

Introduction to the Future Energy Scenarios (FES)



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What FES is...

- A range of credible futures
- An output of an annual stakeholder consultation process regarding the future of the energy landscape
- A document covering the model inputs to the scenario analysis, new technologies, social and economic developments, government policies and progress against targets
- A set of scenarios which can be used to frame discussions and perform stress tests
- A set of scenarios that are projected out from the present to 2050
- Scenarios which form the starting point for all transmission network and investment planning
- They are also used in analysis to identify future operability challenges and potential solutions to meet those challenges
- A document covering developments in electricity generation and demand, and gas supply and demand

What FES isn't...

- The document does not cover potential network developments: these are addressed in the gas and electricity ten year statements
- Costs are not applied to the scenarios. There is too much uncertainty for any numbers to be credible
- The document does not provide a forecast of the future. Scenario planning does not predict the future; rather it considers a scope of potential drivers that may have an impact
- There is no probability analysis undertaken and not one of our scenarios is deemed more likely than another

The four scenarios

Prosperity

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Consumer Power

Economic - moderate economic growth

Political – government policies focus on indigenous security of supply and carbon reduction

Technological – high innovation focused on market and consumer needs. High levels of local generation and a mixture of generation types at national level

Social – consumerism and quality of life drives behaviour and desire for 'going green', not a conscious decision

Environmental – Long-term UK carbon and renewable ambition becomes more relaxed

Gone Green

Economic - moderate economic growth

Political – European harmonisation and long-term environmental energy policy certainty

Technological – renewable and low carbon generation is high. Increased focus on green innovation

Social - society actively engaged in 'going green'

Environmental – new policy intervention ensuring all carbon and renewable targets are achieved

No Progression

Economic – slower economic growth

Political – inconsistent political statements and a lack of focus on environmental energy policies

Technological – little innovation occurs in the energy sector with gas as the preferred choice for generation over low carbon

Social – society is cost conscious and focused on the here and now

Environmental – reduced low carbon policy support and limited new interventions

Slow Progression

Economic – slower economic growth

Political – European harmonisation, focus on low cost environmental energy policies

Technological – medium levels of innovation lead to a focus on a mixture of renewable and low carbon technologies

Social – society is engaged in 'going green' but choices are limited by cost

Environmental – new policy interventions are constrained by affordability



The four scenarios

- Gone Green is a world where green ambition is not restrained by financial limitations. New technologies are introduced and embraced by society, enabling all carbon and renewable targets to be met on time
- Slow Progression is a world where slower economic growth restricts market conditions. Money that is available is spent focusing on low cost long-term solutions to achieve de-carbonisation, albeit it later than the target dates
- No Progression is a world focused on achieving security of supply at the lowest possible cost. With low economic growth, traditional sources of gas and electricity dominate, with little innovation affecting how we use energy
- Consumer Power is a world of relative wealth, fast paced research and development and spending. Innovation is focused on meeting the needs of consumers, who focus on improving their quality of life

External Consultation





http://fes.nationalgrid.com/