

Introduction

Problem

- 1. Energy is essential in almost every aspect of our lives and for the success of our economy. The Annual Energy Statement published on 27 July 2010¹ builds on the commitment in the Coalition Programme for Government and sets out the UK's plan to support the transition to a secure, safe, low-carbon, affordable energy system in the UK, and mobilize commitment to ambitious action on climate change internationally. As outlined in the statement, the UK faces four long-term issues for energy and climate change policies:
 - Saving energy through the Green Deal and supporting vulnerable consumers;
 - Delivering secure energy on the way to a low carbon energy future;
 - Managing our energy legacy responsibly and cost-effectively; and
 - Driving ambitious action on climate change at home and abroad.
- 2. The UK is committed to achieving a 34% reduction in its CO2 emissions by 2020 relative to 1990 and at least an 80% reduction by 2050. Moving to a secure, more efficient, low-carbon energy system in a cost-effective way is extremely challenging, but achievable. This requires major investment in new technologies to renovate our buildings, the electrification of much of our heating, industry and transport, and cleaner power generation. It requires major changes in the way energy is used by individuals, by industry, and by the public sector.
- 3. The UK has a large number of properties, domestic and non-domestic, that through lack of investment, have poor energy efficiency ratings. This is despite the fact that investment can produce savings on future energy bills. Domestic and non-domestic buildings account for a quarter of carbon emissions and there remains a considerable amount of cost-effective abatement-potential from energy efficiency measures, which is currently being underexploited.
- 4. To ensure our energy security, the UK has a well established energy market regulatory framework within which companies make investments in energy infrastructure and targeted incentives are provided to support low carbon technologies. Nevertheless, demand for fossil fuels is set to increase, and with the UK's own oil and gas resources declining, unless we act now to further enhance our energy security and encourage investment in low carbon generation, we will become more vulnerable to high and volatile oil and gas prices.

¹ http://www.decc.gov.uk/en/content/cms/what we do/uk supply/aes/aes.aspx

Fit with recent energy climate change legislation

5. How the provisions of this Bill fit with the existing regulatory landscape is covered in the following section on Policy proposals, and in the individual IAs on each measure. It is worth noting here however that DECC will shortly be consulting on its Electricity Market Reform package, this together with the conclusions of the review of the role of Ofgem and the review of environmental regulations for oil and gas exploration could all require further legislation.

Intended effect

- 6. The Annual Energy Statement is being taken forward through a broad programme of activities and new measures, both legislative and non-legislative. The purpose of this Bill is to provide for a step change in the provision of energy efficiency measures to homes and businesses, and make improvements to our framework to enable and secure, low carbon energy supplies and fair competition in the energy markets.
- 7. In particular, this Bill will take forward important elements of the Statement and government policy relating to:
 - tackling barriers to investment in energy efficiency by launching the Green Deal and
 measures to maximise uptake, introducing a new Energy Company Obligation from 2012
 to underpin the Green Deal, extending powers to direct the roll out of smart meters,
 requiring cheapest tariff information on energy bills and making energy performance
 data from Energy Performance Certificates more widely available.
 - enhancing energy security by improving third party access to UK oil and gas
 infrastructure; requiring information from generators and suppliers that will enable the
 estimation of future electricity security; strengthening market incentive mechanisms for
 ensuring sufficient gas is available during a Gas Supply Emergency; putting in place a
 Special Administration Regime for gas and electricity suppliers; and maximising our
 ability to exploit the UK Continental Shelf.
 - **enabling investment in low carbon energy supplies** by enabling implementation of the enduring offshore electricity transmission regime beyond 2010; and by giving investors in new nuclear increased certainty over their obligations.

Policy proposals

8. All of the policy proposals where costs and benefits have been identified have an individual Impact Assessment (IA) which discusses the options, the rationale and outlines the costs and benefits in more detail. The individual IAs are set out in the sections following this introduction. The Regulatory Policy Committee (RPC) has had an opportunity to comment on the impact assessments, and the final IAs reflect their comments.

