

Assessing strategic and sustainability issues in **Ofgem decision making**

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Setting the scene

We have a duty to protect the interests of current and future consumers. This means taking into account environmental, security and wider sustainability considerations.

> Last year we set out to explore the implications of sustainability for the tools of electricity and gas sector regulation.

> > This has developed into the proposals to assess in more systematic ways strategic and sustainability aspects of our decision making, to better integrate long-term and qualitative considerations into our evaluation processes.



Impact Assessment



Strengthening analysis of these issues is designed to more systematically represent issues related to the interest of future consumers, complementary to a monetised CBA.





These issues play out over mid to long term, with both project and system-level dimensions

2020 2050 **Mid-term Strategic** Long-run Sustainability **Project level** Project level System level System level Learning by **Diversity and** doing and **Pathways Optionality** resilience supply chain and lock-in development Stress and security Natural asset and implications sustainability implications



Monetisation and judgement in regulatory decision making

- Many factors relevant to strategic and sustainability concerns are exceptionally difficult to monetise
 - Deep uncertainty around impacts
 - Role of low probability, high impact events (eg. Security)
 - Evolving science and (domestic and international) politics
 - Multiple options in response with innovation
 - Great complexity
 - Huge sensitivity to choice of discount rates
- Government Economic Service review of Sustainability (also stakeholder feedback) underlined the relevance and legitimacy of qualitative evaluations
- Our proposed approach is designed as input to GEMA decision making, to illuminate possible 'interests of future consumers'
 - As and where there may be tradeoffs with interests of present consumers, it is for GEMA to decide how best to strike the balance



1. Optionality

- Significant subsequent options created or facilitated by the decision
- Significant options precluded by the decision
- Optionality in timing: risks and benefits of deferring a decision.



2. Diversity and resilience

- Diversity of fuels, technologies, types of players, business models and/or services, including influence of a decision on the trend of diversity, highlighting critical stages of low diversity / substitutability
- Other characteristics influencing the resilience of the system including capacity to absorb disruptions, and investor confidence.



Stress and security implications

• Security of supply failure in electricity and gas supplies, and consideration of the interactions between the two fuel sources

• **Potential risk of extreme energy prices and volatility** to a degree which might affect personal security (e.g. winter deaths), even when the likelihood of these events arising may be very small

• **UK's legally binding energy targets**, to ensure that our decisions do not impede the UK's achievement of its legally binding national targets, and to assess potential contributions of our decisions to these targets, taking account of our legal duties and objectives under both UK and European law.



3. Learning by doing and supply chain development

- Potential to gain UK experience which can benefit future projects, including risk reduction, learning and skills base etc
- Avoiding supply chain bottlenecks the pace of development can be constrained by the capacity/capability of the supply chain
- Learning rates to inform cost projections in quantified scenarios.



4. Pathway and lock-in

- Implications for the direction of travel of the energy system, taking account of the interplay between generation and transmission
- Relationship of this trend with the ability to adapt to long-run sustainability constraints and wider environmental impacts.



Natural asset and sustainability implications

- **Consistency with the UK's 2050 GHG target** (interpreted as a 90% reduction in GHG emissions from the electricity and gas sectors)
- **Cumulative GHG** emission implications, which is the most scientifically robust indicator of relative impact on climate change and which also captures implications in terms of potential timing
- Impact on **wider environmental assets** (such as biodiversity, water quality, air quality, marine habitats and landscape amenity) as appropriate to the specific decisions in question.



Joining up analysis: iteration with CBA to provide as coherent assessment as possible



Identification of strategically sensitive parameters



Next steps

Continued informal consultation and internal trials

> Formal consultation on Impact Assessment guidelines (Winter 2012)

> > First official use of new Ofgem Impact Assessments (Spring 2013)