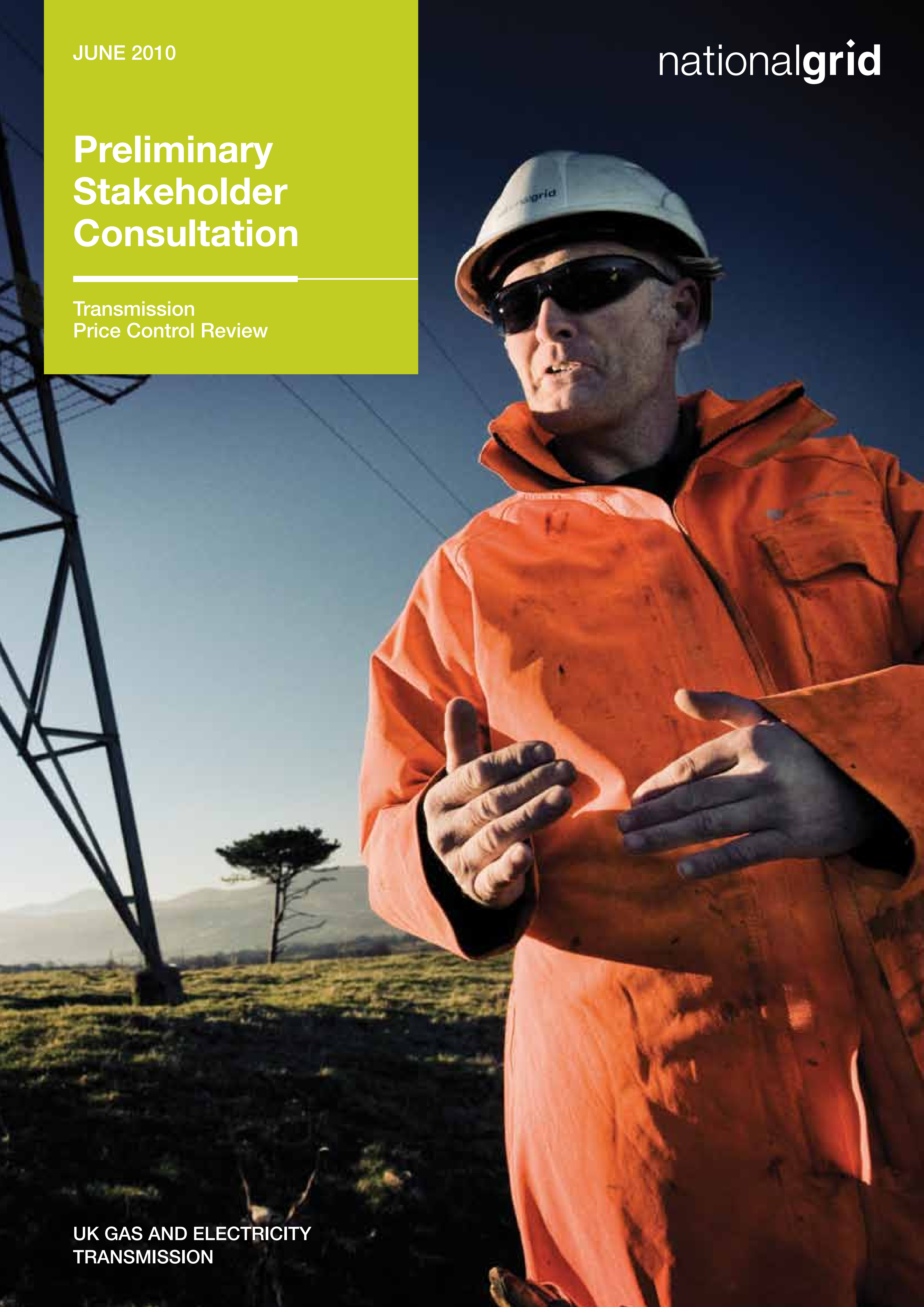
JUNE 2010

nationalgrid

# Preliminary Stakeholder Consultation

Transmission
Price Control Review



UK GAS AND ELECTRICITY
TRANSMISSION

# Summary

## Your views

- In winter 2010/11 National Grid will listen to stakeholder views to help us develop our Transmission business plan in advance of the next Price Control period
- We would like that consultation to be as wide-ranging, open and engaging as possible, so that we can develop a clear understanding of what our stakeholders want us to deliver in the coming years
- This document is part of the process of designing that consultation