- 9. In many cases, individual proposals contribute to more than one policy objective. For the purposes of this Impact Assessment, however, we have grouped individual measures under the primary policy objective that they target, while referring to any additional benefits in the text.
- 10. A number of the policies in the Energy Bill relate to the creation of enabling powers for the Secretary of State. For example, all the primary powers related to the Green Deal are enabling powers for the Secretary of State to make decisions through secondary legislation, the precise form of which will be determined following the adoption of primary legislation.
- 11. The approach we have taken is to assess the costs and benefits that directly arise from the primary legislation, and then as far as possible, based on the potential future policy we have tried to set out illustrative costs and benefits in order to help facilitate the debate. There is considerable uncertainty surrounding the estimates of costs and benefits arising from secondary legislation so the illustrative scenarios presented in this IA should only be seen as indicative and in no way pre-empting the future secondary legislation. Further detail will be presented in impact assessments accompanying secondary legislation as required in due course.

Tackling barriers to investment in energy efficiency

- 12. Government intervention is needed to correct market failures and overcome financial and behavioural barriers that act to reduce the take-up of cost-effective energy and thermal efficiency measures, while ensuring that equity considerations are adequately addressed. The Green Deal package of policies is a solution to the problem of a current lack of investment in cost-effective energy saving measures in homes and non-domestic buildings.
- 13. To enable the take-up of cost-effective energy efficiency measures, the proposals in the Bill will enable the creation of:
 - a new financing mechanism (Green Deal Finance) funded by a charge on consumers' energy bills that would be expected to be less than the cost savings resulting from the installation of the measure, and would pass to the next owner occupier or tenant if they move from the property;
 - b. a Green Deal accreditation regime for assessors and installers;
 - c. an Energy Company Obligation (ECO) from the end of 2012 that would be designed to work alongside Green Deal finance in order to offer and target appropriate measures at those households which are likely to need additional support, in particular those containing vulnerable people on low incomes and those in hard to treat housing; and
 - d. in the event that the private rented sector (PRS) continues to lag behind other sectors in improving the energy efficiency of its lowest rated properties (EPC Bands F and G), the ability to regulate for their improvement, subject to a review of the impact of the Green Deal in the sector.

- 14. As well as encouraging greater energy efficiency through specific Green Deal measures we know consumers are concerned about the cost of their energy and we think it is important that they have the information they need to control costs and consumption. Ofgem has introduced a number of changes to the information presented on consumers' bills, including the provision of an annual statement, but more can be done to empower consumers, and put them in control of their energy costs.
- 15. The proposals in the Bill will give powers that would allow the Government to require energy companies to provide information on the cheapest tariff on energy bills. The detail of this policy will be determined by secondary legislation should a voluntary agreement not be possible, and will be implemented alongside other changes to the bills that form part of the Green Deal, such as information regarding Green Deal repayments, and household comparison information to further encourage energy efficiency.
- 16. Energy Performance Certificates (EPCs), Display Energy Certificates (DECs) and Air Conditioning Reports (ACRs), are currently made available to the Energy Savings Trust, Trading Standards Officers and anyone who can provide a document reference number. Making energy performance data additionally available to accredited Green Deal providers will enable them to provide information, support, offers and advice to consumers who currently have an EPC. The proposals in the Bill will give the Secretary of State powers to amend the Energy Performance of Buildings (Certificates and Inspections) (England and Wales) Regulations 2007, with a view to removing unnecessary restrictions on access to data from EPCs, DECs and ACRs.
- 17. Further to developing the Green Deal the Government is continuing to support the roll-out of smart meters. The Secretary of State has broad powers to implement and direct the roll-out of smart meters under sections 88-91 of the 2008 Energy Act, however these powers currently expire in November 2013. The proposals in the Bill will amend the smart meter powers in the Energy Act 2008 so that they expire in November 2018 rather than November 2013. This will ensure the Government has the appropriate powers to address any unforeseen issues which arise in the later stages of roll out and to ensure the business case is achieved.
- 18. The powers will also be amended to include powers to amend transmission licenses since work carried out during Phase 1 of the smart metering programme suggests that this may be necessary to ensure the effective introduction of the new central communications arrangements which will support all smart meters. The proposed amendment will ensure that the Secretary of State has the necessary powers to introduce these new arrangements in the most effective manner if they are required.
- 19. In the interest of simplifying policy delivery, the powers in the Energy Bill will also repeal the Home Energy Conservation Act (HECA). The Act has been in place since 1995 and government in the meantime has developed a wide range of policy tools that obviate the need to retain HECA. There is no single purpose of government policy that cannot be achieved after repeal of HECA.

