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Briefing Note

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The Energy Act 2010

1 Introduction

The Energy Act 2010 (The Act) came into force on 8 April 2010, taking forward policies first proposed in the *UK Low Carbon Transition Plan 2009* (The Transition Plan). The Transition Plan sets out policy mechanisms which aim to reduce UK carbon emission levels by 18% on 2008 levels by 2020.

The Act, which extends to England, Scotland and Wales[i], has four main elements, it introduces:

- the Carbon Capture and Storage Incentive; and
- Mandatory Social Price Support.

As well as:

- clarifying Ofgem's remit; and
- tackling market power exploitation.[ii]

The following paper provides an outline of each of these measures and background information.

2 The Carbon Capture and Storage Incentive

Carbon Capture and Storage (CCS) is a three part process that consists of:

- capturing CO_2 emissions from power plants and other sources (e.g. industrial plants);
- transporting captured CO_2 via pipeline; and
- storing the CO_2 underground in geological sites, such as deep saline formations, or depleted oil and gas mines.[iii]

The purpose of the technology is to reduce carbon emissions from large-point sources such as coal-fired power plants.

CCS has not yet reached commercial viability. However, as of June 2010, there were 80 large-scale demonstration projects in various stages of development around the world. Five large-scale demonstration projects are currently in operation in Algeria, Norway (two projects) and the USA (two projects).[iv]

The Act sets out a framework for the introduction of a CCS incentive, aimed at placing the UK *'at the forefront of global efforts to develop CCS',* by creating the conditions to deliver:

> *The demonstration of up to four commercial scale CCS projects and, potentially, up to four fully-CCS capable coal-fired power stations by 2025.*[v]

Aspirations towards CCS commercial scale development are based upon the assumption that coal will continue to provide a *vital* part of the UK's energy mix, particularly if it becomes possible to substantially reduce its carbon emissions. Coal, although *'reliable* [and] *low cost, with abundant remaining reserves'*, has the highest level of carbon emissions of all fuels.[vi] Funding has already being awarded to E.ON and Scottish Power for CCS design and development studies based at Kingsnorth (Medway Estuary, England) and Longannet (Fife, Scotland) respectively.[vii]

Specifically, the Act contains provisions that:

> *…give the Government powers to introduce secondary legislation that will provide the detailed arrangements underpinning the levy and govern the disbursal of funds to CCS projects.*[viii]

In effect, the act provides the Government with the power to introduce secondary legislation that will:

- introduce a Climate Capture and Storage Levy (likely to be paid by electricity suppliers based on their market share, according to documentation accompanying the Energy Bill); and
- introduce an incentive payment for CCS projects – referred to as Assistance Schemes in the legislation.[ix]

In addition, the Act requires that the government publishes a report every three years, detailing the progress *'made on the decarbonisation of electricity generation'*, and the *'development and use of CCS'.*[x]

The form of the proposed funding mechanisms and the secondary legislation is to be the subject of a formal consultation process. This was initially planned for summer 2010, with the tabling of legislation planned for autumn of the same year.[xi]

On 8 July 2010, however, an informal consultation document, the *Market Sounding for CCS Demonstration Programme Projects 2-4,* was released. The document is *'intended to help the Department to explore workable options for the CCS demonstration project selection and funding processes'.*[xii] The market sounding process sought comment from industry on a number of points:

- **Projects being developed or considered:** including details on fuel type, capture technology, size, location, transport and storage;
- **Public funding provision** – the document proposes that demonstration project funding is distributed in proportion to the amount of CO_2 abated. The price paid, although not determined, will be expected to enable developers to: *'recover their investment in CCS equipment'*; *'cover the additional cost of operating the CCS chain'*; and *'to provide their required rate of return'*;
- **Key risks in the chain:** the Government has sought opinions on what and where the risk are, and how they may be managed; and
- **The Department's selection process:** the scoping document requests views on the Department's proposed selection model. Proposals will be judged on their: size (CCS demonstration projects will operate on 300-500MW power stations); the scope for knowledge transfer; and co-location. It has also been recommended that at least one project operates on a gas-fired plant.[xiii]

The closing date for responses to was the 15 September 2010. At the time of writing, a response from the Government has not been published. A formal call for proposals is planned for the end of 2010.[xiv]

Significantly, the scoping document states:

> *As with any long-term, high-value funding proposal, final funding approval will be subject to the current Spending Review/*[xv]