## Preliminary stakeholder consultation

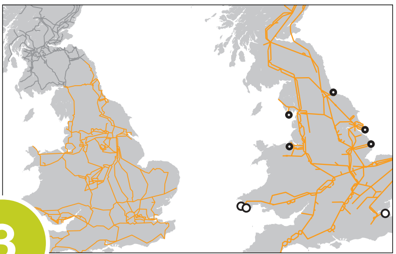
- This preliminary consultation asks for your views on how we at National Grid should best engage with our stakeholders
- Alongside this document, we will conduct face-to-face interviews and hold seminars to understand what good engagement should look like
- We will put your suggestions into practice this winter, when we will consult with you on what we should deliver
- This document features a number of questions. Your views on any or all of these will be a huge help as we shape our forthcoming consultation.

## The future of energy is changing and this winter we will be consulting a wide range of stakeholders on what they want National Grid's Transmission business to deliver.

This consultation is the first in a series of engagements which will be used to help shape our business plans for 2013 and beyond. These plans will then be agreed with the energy regulator, Ofgem.

In this document we give some context around our Transmission business as well as the challenges facing the energy industry and the UK as a whole.

We ask a number of questions about the process of the consultation this winter, to which you are invited to respond via e-mail or an online questionnaire.



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### About National Grid Transmission

- This consultation focuses on UK gas and electricity Transmission
- In the UK, we own and operate over 15,000km of high voltage overhead electricity lines, underground cables and high pressure gas pipelines
- We transport around 1.1million GWh of gas and transmit over 300,000 GWh of electricity per year
- Transmission charges make up 2-3% of household energy bills

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### The future of energy

- The world is changing…
  - Around 25% of existing power stations are forecast to close by 2020
  - 75% of the UK's gas is forecast to be sourced from abroad by 2020
  - The UK is committed to its 2020 and 2050 environmental targets
- We will be one of the key facilitators of these changes

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### Next steps

- 6th August – preliminary stakeholder consultation closes
- Autumn 2010 – summary of responses published
- Winter 2010 – Transmission Price Control Review stakeholder consultation
- 2011 – business plans developed and submitted to the regulator

# 1 Your views

The future of energy will be very different to what we see today and National Grid has a vital role in shaping this future for the UK. We are changing the way we listen to our stakeholders to ensure your views are central to shaping the future of our business.

**Why are we consulting?**
We intend to enhance our existing engagement activities by involving a much wider stakeholder audience. We recognise the need to engage our stakeholders even more than before. This winter (2010/11), we will be consulting a wide range of stakeholders on some fundamental questions about what they would like National Grid's UK Transmission business to deliver. It is important that we understand your views on these fundamental topics to allow us to balance all stakeholders' views on our role in security of supply (keeping the lights on and gas flowing) at an affordable price, whilst supporting the delivery of the UK's environmental targets. We will then use these views to help shape our business plans for the next Price Control period (from April 2013).

In order to make the consultation as inclusive, transparent and effective as possible, we are now undertaking a preliminary consultation. We are working with research and consultation experts, who are helping us to identify an appropriate sample of stakeholders and to facilitate interviews and seminars. This document supports the preliminary consultation by ensuring that stakeholders who have not been interviewed or involved in the seminars are able to give us their views.

National Grid manages electricity and gas, Transmission and Distribution networks, in the UK and US. This consultation however focuses on electricity and gas Transmission in the UK. We will be consulting stakeholders of our UK gas Distribution networks separately in relation to the Gas Distribution Price Control Review.

