Future Energy Scenarios 2016

National Grid today issued its annual Future Energy Scenarios (FES) publication.

05 Jul 2016

It offers four possible scenarios based on industry-wide stakeholder engagement and extensive research, and gives a fascinating glimpse into our possible energy future. The scenarios take into account differing policy and economic landscapes to understand the potential impact upon energy supply and demand.

Marcus Stewart, Head of Energy Insights, National Grid, said:

We are in the midst of an energy revolution with a shift to demand side response, an exponential rise in renewables and the uptake of new technology such as electric vehicles.

"As System Operator, we are fortunate to be at the very centre of the energy industry and we constantly gather data to make sense of the changes that are coming our way. Our scenarios are vital for anyone trying to keep up with the rapid pace of change in the energy sector."

The scenarios are developed using data from a huge range of sources. Over the past year we have worked with 362 stakeholder organisations including academia, government, industry, trade associations and charities to ensure that our scenarios continue to provide a benchmark from which essential decisions can be made.

This year we have developed our scenarios, incorporating new technologies and developments such as new electricity storage. We explore in detail whether the 2050 carbon reduction target is still achievable and what steps we need to take as a society to stay on track to meet it.

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Notes for editors

Download and read the full document on the National Grid Future Energy Scenarios website: http://fes.nationalgrid.com/

The four Future Energy Scenarios:

Gone Green is a world of high prosperity and high green ambition. Policy intervention and innovation are both ambitious and effective in reducing greenhouse gas emissions. The focus on long-term environmental goals, high level of prosperity and advanced European harmonisation ensure that the 2050 carbon reduction target is achieved.

Slow Progression is a world of low prosperity and high green ambition. Economic conditions limit society's ability to transition as quickly as desired to a renewable, low carbon world. Choices for residential consumers and businesses are restricted, yet a range of new technologies and policies do develop. This results in some progress towards decarbonisation but at a slower pace than society would like.

No Progression is a world of low prosperity and low green ambition. Business as usual activities prevail. Society is focused on the short term, concentrating on affordability above green ambition. Traditional sources of gas and electricity dominate the supply market and there is little innovation altering how energy is used.

Consumer Power is a world of high prosperity and low green ambition. It is a market-driven world, with limited government intervention. High levels of prosperity allow for high investment and innovation. New technologies are prevalent and focus on the desires of consumers over and above reducing greenhouse gas emissions.

Notes to Editors:

National Grid is pivotal to the energy systems in the UK and the north eastern United States. We aim to serve customers well and efficiently, supporting the communities in which we operate and making possible the energy systems of the future.

National Grid in the UK:

- We own and operate the electricity transmission network in England and Wales, with day-to-day responsibility for balancing supply and demand. We also operate, but do not own, the Scottish networks. Our networks comprise approximately 7,200 kilometres (4,474 miles) of overhead line, 1,500 kilometres (932 miles) of underground cable and 342 substations.
- We own and operate the gas National Transmission System in Great Britain, with day-to-day responsibility for balancing supply and demand. Our network comprises approximately 7,660 kilometres (4,760 miles) of high-pressure pipe and 618 above-ground installations.
- As Great Britain's System Operator (SO) we make sure gas and electricity is transported safely and efficiently from where it is produced to where it is consumed. From April 2019, Electricity System Operator (ESO) is a new standalone business within National Grid, legally separate from all other parts of the National Grid Group. This will provide the right environment to deliver a balanced and impartial ESO that can realise real benefits for consumers as we transition to a more decentralised, decarbonised electricity system.
- Other UK activities mainly relate to businesses operating in competitive markets outside of our core regulated businesses; including interconnectors, gas metering activities and a liquefied natural gas (LNG) importation terminal – all of which are now part of National Grid Ventures. National Grid Property is responsible for the management, clean-up and disposal of surplus sites in the UK. Most of these are former gas works.

Find out more about the energy challenge and how National Grid is helping find solutions to some of the challenges we face at https://www.nationalgrid.com/group/news

National Grid undertakes no obligation to update any of the information contained in this release, which speaks only as at the date of this release, unless required by law or regulation.