3 Mandatory social price support

The Act provides the Government with the power to introduce *'one or more schemes for the purpose of reducing fuel poverty'.*[xvi] Significantly this includes introducing a scheme which offers lower prices to vulnerable customers.[xvii] In addition, the Act enables the Government to set up a *'reconciliation mechanism'* to spread the cost of schemes across suppliers to ensure no company is *'disadvantage as a result of having higher numbers of customers who are deemed as eligible for social price support'.*[xviii]

The Act does not specify the details of the support schemes. Such details are to be defined through a formal consultation process. The initial timetable for consultation was summer 2010, with secondary legislation expected in early 2011.[xix] At the time of writing the consultation has not been released.[xx]

The Committee for Energy and Climate Change's *Fifth Report on Fuel Poverty* (March 2010), states:

> *The Government has said it will require suppliers to make available £300m annually by 2013-14 for support to vulnerable and low income customers...*[xxi]

The report also notes that the Government was:

> *…minded that a significant proportion of the new resources made available through the mandated scheme will be focused on older pensioner households on the lowest incomes, and that some additional support will be available for other households vulnerable to fuel poverty. Support would be offered in the form of a fixed sum off the household electricity bill.*[xxii]

4 Ofgem's principal objective

The Act amends the sections in the Gas Act 1986 and Electricity Act 1989 that set out Ofgem's general duties. In this respect the Act requires Ofgem to:

> *Ensure that the interests of all consumers, future and present, are taken into account when decisions are made in relation gas and electricity markets. This includes ensuring that the long term issues of tackling climate change and energy security are fully considered alongside the cost to current and future consumers.*[xxiii]

This effectively alters Ofgem's remit, placing climate change and energy security on an equal footing to cost considerations.

Furthermore, prior to the Act Ofgem's principle mechanism for ensuring consumer protection was the promotion of competition. The Act places an obligation on the authority to *'consider more direct measures to protect the consumer interest'.*[xxiv]

The above changes came into force in June 2010. Since then, the Coalition Government has announced a review of Ofgem's role to *'explore whether any changes are needed to the regulatory framework to enable the Government to achieve its goals'.* A call for evidence was issued on 27 July 2010. The closing date for evidence has since passed (24 September). At the time of writing the outcome of this exercise has yet to be published.[xxv]

Northern Ireland

In Northern Ireland consideration of environmental sustainability and security supply forms part of the Authority's legislative objectives. It is, however, subject to the meeting of the principal objective.

The Energy (Northern Ireland) Order 2003 states that:

> *The principal objective of the Department and the Authority in carrying out their respective electricity functions is to protect the interests of consumers of electricity supplied by authorised suppliers, wherever appropriate by promoting effective competition between persons engaged in, or in commercial activities connected with, the generation, transmission or supply of electricity.*[xxvi]

It adds:

> *The principal objective of the Department and the Authority in carrying out their respective gas functions is to promote the development and maintenance of an efficient, economic and co-ordinated gas industry in Northern Ireland.*[xxvii]

In meeting its principle objective for electricity, Section 12(1) of the 2003 Order states that the Authority must have *'regard*' for:

- the need to secure that all reasonable demands for electricity are met; and
- the need to secure that licence holders are able to finance the activities which are the subject of obligations imposed by or under Part II of the Electricity Order or this Order; and
- the need to secure—
  - that the prices charged to tariff customers by public electricity suppliers for electricity supplied under Article 19(1) of the Electricity Order to premises in any area specified in an order made by the Department are in accordance with tariffs which do not distinguish (whether directly or indirectly) between different parts of that area; and
  - that public electricity suppliers are not thereby disadvantaged in competing with other persons authorised by a licence or exemption to supply electricity to such premises.[xxviii]

In meeting its principle objective for gas, Section 14(2) of the 2003 Order states that the Authority must have *'regard'* for:

- the need to ensure a high level of protection of the interests of consumers of gas;
- the need to secure that licence holders are able to finance the activities which are the subject of obligations imposed by or under Part II of the Gas Order or this Order;

- the need to secure that the prices charged in connection with the conveyance of gas through designated pipe-lines (within the meaning of Article 59) are in accordance with a common tariff which does not distinguish (whether directly or indirectly) between different parts of Northern Ireland or the extent of use of any pipe-line; and
- the need to protect the interests of gas licence holders in respect of the prices at which, and the other terms on which, any services are provided by one gas licence holder to another.[xxix]

In both cases (see Section 12(5) and Section 14(5) of the 2003 Order), the Energy Order places a subsequent requirement on the Authority to carry out its functions *'in the manner which it considers is best calculated':*

> *…to secure a diverse, viable and environmentally sustainable long-term energy supply.*[xxx]

5 Tackling market power exploitation

Market arrangements in Great Britain entitle generation companies to operate power stations without taking into account network limitations. However, in some areas insufficient wire capacity places a limit the amount of electricity that can flow between certain locations – these are known as areas of constraint.