**Existing stakeholder consultation and engagement**
We currently consult on many aspects of how we operate, usually focusing on a particular technical area of our work. Examples of existing consultations and other stakeholder engagement are as follows:

- Customer satisfaction surveys
- Local community liaison for major infrastructure projects
- Transporting Britain's Energy annual consultation
- Public opinion surveys on tower design
- System Operator incentives consultations
- Charging methodology forums and consultations
- Electricity customer seminars and consultations
- Operational forums
- Electricity security and quality of supply consultation
- Surveys of our grantors
- Gas shipper forums
- Input to many industry bodies and working groups
- Regular discussions with customers

**How is this consultation different?**

The existing consultations and engagement typically involve members of the energy industry or focus on a specific project. The Transmission Price Review stakeholder consultation will be different because it will be asking a much wider range of stakeholders questions about what they want us to deliver. The stakeholder consultation this winter is particularly important because the responses will be used to shape our business plans for many years to come (from 2013), which are to be agreed by our regulator, Ofgem, as part of the Price Control process. It is our intention to continue the stakeholder consultations on a regular basis after the Price Control Review to ensure that what we deliver is continually shaped by stakeholders' views.

**About this document**

**Section two** sets out the questions we are asking now for this preliminary consultation. **Sections three** and **four** give some background to our company and how we see our role in overcoming some of the major energy and environmental challenges facing the UK. **Section five** gives further details of how to respond to this document.

In order to ensure our consultation this winter is as effective as possible, please respond to the questions in the next section to let us know your views on the key areas on which you would like to be engaged, and how you would like to be engaged.

**How to respond**

You can email us with your responses to the questions or complete our online questionnaire.

**Email**:
TPCR5views@uk.ngrid.com

**Online questionnaire:**
www.nationalgrid.com/TPCR5views

**To ensure your views are included, please make sure that we have received your response before 6th August 2010**

# 2 Preliminary stakeholder consultation

The questions to which we would like you to respond for this preliminary stakeholder consultation are set out below. Your views on any or all of these will be a huge help as we shape our forthcoming consultation.

**The Transmission Price Control Review**

**Q1** – Before you read this document, were you aware of price controls?  If so, what is your understanding of them and what do they mean to you?

**Who should we talk to?**

**Q2a** – Whose views do you think we should seek as part of our Transmission Price Control Review stakeholder consultation?  Please list all the organisations, types of organisations and individuals you think we should contact.

Here is a list of stakeholder groups we think we should talk to as part of the consultation:

- City analysts
- Construction partners
- Consumer groups
- Directly connected consumers
- Debt markets
- Electricity distribution network operators
- Domestic consumers
- Economic opinion bodies
- Environment Agency
- Environmental groups
- Equity markets
- EU transmission businesses
- European Union
- Existing electricity generators
- Future electricity generators
- Gas distribution networks
- Gas producers
- Gas storage providers
- Gas and Electricity Markets Authority
- General public
- Government departments
- Grantors*
- Health and Safety Executive
- Independent transporters

- Industrial & commercial consumers
- Industry consultants
- Industry groups
- Interconnector owners
- Lobby groups
- Local authorities
- Media
- MPs, AMs, MSPs & MEPs
- Non-government organisations
- Ofgem
- Offshore electricity transmission owners
- Pension fund trustees
- Professional bodies
- Scottish Government
- Scottish electricity transmission owners
- Shippers/suppliers of gas
- Supply chain partners
- Trade unions
- Treasury
- Welsh Assembly
- Westminster

*Grantors are owners of land upon which we have assets, such as electricity towers or gas pipelines.

**Q2b** – Which groups on the above list, if any, do you think we do **not** need to talk to in the course of this consultation? Please give reasons in each case.

**How should we consult our stakeholders?**

**Q3a** – What methods and tools would you expect us to use in order to engage stakeholders in this consultation?

Here is a list of methods and tools we are considering using as part of the consultation this winter:

- Individual meetings
- Group seminars
- Information on our website
- Consultation material (documents, fact sheets, presentations etc)
- Online survey

**Q3b** – Which of the methods and tools listed above, if any, do you think we should definitely **not** use for this consultation? Please give reasons in each case.