Table 1: Measures to remove barriers to investment in energy efficiency		
Policy	Costs	Benefits
Green Deal (overall), including a new finance mechanism and accreditation of Green Deal providers	By themselves the primary powers do not impose costs on businesses, households or the public sector. Implementation after secondary legislation will cost businesses and households who invest in the energy saving measures. Additional costs will arise from: costs associated with arranging the Green Deal financial package; changes to billing; the possibility of increased queries from customers related to their bills; and the resource costs associated with any increased defaults. There could also be additional accreditation that will be required on top of any voluntary industry codes already in place.	Implementation of the policy after secondary legislation should lead to benefits to households and businesses as they invest in cost-effective energy efficiency measures. There will also be additional benefits to accrue to society through carbon savings. The finance mechanism and accreditation should lead to increased take up of energy efficiency measures, as well as a reduction in risk of damages and associated costs.
Energy Company Obligation (ECO)	There are no costs associated with the primary powers, however depending on the level of the ECO there is a potential for significant costs to suppliers in meeting the obligation which ultimately we expect to be borne by consumers.	There are not direct benefits from the primary powers, however they do enable future policy which has the potential to deliver benefits associated with energy and thermal efficiency measures.
Private rented sector	There are only costs associated with this measure if they are used, and at this stage the exact nature of the regulation is unknown. If it is used there will be costs associated with investing in the measures, as well as some enforcement costs.	This measure will only be used if take-up of the Green Deal in the private rented sector has been low, and therefore will ensure that the benefits of energy efficiency measures are delivered in that sector, where a significant proportion of households are fuel poor, and there are a substantially larger proportion of homes with the lowest energy proportion rating than other sectors.
Information on customer bills	There will be no costs associated with the primary legislation. If a voluntary agreement cannot be reached and secondary legislation is required then there are costs to suppliers of changing their bills, including up-front system changes printers, extra storage, IT staff costs and bill re-design. There will also be potential on-going costs from	The specific option chosen as part of a voluntary agreement or through secondary legislation will determine the level of switching as a result of the cheaper tariff information. Consumers may benefit in terms of cheaper energy bills and there could be improvements in the level of competition in the market.

	increased printer running costs. The magnitude of these will be determined through secondary legislation.	
Energy Performance Certificates	The cost of operating and developing the registers on which EPCs, DECs and ACRs are lodged is covered by the lodgement fee. The change in regulations will result in a one-off increase in workload for the Register Administrator but the current view is that the lodgement fee is already sufficient to cover this. Organisations receiving bulk data will incur some handling costs. However there is no obligation on such organisations to receive the data. There will be some costs for running an information campaign to inform current EPC holders how their data will be used and how to opt out.	Government departments, local authorities, researchers and business will benefit from having access to data allowing them to analyse the energy efficiency of buildings. Green Deal Providers will be able to target marketing material at the most receptive customers. Customers should also benefit from tailored advice. Wider access should raise awareness among the general public of the energy efficiency of buildings.
Smart meters	The amendment and extension of the existing Energy Act 2008 powers does not have any direct costs, however it does increase the regulatory uncertainty for code and licence holders during the rollout period. This should be mitigated by the fact that any use of the powers would be subject to detailed costbenefit analysis, as well as to consultation with licence holders, Ofgem and other interested parties.	In the absence of the appropriate powers after November 2013, the Government will be unable to adjust the roll out strategy in the latter stages of the roll out if this proves necessary, nor amend transmission licences, hence increasing the risk that the roll-out will not be delivered efficiently. This would have an impact on the total costs of the roll out.
HECA	There are no costs associated with the repeal of HECA.	The Repeal of HECA simplifies policy delivery and benefits accrue to Local Authorities and DECC in the form of administrative savings.

