minimise carbon emissions.

Climate change resilience of our properties

Creating a climate adaption plan for our offices and depots that includes nature-based solutions and focuses on the highest risk locations first



SLIDO POLL RESULTS

The Future of Energy

Antony Green

Director, Future of Energy

SGN

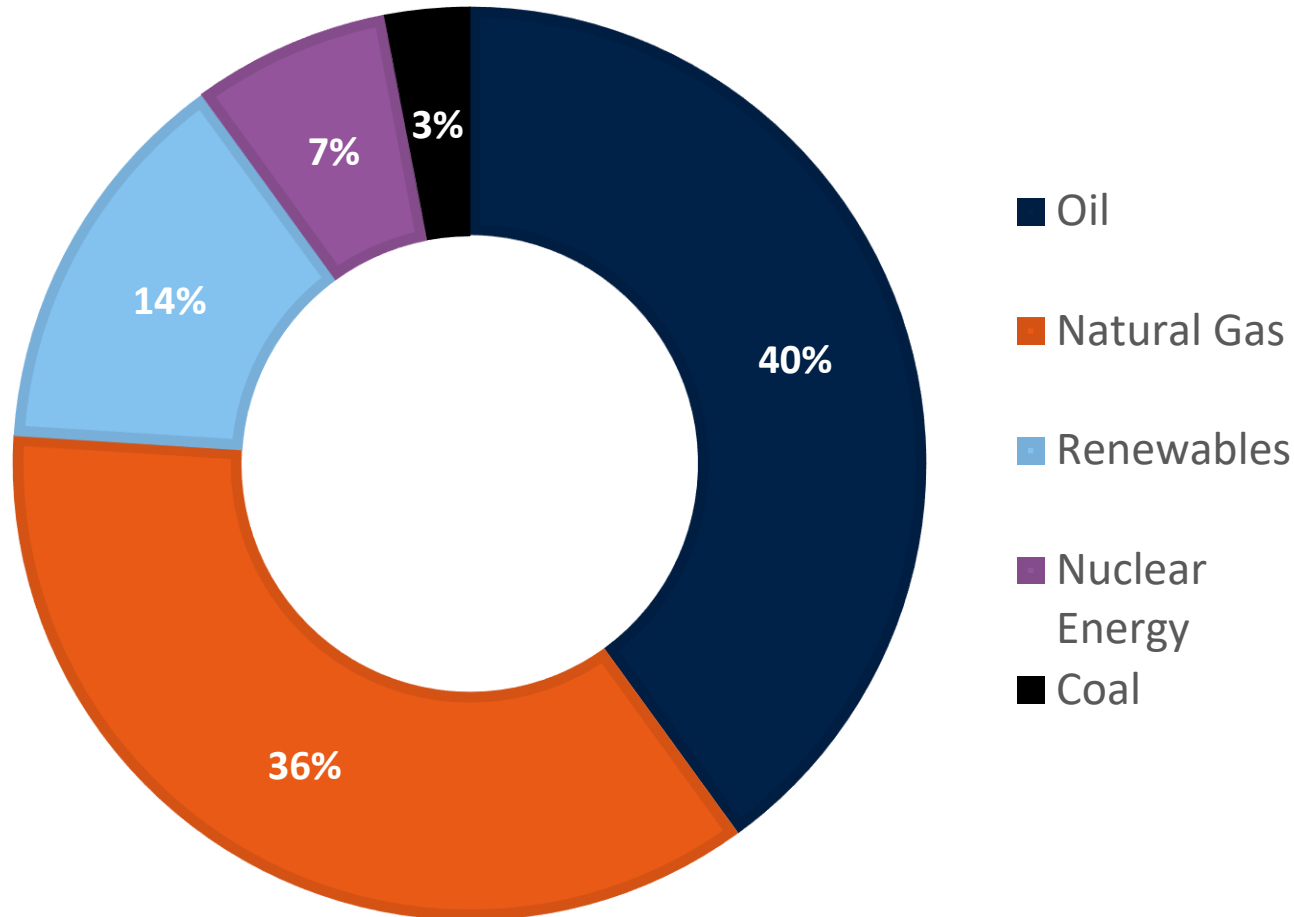


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The UK and natural gas today

UK energy source mix



36% of the UK's yearly primary energy demand from natural gas

c. **68%** of UK household energy demand provided by natural gas

86% of UK residential properties rely on natural gas for heat.