# Preliminary stakeholder consultation (continued)

**What should we be talking to our stakeholders about?**

**Q4a** – What themes would you expect the stakeholder consultation to cover? Please outline why you think each is important.

We think our consultation should cover the impact of our Transmission operations on the following six themes:

- the SAFETY of the public and our employees and contractors
- the RELIABILITY of the energy we deliver
- the ENVIRONMENTAL impact of our business and facilitating the development of a low carbon economy
- how we CONNECT CUSTOMERS to our Transmission systems
- how we maintain and improve CUSTOMER SATISFACTION
- our role in MARKET FACILITATION

**Q4b** – Having now seen our suggested list of themes, what further themes, if any, should we include in our consultation? Please outline why you think each is important.

**Q4c** – Which themes on our list, if any, should be excluded from the consultation? Please give reasons in each case.

**Q4d** – What questions would you expect us to ask in our consultation under each of these themes, outlining why you think each is important?

**When should we consult?**

**Q5** – On the right is a proposed timeline, with the stakeholder consultation planned to take place between November 2010 and February 2011. Do you think the proposed timeline should be changed in any way? If so, please give reasons for each suggested change.

**Any other comments?**

**Q6** – Please let us know if you have any other thoughts or comments on the points raised in this document, or if you would like to highlight any other issues you consider to be important.

# Timeline

| Year | Month | Activity | Consultation |
|---|---|---|---|
| 2010 | JUN | | PRELIMINARY CONSULTATION |
| | JUL | | |
| | AUG | | |
| | SEP | | |
| | OCT | | |
| | NOV | | |
| | DEC | | CONSULTATION |
| 2011 | JAN | | |
| | FEB | | |
| | MAR | | |
| | APR | | |
| | MAY | | |
| | JUN | | |
| | JUL | DEVELOP BUSINESS PLANS | |
| | AUG | | |
| | SEP | | |
| | OCT | | |
| | NOV | | |
| | DEC | | ONGOING CONSULTATION |
| 2012 | JAN | | |
| | FEB | | |
| | MAR | | |
| | APR | | |
| | MAY | DISCUSS DETAILED PLANS WITH REGULATOR | |
| | JUN | | |
| | JUL | | |
| | AUG | | |
| | SEP | | |
| | OCT | | |
| | NOV | | |
| | DEC | REGULATOR SETS FINAL PLANS | ONGOING CONSULTATION |
| 2013 | JAN | | |
| | FEB | | |
| | MAR | | |
| | APR | PRICE CONTROL STARTS | |

# 3 About National Grid Transmission

## OUR VISION

We, at National Grid, will be the foremost international electricity and gas company, delivering unparalleled safety, reliability and efficiency, vital to the wellbeing of our customers and communities.

We are committed to being an innovative leader in energy management and to safeguarding our global environment for future generations.

### ABOUT UK TRANSMISSION

**UK Electricity Transmission**

In England and Wales, we take electricity from sources of generation, and transport it through our Transmission network to regional distributors. In Scotland, we operate but do not own the network. We are responsible for ensuring that electricity generation exactly matches demand at the correct voltage and frequency.

**UK Gas Transmission**

We take gas from terminals and transport it nationwide through our Transmission system to regional distributors in areas of demand. We are required to be able to meet the highest predicted gas demand in the coldest winter in a 20 year period.

