

How can Gas Transmission help enable and support your business?

National Grid Gas
Transmission
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Who are we?



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Logistics

Webinar should last for approximately an hour All delegates will be placed on mute Your questions are welcomed via the chat function Please answer poll questions when prompted

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- Introduction
 - Who we are and what we do for you
 - What is RIIO?

- Your Priorities
 - I want an affordable energy bill
 - I want to use energy as and when I want
 - I want you to minimise disruption to my life

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- Summary and next steps
- Questions

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

Gas Transmission

Who are National Grid

And what do we do?



National Grid Gas Transmission – the network

Our role

To connect millions of people to the energy they use safely, reliably and efficiently

We own & operate

7,660km of high pressure pipelines, 24 compressor stations and over 600 above ground installations

We transport

Over 3 times the energy provided by electricity each year

810TWh

2017: Total gas demand

297TWh

2017: Total electricity demand



National Grid Gas Transmission - TO/SO



Transmission Owner (TO)

Builds, maintains and owns assets



System Operator (SO)

Real-time operation of the network

Gas Transmission Stakeholder Priorities

Industrial and Domestic consumer priorities ...

I want an affordable energy bill

I want to use energy as and when I want

I want you to minimise disruption to my life



...are delivered through our stakeholder priorities...

I want to take gas on and off the Transmission system where and when I want

I want you to protect the Transmission system from cyber and external threats I want all the information I need to run my business, and to understand what you do and why

I want you to care for communities and the environment

I want to connect to the Transmission System

I want you to facilitate the whole energy system of the future – Innovating to meet the challenges ahead I want the gas system to be safe

I want you to be efficient and affordable

Quick Poll...

Do these priorities capture what's important to you and your business?

- A. Yes
- B. Somewhat
- C. No

Please give a reason for your answer



Quick Poll...

Please rank these priorities in order of importance to you and your business:



I want to take gas on and off the Transmission system where and when I want





B

I want all the information I need to run my business, and to understand what you do and why

I want you to leave a positive impact on our communities and the environment





I want to connect to the Transmission system

I want you to facilitate the energy system of the future – Innovating to meet the challenges ahead



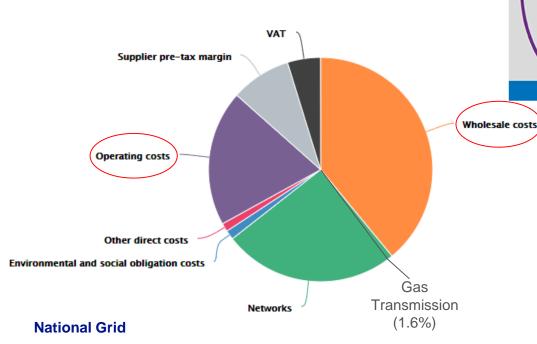


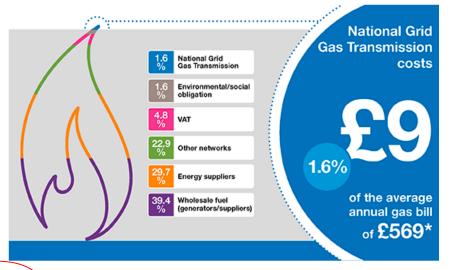
I want the gas system to be safe

I want you to be efficient and affordable



Our impact on the domestic consumer bill





We account for £9 on the average duel fuel bill. We also have the potential to influence other aspects of the bill through the services we deliver

Gas Transmission

What is RIIO?



What is RIIO?



Constructive Engagement

Stakeholderled Plans

Affordability

Stakeholder engagement

Listen (priorities)

Co-create (options & trade-offs)

Propose (holistic plan)

Stakeholder Group

Seek to agree what companies should deliver nationalgrid (outputs, expenditure, incentives, uncertainty)

Stakeholder Group report areas of agreement

Company

submission

<u>Ofgem</u>

Potential 'public hearings' (for areas lacking agreement)

lacking agreement)
Final decision (emphasis of

(emphasis of scrutiny on areas still lacking agreement)

Interaction to explore trade-offs and maximise alignment



iterate

iterate

Sector 'RIIO2 Challenge Group'

Seek to agree the affordability of company plans

(sustainability, affordability & vulnerable consumers)



Challenge Group report areas of agreement

2017/2018

2019

2020

National Grid

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Gas Transmission Stakeholder Priorities

Industrial and Domestic consumer priorities ...

I want an affordable energy bill

I want to use energy as and when I want

I want you to minimise disruption to my life

...are delivered through our stakeholder priorities...