We've recently held several engagement activities to hear what matters most to our stakeholders

Initiatives that stakeholders support



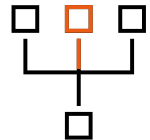
Low-carbon energy solutions are a top priority for more investment and critical to SGN's future



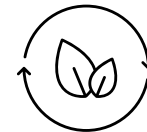
Investing in future low-carbon energy solutions is needed given uncertainty over the long-term use of natural gas



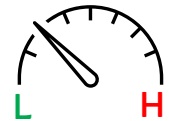
Updating the network to plastic pipes is necessary for future-proofing the network



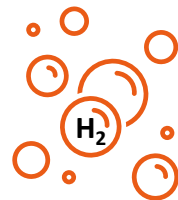
Biomethane has an important role in decarbonising energy



Enthusiasm for biomethane's renewable and low-carbon nature



Biomethane technology is favourable and proven and investment risk is low



Hydrogen is supported but there's currently too much uncertainty and potential investment risk



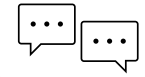
More could be done to communicate the potential benefits of hydrogen (H₂)



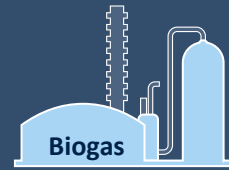
Addressing current lack of understanding may increase public's acceptance of trials

A whole system approach

DISCUSSION



POLL



Biomethane

Potential
for 6m
plus homes



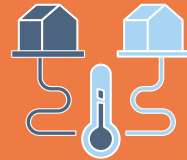
Hydrogen

10GW of
production by
2030



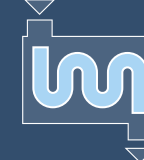
Heat pumps

600k per
annum
target by 2028



Heat networks

20% heat
demand by
2050



Hydrogen blending

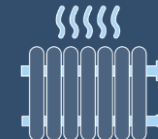
20% blend
(9TWh for SGN)

Hybrid
heat pumps



Opportunities
to explore

Waste
heat



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

1. Local Area Planning
2. Whole Energy System
3. National Energy System Operator



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SCOTLAND

- **2045 Net Zero** commitment
- **Political** will and alignment
- **High levels of curtailment** in offshore and onshore wind
- **Biomethane** potential

- **Establishing storage** near to renewables
- **Export policy** and linkages to Europe

SOUTHERN

- **2050 Net Zero** commitment
- **Fragmented local decarbonisation** policies
- **Solent Cluster** emerging and becoming increasingly established
- **Some geological storage** in Wessex basin

- **Limited renewable generation** at scale in-region for green H₂
- **Difficult to develop** under government funding initiatives