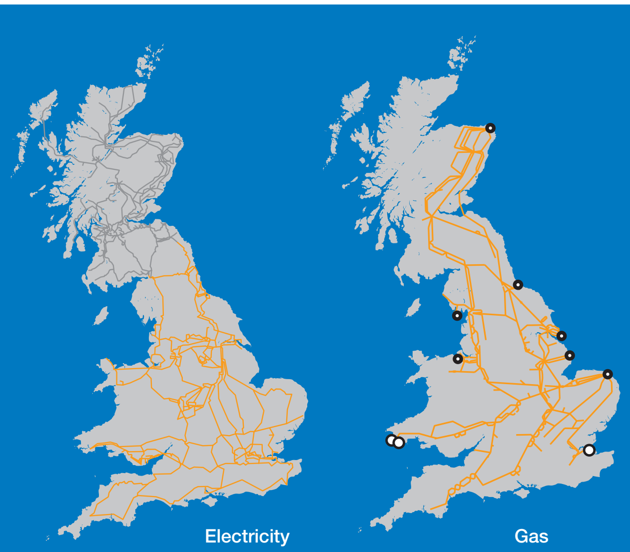
### REGULATION

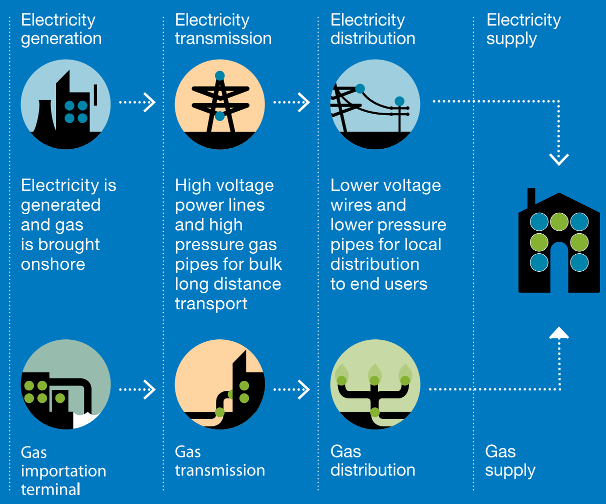
We hold a geographic monopoly position in Great Britain as the owner and operator of the gas Transmission network, the owner and operator of the England and Wales electricity Transmission network and the operator of the Scottish electricity Transmission network. Our UK Transmission business is therefore regulated by the Office of Gas and Electricity Markets (Ofgem), whose main priority is to protect current and future energy consumers. In line with our own obligations, further Ofgem objectives are to help secure Britain's future energy supplies and to contribute to the drive to curb climate change.

UK Transmission revenues are set by Ofgem every five years – the 'Price Control periods'. The current period was due to end in March 2012 but has been extended by Ofgem to ensure that the outcomes of their 'RPI-X@20' project [1] (which looks at the future of energy regulation) can be included within the next Price Control.

The next Price Control will therefore start in April 2013, although its duration may be longer than five years as Ofgem is consulting on whether a longer term Price Control could be beneficial.

In 2009, Ofgem commenced a review into whether or not future security of supply can be delivered by the existing market arrangements. The review – Project Discovery [2] - estimates that network investment will




make up around £45billion [3] of the £200billion needed by 2020 to secure energy supplies and ensure the UK meets its climate change targets. Ofgem is seeking to encourage network companies to become more flexible and innovative so they can quickly adapt to meet the demands of customers and a low carbon economy.

## THE COST OF ELECTRICITY AND GAS TRANSMISSION

Electricity Transmission currently makes up around 3% of household electricity bills – approximately £13 for an average electricity consumer paying £445 per year [4]. Gas Transmission makes up around 2% of household gas bills – around £16 for an average gas consumer paying £800 per year.
Transmission charges have reduced significantly since privatisation of the gas and electricity industry as a result of increased efficiency within our business (overall electricity Transmission charges reduced by 41% from 1990 to 2008 and overall gas Transmission charges reduced by 41% from 1994 to 2008 [5] ).

We are likely to see increased Transmission costs in the future to reflect the unprecedented levels of investment needed to replace and repair ageing assets and to support the decarbonisation of electricity by connecting new and cleaner energy sources.

