

FACTORING STRATEGIC AND SUSTAINABILITY CONSIDERATIONS INTO ENERGY SECTOR REGULATION: A CASE STUDY OF DEVELOPMENTS IN THE UK OFFICE OF GAS AND ELECTRICITY MARKETS (OFGEM)

Michael Grubb, UK Office of Gas and Electricity Markets, 020 7901 7344, michael.grubb@ofgem.gov.uk
Jenny Mills, UK Office of Gas and Electricity Markets, 020 7901 7000, Jennifer.mills@ofgem.gov.uk

Overview

This paper, for the applied Case Studies workstream, explores the impact of growing attention to strategic and sustainability concerns in UK energy policy. These concerns led not only to the fundamental policy change of UK Energy Market Reform, but also expanded the legal mandate of the energy regulator (Ofgem) and led it to change the structure of its Impact Assessment in ways which may have wider reverberations. The UK is widely seen as a pioneer of market liberalisation. Consequently these developments may be of widespread interest as a case study of the potential tensions between competitive electricity markets and strategic and the sustainability concerns surrounding the energy sector, and ways in which these may (or may) be resolved.

Methods

The methodology is based upon the lead author's own direct involvement, initially from a research perspective, and then in relevant positions including current position as Senior Advisor on Sustainable Energy Policy to the UK regulator Ofgem; through this, it also draws upon extensive consultation processes, as well as a range of official documents and key academic papers that influenced the evolution of UK policy. It offers, therefore, a predominantly descriptive approach from a close observer, analyst, and subsequently participant in the developments described. Key documents that reflect pivotal points in the policy development are cited.

The paper serves both as a historical account and an analysis of the driving issues, and the policy results that have emerged. The concluding part of the paper reflects on the new challenges raised.

Results

In the 1980s and 1990s the UK was widely known for pioneering liberalisation of its electricity system. The UK regulator was initially established with a primary duty to promote competition, which was subsequently amended to a focus on protecting the interests of consumers. The 2000s saw growing tensions between the renamed Office of Gas and Electricity Markets (Ofgem) and the government over strategic dimensions – particularly escalating concerns about investment adequacy, for both security and decarbonisation.

Proposals to give the regulator an explicit primary duty relating to either security or the environment did not succeed, but the 2008 Energy Act 'clarified' its primary duty as being "to protect the interests of both existing and future consumers." In effect, this achieved the same thing: it gave the regulator an explicit duty to consider the longer-term implications of energy sector developments. The short-run benefits of competition in cutting costs could thus no longer be considered as the only metric: impacts on investment, and through this security and the environment, also needed to be considered.

The defining struggle within Ofgem was then its Project Discovery (2009), the findings of which were simultaneously lambasted from different camps as heresy, or derided as Ofgem finally "discovering the real world." The conclusion that the UK electricity market structure could not guarantee security and could not deliver the scale of low carbon investment required led directly to the government developing the UK Energy Market Reform bill, which radically changes the economic structure of the UK electricity system, and which entered into law in December 2013 (Newbery 2012; DECC, 2013).

Ofgem also underwent internal changes, setting up a Division of Sustainable Development charged in part with ensuring that the concerns of future consumers are represented at the table of regulatory decisionmaking. One of its first tasks was to examine whether expanding the definition of consumers to include "future consumers" had implications for Ofgem's framework of Impact Assessment, which is the main focus of this paper.

Analysis of the issues at stake – and practical experience - led to the conclusion that attempts to aggregate the interests of present and future consumers (and potential trade-offs) through aggregate monetised cost/benefit appraisal was unworkable and potentially obscured rather than informed good decisionmaking. In this, conclusions were similar to the UK government's own review of the economics of sustainability (DEFRA 2010).

In the case of Ofgem, which regulates a sector of exceptionally long timescales, strategic concerns, and with high environmental impacts, this led to a substantial change of its Impact Assessment framework. Following a 2-year process of research and consultation, in July 2013 Ofgem’s Board agreed a major restructuring of its Impact Assessment framework into three broad categories: aggregate monetised assessment; distributional analysis of impacts on present consumers; and a strategic and sustainability assessment, with specific tests to bring greater consistency and transparency to Ofgem’s treatment of long term, complex and often qualitative issues (Ofgem 2012).

Key issues in this are striking a balance between recognition of uncertainty and hence the value of ‘intangibles’ like optionality and diversity, in a framework which also aims to ensure that the energy sector develops in a direction consistent with sustainability concerns, and specifically, the parameters set by the UK Climate Change Act (see Figure 1 for the summary chart). The paper sets out the framework, and some initial experience in its application to issues in transmission regulation.

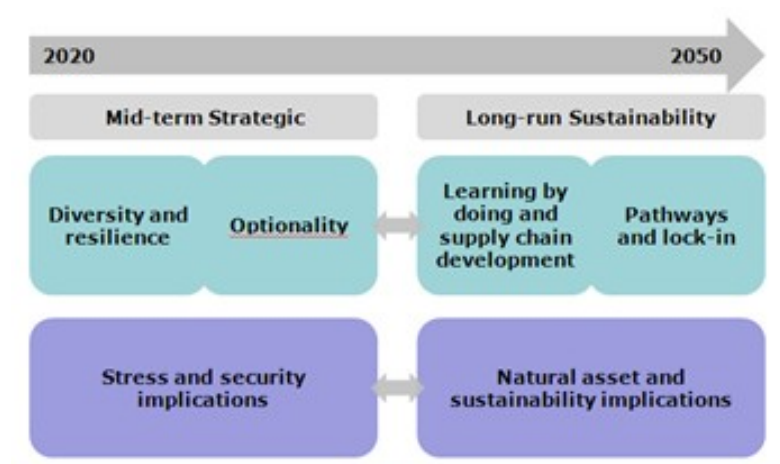


Figure 1: Structure of Ofgem’s Strategic and Sustainability Assessment

Conclusions

The UK journey underlines the extent to which energy market structures and their regulation cannot be separated from the wider definitions of objectives and responsibilities, which in turn reflect the state of evolution of the energy system, and wider national political debate. Economic principles which fit one set of conditions and lead to one set of reforms may not be adequate in themselves when conditions or the balance of objectives change.

Market structures and the regulation of them consequently evolve. There is no reason to believe this process of regulatory evolution is at an end; implementing the Energy Market Reform will inevitably clarify a new set of challenges. The UK experience may, however, be an interesting topic of study, and instructive for other countries as they grapple with similar challenges.