I want to take gas on and off the Transmission system where and when I want

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I want you to be efficient and affordable

Consumer priority
"I want an
affordable energy
bill"

Delivered through this stakeholder priority:

• I want you to be efficient and affordable

I want you to be efficient and affordable

What we've heard to date:

"We need reliable gas supplies without cost volatility"

"All the consumer cares about is the impact on their bill and security of supply"

"Price of gas impacts competitiveness with Europe"

We need to:

Demonstrate efficient expenditure

Understanding the balance of cost and risk on your business

Consumer priority

I want to use energy as and when I want

Delivered through these stakeholder priorities:

- I want to take gas on and off the Transmission System where and when I want
- I want all the information I need to run my business
- I want you to protect the Transmission system from cyber and external threats



I want to take gas on and off the Transmission System where and when I want

What we've heard to date:

My business is non-interruptible, we need gas to deliver "

There is huge risk to furnaces if there is a loss of supply - Typically takes 2-3 days to cool in a controlled way "

" We cannot switch to other fuel stocks so need to keep options open "

Large energy consumers needs differ greatly "

We need to:

Understand the different requirements for different types of users and why

Understand the value you place on having an uninterrupted gas supply

Understand the impact on your business of any change in service

I want all the information I need to run my business, and to understand what you do and why

What we've heard to date: NG provide very useful information and the right " I value the transparency and Gas deficit warnings amount of data which is made amount of information, especially related to are important " supply and demand at tricky times " available to the market " We need to: Understand what data and information you use and why Understand if these needs differ for different users

I want you to protect the Transmission System from cyber and external threats

What we've heard to date:

" Cyber security for the Transmission system is a National Security issue"

" Outputs need to include Cyber Security and this needs to be funded"

" I want there to be physical presence to prevent external threats"

We need to:

Understanding and complying with government and legislative requirements for critical national infrastructure

Consumer priority

I want you to minimise disruption

Delivered through this stakeholder priority:

 I want you to facilitate the whole energy system of the future – innovating to meet the challenges ahead



I want you to facilitate the energy system of the future – Innovating to meet the challenges ahead

What we've heard to date:

" We need a whole system energy approach "

"The furnaces have electric control systems so we need both a gas and electricity supply to work"

" Looking at potential for hydrogen mixes "

We need to:

Understand the potential impacts of decarbonisation

Work with others to facilitate innovation across the whole industry

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Questions we would like your thoughts on

Gas on and off

- If you can't use gas when you want...
 - What impact will you see? (financial, commercial, reputational, physical, environmental, safety)
 - Is there a difference in impact between total shutdown and reduced service?
 - If your service was interrupted, what length of time would be acceptable to you?
 - Does this change depending on how much notice you are given before an interruption?

Information Provision

- Are you aware of the data and information that we provide?
 - If so, what do you use?
 - What do you use it for?
- Do you do anything to the data/information to make it usable for your business?
 - If so, what?
- Would you like to see any additional information or data?

Facilitating the future

- How do you define whole energy system?
- What interactions do you see between gas and electricity?
- What value would you get from closer interactions between gas and electricity?

Summary of what's next

What we're doing?

- Understanding what aspects of the services we deliver are valued by stakeholders and why
- Understanding the impact of any disruption or change to these services on your business. Both felt directly by you and by your customers

How?

- Conducting a survey to get detailed information on value and impacts
- Undertaking consumer research
- Offering 1-1's with anyone that would like to talk to us further
- Invite stakeholders to workshops where we will share and discuss options for the future Gas Transmission system

Next Steps

- We will play back what we've heard from you in February via online consultation, webinars and workshops
- We will incorporate the impact you feel to our cost benefit analysis
- Further discuss a number of costed options for what the Gas National Transmission System will deliver in the next regulatory period and beyond

Quick Poll

1. Are there any areas you would like to discuss with us further?

- A. I want you to be efficient and affordable
- B. I want to take gas on and off the Transmission System where and when I want
- C. I want all the information I need to run my business, and to understand what you do and why
- D. I want you to facilitate the energy system of the future Innovating to meet the challenges ahead

2. How would you like to engage with us going forward?

- A. 1-1s
- B. Survey
- C. Workshops

Be part of shaping Gas Transmission's future...

Ofgem consultation
Due 18th December
Closing February

NGG Directional RIIO2 consultation February 2019

Upcoming events...

Major Energy Users Council meeting

4th December

Environment Event, Scotland

5th December

IGEM Future of Gas Panel debate

December



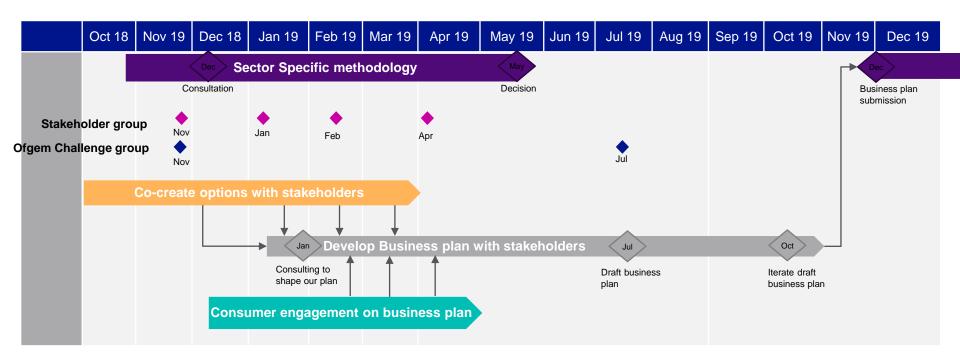
Visit our website





Contact us directly

Timeline



Questions?



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