1 http://www.ofgem.gov.uk/Networks/rpix20/Pages/RPIX20.aspx

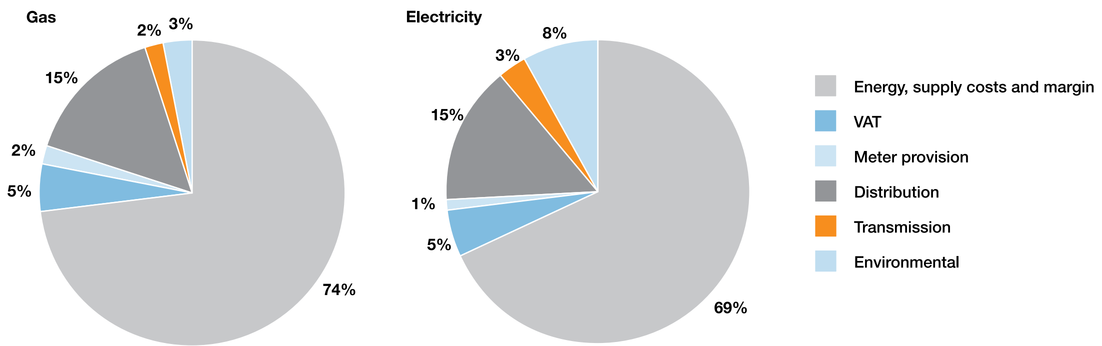
2 http://www.ofgem.gov.uk/Markets/WhlMkts/Discovery/Documents1/Project_Discovery_FebConDoc_FINAL.pdf

3 Ofgem Factsheet 87 (20/01/2010)

4 Ofgem Factsheet 81 (06/08/2009)

5 Alistair Buchanan, Beesley Lecture, 2nd October 2008 http://www.ofgem.gov.uk/Media/keyspeeches/Documents1/Beesley%20Lecture.pdf

**Transmission element of gas and electricity bills (June 2009 prices)**




Source: Ofgem factsheet 81 (06/08/2009)

# 4 The future of energy

## CHALLENGES

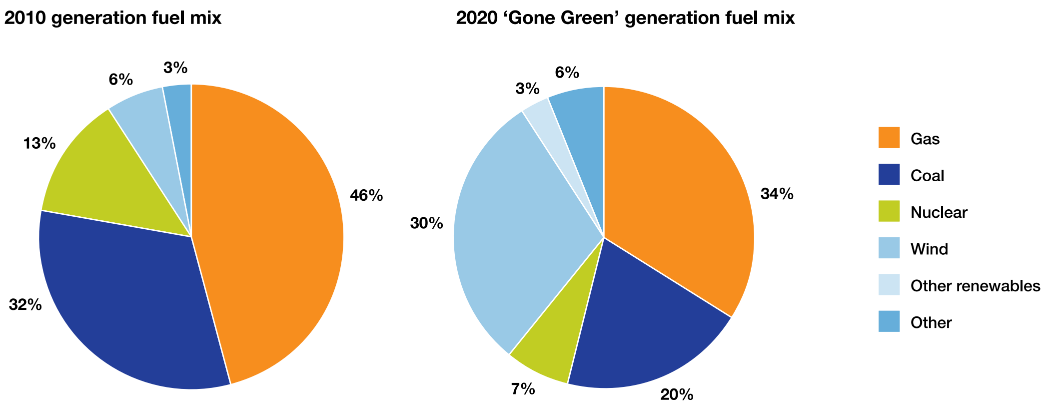
In the UK, the energy sector faces significant challenges related to the declining gas reserves in the North Sea; our latest forecast is that the UK will import around 46% of its gas requirements by 2010/11 and 69% by 2018/19 [6].