Key drivers and considerations

Challenges

Greening our networks - Biomethane

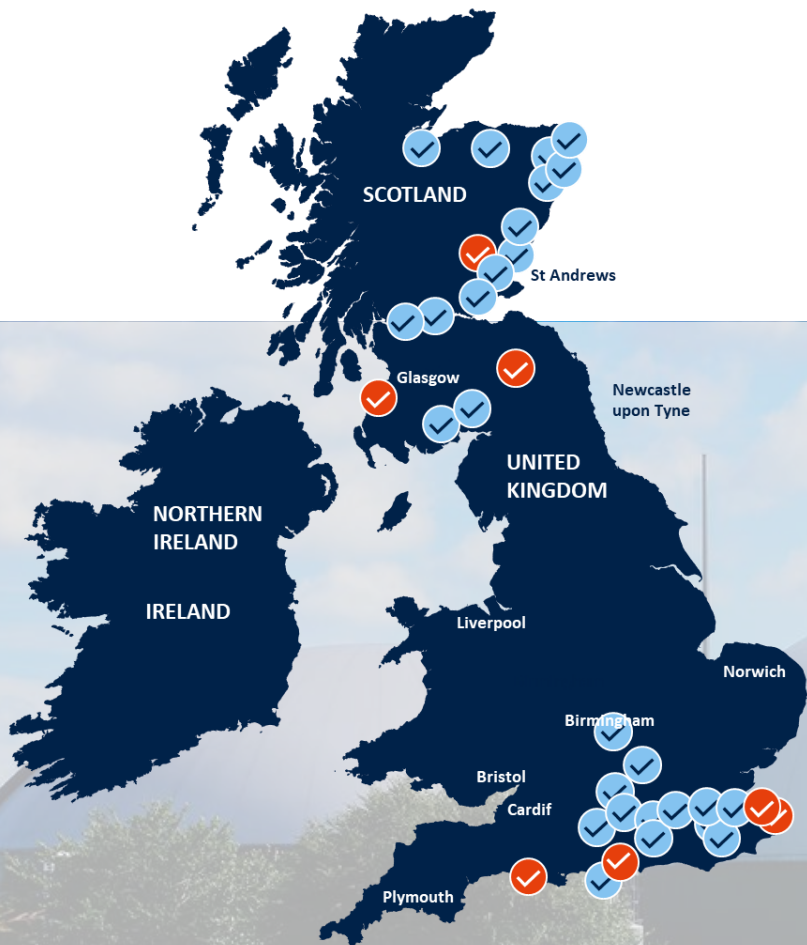
DISCUSSION

POLL

Developing the infrastructure to deliver biomethane

Equivalent homes heated with biomethane

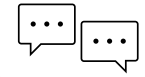
Scottish Independent Undertakings (SIUs):
Low carbon biomethane solution



450,000 by 2026

1 million by 2031





01

Mix hydrogen with natural gas, reducing carbon emissions

02

Produce green hydrogen from renewable electricity, reducing impacts of curtailment

03

Work with other networks, national transmission organisations and governing bodies to shape policies and practices



H100 - A world-first green hydrogen-to-homes heating network



Fife



We're developing a world-first hydrogen network to provide zero-carbon fuel for heating and cooking



