

National Grid Gas Transmission: Our role in an uncertain energy future

nationalgrid



Who we are...



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RIIO 2 Stakeholder
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Logistics



Should last for approximately an hour



Polling via Webex



Your questions are welcomed throughout via chat function



All callers will be placed on mute

Quick Poll – Getting to know you

1. Please tell us your name

2. Which of the following best describes you / your organisation?

3. On a scale of A to E, where A is know nothing and E is know a great deal, how much would you say you know about National Grid Gas Transmission's operational activities?

- A. Know nothing
- B.
- C.
- D.
- E. Know a great deal

Quick Poll – Impact and Interest

On a scale of A to E, where A is not impacted at all and E is impacted a great deal, how impacted are you or those you represent) by net zero?

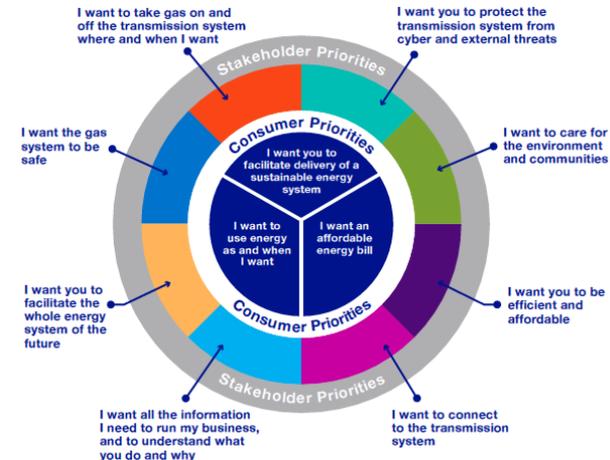
- A. Not impacted at all
- B.
- C.
- D.
- E. Impacted a great deal

On a scale of A to E, where A is not interested at all and E is interested a great deal, how interested are you (or those you represent) by net zero?

- A. Not interested at all
- B.
- C.
- D.
- E. Interested a great deal

How will our plan support the government's commitment to Net Zero by 2050?

- Draft RII02 business plan published in July
- Commitment to explore the potential implications of the government's commitment to Net Zero by 2050
- We have been working further on the commitments we make, and would like to gain your feedback on these today
- We will cover:
 - The context of the changing energy landscape
 - Our role in facilitating the whole energy system of the future, including how we will support the government's Net Zero commitment
 - Balancing costs between current and future consumers



Changing energy landscape - Long term role of gas in the transition to a net zero future

The energy system faces uncertainty - *supply and demand is changing.*

The role of gas will change in three areas:

- **Decarbonisation:**

Gas will play a role in **enabling** decarbonisation of power generation, heat, transport and industry

- **Decentralisation:**

Power generation is becoming more embedded at distribution levels. Supplier of cleaner gases are looking at **connecting to the transmission network**. This means that a **more holistic and coordinated approach** to energy planning and operation will be needed.

- **Digitisation:**

There will continue to be **advances in technology**. If we are to respond to this change effectively we must invest and improve our IT systems during RIIO-2.

Changing energy landscape - Drivers

How gas is sourced, transported and used in GB

- Imported gas accounts for around half GB's needs
- Gas power generation will increasingly be needed to support renewable generation
- This leads to uncertainty on the volume and type of gas, where, when and how gas will be enter and exit the network
- Understanding the ability of the network to meet future needs is essential to our business plan
- We need to ensure the network is sized correctly to meet these needs.

Legislative changes relevant to energy networks

- To enable a net zero future, several pieces of legislation have been introduced:
 - Air quality emissions legislation
 - Cyber and physical security legislation
- Additionally heat policy will be decided during RIIO-2
- We need to drive down the cost to consumers, without limiting our options for the future.

Net Zero - our role in the whole energy system

- The climate change committee laid out an **ambitious goal** of net zero by 2050.
- Change is required to decarbonise heat & transport in a way that is **affordable** and **minimises disruption and risk** for consumers
- **Collaboration** of networks, regulator and the energy sector is critical
- It is essential that the net zero mandate is deployed in a manner that minimises the cost, disruption and uncertainty for consumers

National Grid are committed to enable the ambition of net zero, and our proposals for RII0-2 look to support this.

Broader perspective on the need for whole-system solutions towards achieving net-zero

- Extensive collaboration across the whole-system including electricity, transport, heat & industry to deploy the right solution for consumers
- We have a key role to play on this for **hydrogen**
- We believe we also have a **collaboration role across heat, transport & electricity**
- We expect to pursue these areas with the same rigour & intent as for hydrogen. However, we anticipate the scale of funding required to enable this could potentially be greater and be required sooner

Broader perspective on the need for whole-system solutions towards achieving net-zero

- We see our role as key to delivering this, but this will only be possible by collaborating with industry, Government & others to help define these roadmaps.