To address this situation, the system operator is required to balance supply and demand on *'both sides of such constraints'.* [xxxi] Ofgem balances supply and demand by accepting *'offers to increase generation'* and *'bids to reduce generation'* from specific plants*.*[xxxii] Bids refer to the price generators are willing to pay the system operator reduce generation or increase consumption by certain volume. Offers refer to the price generators are willing to charge the system operator to increase generation or reduce consumption.[xxxiii] Exploitation occurs when the generator utilises its market power to secure an excessively high price for increasing generation or an excessively low price for decreasing generation.[xxxiv]For example, a generator might secure an excessively low price for decreasing generation as a result of being the only producer in a particular location available to reduce output, which, therefore, enables them to name their bid price.[xxxv]

Commenting on the issue, Ofgem have stated:

> *The direct and indirect costs of any undue exploitation of market power are likely to be borne by GB consumers in terms of increased retail bills. In the longer run the impact on consumers would be greater if the undue exploitation of market power was to have the effect of deterring new entrants and reducing the competitiveness of the market.*[xxxvi]

Furthermore:

> *Any undue exploitation of market power will make wholesale electricity more expensive and have a detrimental effect on the competitiveness of the wholesale market. For example, there may be a negative impact on investment and new entry and a lack of confidence in the ability of prices to reflect market conditions which could lead to reduced liquidity. These factors could increase the price of wholesale electricity still further over time. The resultant costs of all these effects are likely to be borne by consumers in terms of increased retail bills.*[xxxvii]

The Act provides the Government with the power to insert a new licence condition into electricity generation licences that will give Ofgem additional powers to tackle such abuses. The Act also provides that generators, subject to an enforcement order under the terms of the new licence condition, are entitled to appeal to the Competition Appeal Tribunal.[xxxviii]

A consultation on the detailed licence condition was expected to take place during the summer 2010, enabling it to be operational by the first quarter of 2011 (subject to Parliamentary scrutiny).[xxxix]At the time of writing, the consultation document has not been published.[xl]

6 Other aspects of the Act

In addition to the above the Act introduces clauses which enable the Government to set the period within which energy companies must inform customers of changes to their gas and electricity tariffs. The current 65 working day period has been deemed *'unacceptable'*. [xli]

In addition the Act allows the Government to extend the time limit within which Ofgem can impose financial penalties on energy suppliers for breaches of licence conditions from 12 months to five years.[xlii]

Finally, the Act introduces reserve powers that the Government may use to address any disadvantage to consumers caused by cross subsidy. In the period 2005 to 2007 suppliers earned higher margins from electricity supply than often lower than those earned through gas supply. Ofgem has identified incidents were suppliers, offering both gas and electricity, have cross-subsidised their gas business from their electricity business. Higher electricity price effectively pay for lower gas prices. This situation negatively impacts electricity only customers (of such suppliers) who experience higher electricity prices but do not benefit from a subsidised gas supply.[xliii]

[i] The Energy Act 2010 s37 http://www.legislation.gov.uk/ukpga/2010/27/pdfs/ukpga_20100027_en.pdf (accessed 28/09/10)
[ii] Department of Energy and Climate Change, *Energy Bill Factsheets: Summary* (2010) http://www.decc.gov.uk/assets/decc/legislation/energybill/1_20100226093333_e_@@_energybillfactsheetsummary.pdf (accessed 28/09/10)