Enhancing energy security

- 20. The proposals in the Bill will increase the effectiveness of monitoring of electricity security of supply. This will include making Ofgem responsible for providing estimates of future capacity need and for assessing the adequacy of plans to meet future capacity need, by giving them powers to require the necessary information from generators/suppliers. The Secretary of State will also be obliged to publish their assessment of the future capacity need and availability in the following four years.
- 21. Studies commissioned by the Department of Energy and Climate Change concluded that there are certain scenarios, with a low but not negligible probability, which could have a high impact on gas consumers in Great Britain. The impacts of such events could lead to involuntary gas supply disruption and / or very high wholesale prices. The Government has decided to reduce these risks through legislative changes to ensure that Ofgem can implement necessary changes rapidly. The Proposals in the Bill will grant powers to Ofgem to urgently review the current gas emergency arrangements with a view to strengthening the market incentive mechanism for ensuring sufficient gas is available.
- 22. Special administration regimes are an alternative to general administration law. They are generally designed to ensure uninterrupted and safe operation of essential services in the event of a company becoming insolvent. We have to date relied on the Supplier of Last Resort process to ensure supply to customers in the event of a supplier's insolvency which has been tested several times over the last few years when small suppliers have failed. However, although the arrangements have worked well to date, experience has shown that it is unlikely that they would work in the event of a large supplier becoming insolvent because of the volume of customers involved. The proposals in the Bill will create a special administration regime for gas and electricity suppliers as an adequate 'insurance policy' for the low probability, high impact event of a large energy supplier becoming insolvent.
- 23. The remaining hydrocarbon resources of the UK Continental Shelf are still substantial perhaps as much as 20 billion barrels, compared to the 40 billion produced over the last four decades. But because production projects are now typically smaller, access to existing infrastructure is of increasing importance to the aim of securing full economic recovery of these resources. There is also a perception amongst many users of infrastructure that negotiations for access take too long and do not necessarily result in fair and reasonable terms being agreed. The proposals in the Bill will consolidate existing provisions for third party access to upstream oil and gas infrastructure, and streamlining of current procedures to facilitate determinations by the Secretary of State where required; with new provisions for notification of commercial negotiations, and to trigger determination procedures where negotiations have been unduly protracted.
- 24. Under current law, once an area has been designated as UK continental shelf it cannot be de-designated. The proposals in the Bill will give powers to de-designate areas of the UK Continental Shelf in order to facilitate the exploitation of our Continental Shelf resources (important for oil, gas and renewable energy supply.