Do you agree with this role?

- To enable this, we may need to unlock the required funding throughout the whole-system to develop the right solutions for our consumers.

Do you agree with this need?

We welcome your thoughts on this, particularly our assessment of our role, and the requirements to deliver & unlock this

Quick poll

Do you agree with our Net Zero broader perspective?

Yes

Somewhat

No

Please give a reason for your answer

Net Zero - our role in the whole energy system

Stakeholders have said that they want us to take a leading role in driving and enabling the energy transition.

Lead	Collaborate/Facilitate
Developing the options for Gas Transmission in relation to the decarbonisation of heat. Looking specifically at options around Hydrogen	Developing the whole energy system options required to achieve Net Zero together with all sectors and vectors
The formation of GMaP framework , including a steering group to prioritise a programme of works.	We will collaborate with GDN's, BEIS and others on an agreed Hydrogen workplan .
	Work with industry to better understand the detail and impacts of the prioritised work programme and develop plans for potential implementation .
	Innovation to explore the solutions in whole energy assets and markets to deliver consumer benefits.

Net Zero - our role in the whole energy system

We have worked with the GDN's and come up with a proposed workplan for Hydrogen. The main aim of the workplan is to provide evidence that the gas network is able to support the widespread conversion to hydrogen and is a viable pathway to decarbonisation of heat.

National Grid Gas will lead projects in three main areas:

- **Developing the future System Operator**
- **Developing market services for System Operator**
- **Using our transmission pipes**

Whole energy system – we are keen to hear your thoughts on...

Q1

What do you think National Grid's role should be in delivering net zero targets?

Q2

How can we ensure "fairness" in the transition to decarbonised heat?

Quick poll

Do you agree with our view of what we are leading, collaborating/facilitating on?

Yes

Somewhat

No

Please give a reason for your answer

Do our proposals meet your needs?

Yes

Somewhat

No

Please explain your answer

How can we ensure fairness during decarbonisation – consumer research

- Undertaken deliberative consumer engagement
- Two focus groups including 62 participants covering all social economic groups/demographics in Scotland and England
- Participants were introduced to National Grid Gas via a briefing and contextual discussion before posing any questions

How can we ensure fairness during decarbonisation

- Over the next 30 years, the number of households that use gas is probably going to go down. This is due to a shift in decarbonisation where more households and businesses will move to alternatives for heating and cooking
- In the future (say 20 years from now), those with lower household incomes or in fuel poverty may still be those who rely on gas to heat their homes rather than replacing their boilers with alternative technologies

How can we ensure fairness during decarbonisation

- Today, the cost and upkeep of National Grid's gas equipment is spread evenly over 45 years but as it is replaced it will be designed to last for about 25 years.
- As there may be fewer gas customers in the future (say in 20 years' time), the costs may be spread over fewer customers who would be charged more than if consumer numbers stayed the same.

Because of this, we are considering how bills are calculated in the future

This is where we need your help and input...

Quick Poll: How can we ensure fairness during decarbonisation

Against the uncertain energy transition, which option would you choose?

Option	Who pays	Scenario	Bills today	Bills in future
A	Costs spread to future consumers	Maybe fewer consumers	↓	↑
B	Costs paid by current consumers	Maybe more consumers	↑	↓

How can we ensure fairness during decarbonisation :

Consumer results

Against the uncertain energy transition, which option would you choose?

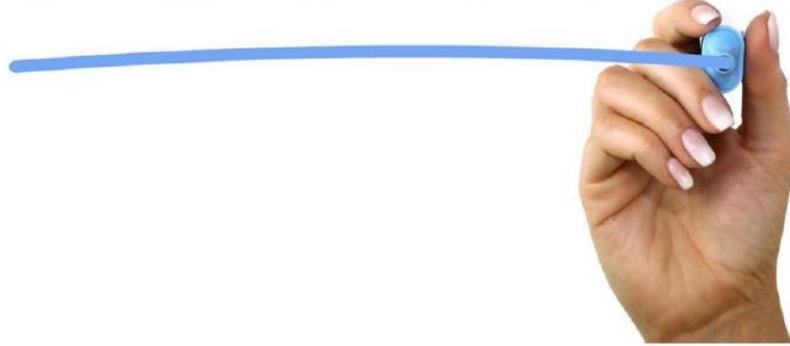
Option	Who pays	Consumer
A	Costs spread to future consumers	10%
B	Costs paid by current consumers	90%

Thank you for your time today.



- We will reflect your feedback today, and feedback from our other engagement activities, in the October draft version of our plan
- We will continue to address challenges from our independent stakeholder user group and the RIIO-2 Challenge Group
- We will continue to share the development of our plan with you as we progress towards a final version in December

QUESTIONS



Get in touch with:

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