[iii] Department of Energy and Climate Change, *Office of Climate Capture and Storage* http://www.decc.gov.uk/en/content/cms/what_we_do/uk_supply/energy_mix/ccs/occs/occs.aspx (accessed 28/09/10)
[iv] IEA/CSLF Report to the Muskoka 2010 G8 Summit, *Carbon Capture and Storage Progress and Next Steps* (June 2010) http://www.iea.org/papers/2010/ccs_g8.pdf (accessed 28/09/10)
[v] Department of Energy and Climate Change, *Energy Bill Factsheets: Carbon Capture and Storage Incentive* http://www.decc.gov.uk/assets/decc/legislation/energybill/1_20091215163644_e_@@_ccsfactsheet.pdf (accessed 28/09/10)
[vi] *Ibid*
[vii] Department of Energy and Climate Change, *Carbon Capture and Storage (CCS)* http://www.decc.gov.uk/en/content/cms/what_we_do/uk_supply/energy_mix/ccs/ccs.aspx (accessed 29/09/10)
[viii] Department of Energy and Climate Change, *Energy Bill Factsheets: Carbon Capture and Storage Incentive* http://www.decc.gov.uk/assets/decc/legislation/energybill/1_20091215163644_e_@@_ccsfactsheet.pdf (accessed 28/09/10)
[ix] *Ibid*
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[xi] *Ibid*
[xii] Department for Energy and Climate Change, *Market Sounding for CCS Demonstration Programme Projects 2-4*, http://www.decc.gov.uk/en/content/cms/consultations/mktsound_ccs/mktsound_ccs.aspx (accessed 28/09/10)
[xiii] *Ibid*
[xiv] *Ibid*
[xv] *Ibid*
[xvi] The Energy Act 2010 s9(1) http://www.legislation.gov.uk/ukpga/2010/27/pdfs/ukpga_20100027_en.pdf (accessed 28/09/10)
[xvii] *Ibid* s9(8b)
[xviii] Department of Energy and Climate Change, *Energy Bill Factsheets: Mandatory Social Price Support* http://www.decc.gov.uk/assets/decc/legislation/energybill/1_20091123124616_e_@@_energybillfactsheet2.pdf (accessed 28/09/10)
[xix] *Ibid*
[xx] See DECC Consultations http://www.decc.gov.uk/en/content/cms/consultations/consultations.aspx (accessed 29/09/10)
[xxi] House of Commons Energy and Climate Change Committee , *Fuel Poverty Fifth Report of Session 2009–10 Volume I* (30 March 2010) http://www.publications.parliament.uk/pa/cm200910/cmselect/cmenergy/424/424i.pdf (accessed 29/09/10)
[xxii] *Ibid*
[xxiii] *Ibid*
[xxiv] *Ibid*
[xxv] Department of Energy and Climate Change, *Ofgem review: Call for evidence* http://www.decc.gov.uk/en/content/cms/consultations/ofgem_review/ofgem_review.aspx (accessed 29/09/10)
[xxvi] The Energy (Northern Ireland) 2003 s12(1)
[xxvii] *Ibid* s14(1)
[xxviii] *Ibid* s12(2c)
[xxix] *Ibid* s14(2c)
[xxx] *Ibid* s12(5) and s14(5)
[xxxi] Department of Energy and Climate Change, *Energy Bill Factsheets: Market Power Licence Condition* http://www.decc.gov.uk/assets/decc/legislation/energybill/1_20091119093624_e_@@_energybillfactsheet4.pdf (accessed 29/09/10)
[xxxii] *Ibid*
[xxxiii] Ofgem, *Addressing Market Power Concerns in the Electricity Wholesale Sector - Initial Policy Proposals* (March 2009) http://www.ofgem.gov.uk/Markets/WhlMkts/CompandEff/Documents1/Market%20Power%20Concerns-%20Initial%20Policy%20Proposals.pdf (accessed 29/09/10)
[xxxiv] The Energy Act 2010 s18(4-6) http://www.legislation.gov.uk/ukpga/2010/27/pdfs/ukpga_20100027_en.pdf (accessed 28/09/10)
[xxxv] Ofgem, *Addressing Market Power Concerns in the Electricity Wholesale Sector - Initial Policy Proposals* (March 2009) http://www.ofgem.gov.uk/Markets/WhlMkts/CompandEff/Documents1/Market%20Power%20Concerns-%20Initial%20Policy%20Proposals.pdf (accessed 29/09/10)

[xxxvi] *Ibid*
[xxxvii] *Ibid*
[xxxviii] Department of Energy and Climate Change, *Energy Bill Factsheets: Market Power Licence Condition* http://www.decc.gov.uk/assets/decc/legislation/energybill/1_20091119093624_e_@@_energybillfactsheet4.pdf (accessed 29/09/10)
[xxxix] *Ibid*
[xl] See DECC Consultations http://www.decc.gov.uk/en/content/cms/consultations/consultations.aspx (accessed 29/09/10)
[xli] Department of Energy and Climate Change, *Energy Bill Factsheets: Summary* http://www.decc.gov.uk/assets/decc/legislation/energybill/1_20100226093333_e_@@_energybillfactsheetsummary.pdf (accessed 28/09/10)
[xlii] *Ibid*
[xliii] Department of Energy and Climate Change, *Energy Bill Factsheets: Reserve power for the adjustment of energy charges* http://www.decc.gov.uk/assets/decc/legislation/energybill/1_20091119093645_e_@@_energybillfactsheet6.pdf (accessed 29/09/10)