The UK is committed to some challenging environmental targets over the coming decades:

- The UK Climate Change Act (2008) – reducing $CO_2$ by at least 26% by 2020 and greenhouse gas emissions by 80% by 2050
- European Union target to reduce greenhouse gas emissions by at least 20% by 2020
- Legally-binding UK targets to deliver cuts in greenhouse gas emissions, with 15% of our energy to come from renewable sources by 2020 [7] – which equates to 30% of electricity from renewable sources. [8]

At the heart of the challenge for National Grid's Transmission business is the need to enable new wind and gas fired generation connection, and the closure of existing power stations. Coupled with more interconnection with Europe, the adoption of larger nuclear generating units from 2020 and the development of smarter grids, this activity will require significant reinforcement of our transmission networks, some of which may be incremental in nature and some of which will require large increases in investment. More use of wind generation will bring increased intermittency for electricity and more geographical diversity of generation, while new entry points for gas will mark a move away from the traditional north-south gas flows.

6 National Grid Ten Year Statement 2009
7 Source: DECC Renewable Energy Strategy
8 Source: The UK Low Carbon Transition Plan




Source: ENSG 'Our Vision for 2020' report, July 2009

Existing powerstation closures

**c.25%***

of total capacity by 2020

Gas from UK sources

**c.25%****

of total supplies by 2020

30% of electricity from renewable sources by 2020

15% of energy from renewable sources by 2020

$CO_2$ reduction of at least 26% by 2020

Greenhouse gas emissions cut by 80% by 2050

Source: *National Grid 'Gone Green' forecasts; ** National Grid Ten Year Statement 2009

With 2020 just a decade away, there is a sense of urgency across the industry, and a broad consensus that the earlier action is taken, the greater the chances of successfully delivering on the UK's targets. This transformation will require significant capital investment.

The Electricity Networks Strategy Group [9] (a forum which brings together key stakeholders in electricity networks to support the government in meeting its targets) has endorsed a scenario termed 'Gone Green' which has a very different pattern of generation in 2020 from the one we have today. With the decline of UK gas, we will also see different and variable sources of gas by 2020. The transmission networks will need to develop considerably to facilitate this new pattern of generation and sources of gas. Ofgem's 'Project Discovery' estimates that £200billion of investment is required across the energy industry by 2020. With this scale of challenge for the industry, significant investment in Transmission is unavoidable.

## NATIONAL GRID'S ROLE

We have a critical role to play, but this is not something new for us – it is at the core of who we are and what we do. We want to facilitate a world where homes and businesses will have smart meters, linked to a smart grid, customers will use energy more efficiently and make energy choices resulting in increased use of renewable energy.

This is not going to be quick or easy but the challenges are clear. We must increase efficiency, reduce emissions and enhance security of our networks. Partnerships are needed for a sustainable energy future.

**Meeting the challenges**

- We need robust and flexible transmission grids to handle new sources of renewable energy and new sources of gas.
- We're ready to enhance our transmission networks to continue to ensure safe, reliable and efficient service and to advance renewable and other clean energy resources for customers in today's changing energy world.
- Advanced communications and technologies are required for a 'smarter' transmission grid, which will enhance utilities' ability to handle increasing amounts of renewable generation. It will also give customers more control over energy use.

Investment for UK gas and electricity Transmission was £1,254m in 2009/10 [10]. We are expecting to need to invest increasing amounts over the coming years replacing ageing assets, connecting new sources of electricity generation (such as biomass, wind, wave, solar and low-impact hydro) and gas supply, and improving network flexibility.

9 http://www.ensg.gov.uk/
10 Source: National Grid Preliminary Results Statement 2009/10

# 5 Next steps

## How to respond

Thank you for taking the time to read this document. Please email us with your responses to the questions or complete our online questionnaire.

**Email:**
TPCR5views@uk.ngrid.com

**Online questionnaire:**
www.nationalgrid.com/TPCR5views

To ensure your views are included, please make sure that we have received your response **before 6th August 2010.**

**Next steps**

We will publish a summary of all of the responses that we receive. We will then use your views to help shape the stakeholder consultation taking place this winter. We will use the feedback from that consultation when developing our business plans during 2011, for submission to Ofgem towards the end of 2011.

**Further information**

If you would like further information about National Grid, its Transmission business or any aspect of the Transmission Price Control Reviews, please do not hesitate to contact us using the email address above or visit www.nationalgrid.com.

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