Safe



Reliable



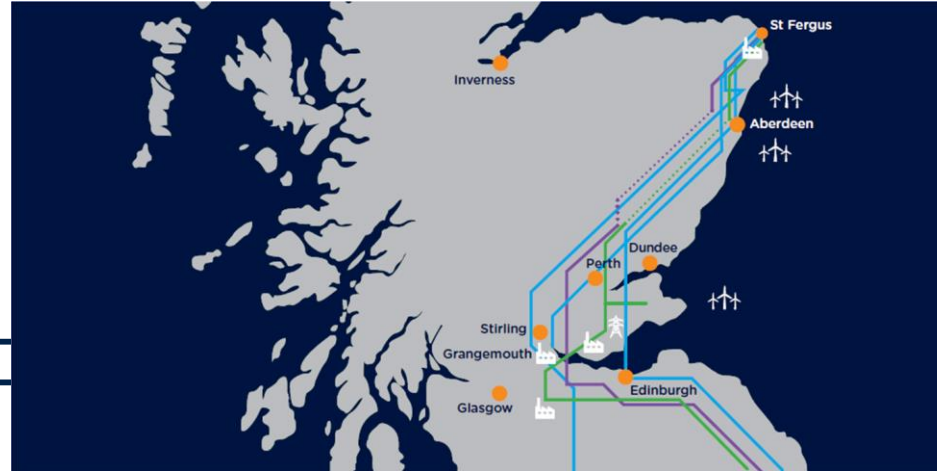
Clean



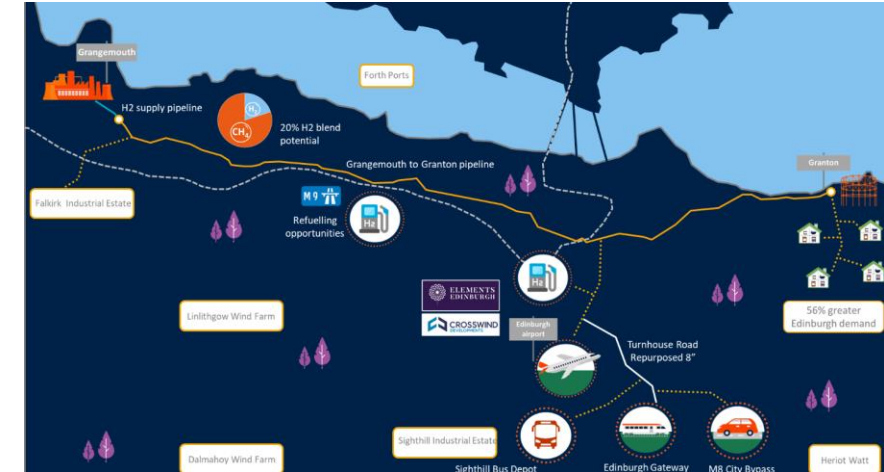
Hydrogen transmission infrastructure

Scotland

H2 Caledonia



LTS Futures



Southern
England

H2 Connect

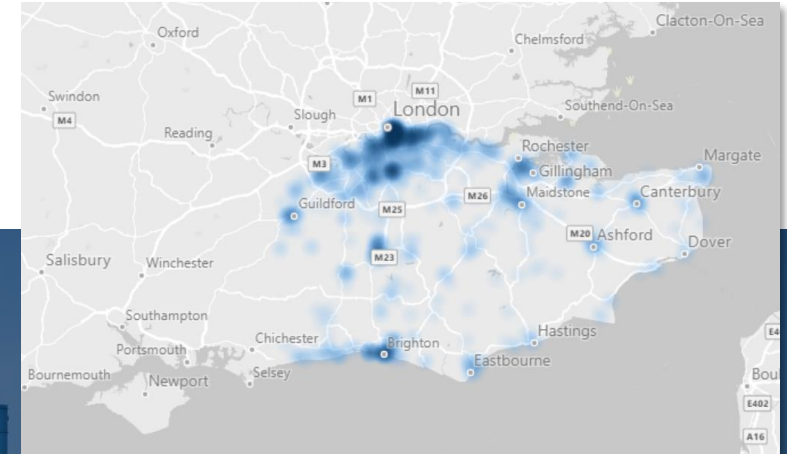
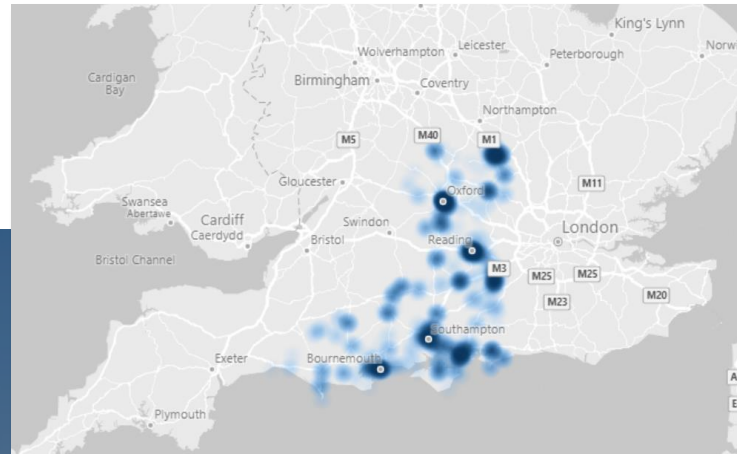
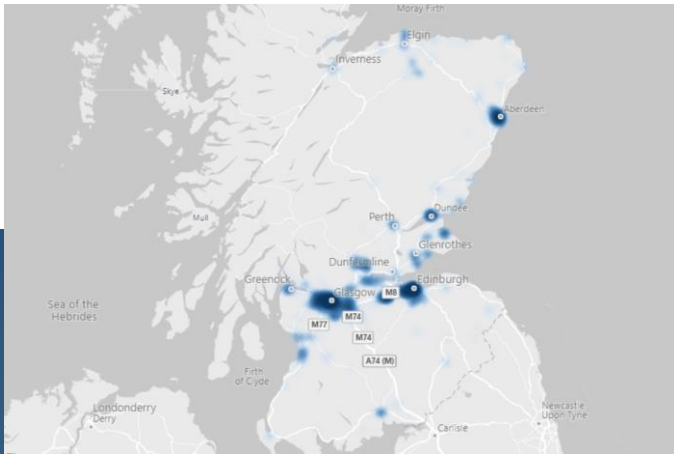


Three projects developing our understanding to support decarbonisation

Decarbonisation of Industrial and Commercial network users

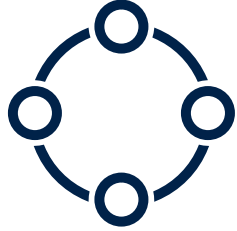


Industrial and commercial users account for **40%** of demand



3 clusters, presenting an opportunity to decarbonise industry and commercial enterprises by replacing natural gas with hydrogen

Our Business Plan themes



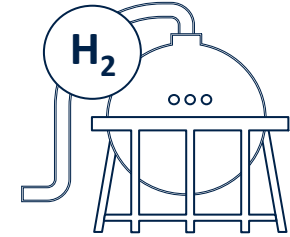
Whole system

Further develop the application of whole system solutions to support regional decarbonisation initiatives.



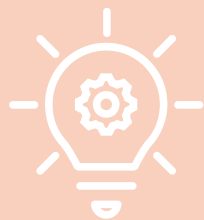
Greening the network

Maximise the potential for biogas and hydrogen blending into the gas grid to reduce carbon emissions today and support hydrogen production.



Hydrogen (unblended)

Continue to develop and progress hydrogen for heat, providing evidence for policy decisions. Support I&C decarbonisation.



Innovation

Deliver innovation that supports improvements in business safety, sustainability, and efficiency ensuring SGN provides an affordable service to consumers.

Discussion points

Do you think SGN's **future of energy plans** are going in the right direction? Why?

How ambitious do you think SGN's **future of energy plans** are... about right, too ambitious or not ambitious enough?

Join Slido to submit
your responses



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Event code **SGN**

Please note: after clarification questions Zoom participants will be automatically moved into breakout rooms

Future of Energy Business Plan Summary

Do you think SGN's future of energy plans are going in the right direction? Why?

How ambitious do you think SGN's future of energy plans are... about right, too ambitious or not ambitious enough?



Regional approach

Recognise the different political, infrastructure and demand drivers of each SGN region, to create best fit approaches to decarbonisation



Whole system approach

Further develop the application of whole system solutions to support regional decarbonisation initiatives.



Hydrogen Blending

Maximise the potential for hydrogen blending into the gas grid to reduce carbon emissions today and support hydrogen production.



Biomethane

Develop the infrastructure and supply network to increase the equivalent number of homes heated by biomethane to 1 million



Hydrogen (unblended)

Continue to develop and progress hydrogen for heat, providing evidence for policy decisions. Support Industrial & Commercial user decarbonisation.



SLIDO POLL RESULTS

Listen & Act



SGN
Your gas. Our network.

Next Steps

Joss Clarke

Head of Stakeholder Engagement
& External Affairs

SGN



SGN

Your gas. Our network.

Next Steps

STAGE 1

Listening

To understand customer and stakeholder priorities to shape decision-making

STAGE 2

Test & Iterate

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

STAGE 3

Consult

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

STAGE 4

Refine

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

60 Second Survey

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



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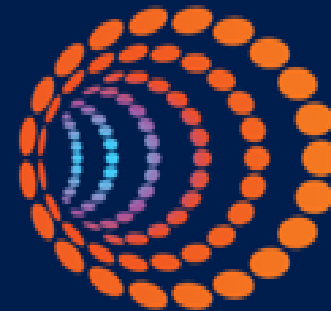


SGN

Your gas. Our network.

SGN Engage

Thank You



SGN

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