Table 2: Measures to enhance energy security		
Policy	Costs	Benefits
Electricity security	All the costs arise directly from the primary legislation and comprise upfront once-off costs in 2010-11 to run a consultation, as well as annual/ongoing costs to Ofgem to collect required information, conduct analysis and produce a report for the Secretary of State. Costs to industry are not anticipated to be material given the current system of information/reporting requirements to National Grid.	The provision of better information to the Government will enable it to make more informed policy choices to ensure electricity security supply. Market participants could benefit from being able to make more informed choices with regards to when and how they chose to invest and operate in the market. Enhanced information could also reduce some barriers to entry into the market for new entrants.
Gas security	There are no costs that arise directly from these primary powers, however following future action by Ofgem there could be a transfer of risk from customers to shippers. It may be that this is reflected in higher costs of capital or other costs for shippers and some or all of this may get passed back to consumers in the form of higher prices. There could be potentially higher costs to some groups of customers or industry participants in the event of a Gas Deficit Emergency that would have benefited from a lower frozen cashout price, and there may be some impacts on competition that Ofgem will have to be careful to mitigate in their design of the policy.	The benefits of action to be taken by Ofgem are that gas supplies are not unnecessarily constrained by the emergency arrangements; the responsiveness of demand is improved in an emergency; incentives improved for market participants to invest or contract in such a way to avoid an emergency; and, to ensure that those that bear the risks and costs of an emergency are those that can most influence it.
Special Administration Regime	The direct costs of the primary legislation will fall on Government and Ofgem in developing the policy. The cost of the proposal on business is negligible.	The risk of a large energy supplier failing is very low. However should this happen there will be benefits arising from the avoidance of very large transfers of cost from a failed supplier to other industry participants, reducing the risk of contagion.
Third party access to oil and gas infrastructure	Negligible	Benefits are expected to arise from more timely development of oil/gas fields.
UK continental shelf	Negligible	Expected to be small and not directly related to the measure but rather to other measures which it could enable.

Enabling investment in low carbon energy supplies

- 25. The proposals in the Bill will extend existing Secretary of State powers in the Energy Act 2004 (that expire on 19 December 2010) to enable the implementation of the enduring offshore electricity transmission regime beyond 2010 (currently the subject of a DECC-Ofgem consultation). The proposals will also extend to 2025 the life of the powers of Ofgem under the Electricity Act 1989 to make property transfer schemes to resolve any disagreements on the appointment of an offshore transmission operator where the transmission assets have been constructed by a generator. There is not a separate impact assessment to accompany the Energy Bill because the costs and benefits of using these powers have already been assessed in published DECC impact assessments accompanying the on-going consultation. However, a summary of the main costs and benefits associated with the on-going consultation is set out below.
- 26. The proposals in the Bill will amend the existing powers in the Energy Act 2008 that allow the Secretary of State to modify a nuclear operator's Funded Decommissioning Programme. The proposed amendments will provide an enabling power that will allow the Secretary of State to enter into an agreement at the time a Funded Decommissioning Programme (FDP) is approved that will set out the manner in which he will exercise his powers to modify an FDP in accordance with the principle of securing prudent provision. The aim of this amendment is to ensure that there is an appropriate balance between the Secretary of State's powers to protect the taxpayer and the operator's need for clarity over how those powers will be exercised.

Table 3: Measures to enable investment in low carbon energy supplies		
Policy	Costs	Benefits
Offshore electricity transmission regime	Apart from small administrative costs to Ofgem and DECC, it is not expected to lead to any additional costs or benefits beyond those already identified for the enduring regime introduced in 2009 and assessed in the March 2009 IA ² .	Extending the powers will enable the 'enduring' regime to be changed following consultation should it not be possible before 19 December. By giving businesses additional flexibility and choice, the "generator-build" option could lead to an improved allocation of risk, thereby reducing financing costs. Extending the life of the property transfer powers could lead to any disputes being resolved more quickly. The benefits were outlined in more detail in the August 2010 IA. ³
Nuclear operators' Funded	It is not expected that these	•
Decommissioning	amendments will impose any costs	are to reduce the regulatory risk

² March 2009 Offshore Transmission Impact Assessment http://www.berr.gov.uk/files/file50576.pdf

³ August 2010 Extension of the enduring offshore transmission regime Impact Assessment: http://www.decc.gov.uk/assets/decc/Consultations/offshoreElectricityTransmission/423-ia-offshore-transmission-regime.pdf

Programme	that are significantly incremental to	associated with the relatively
	cost of compliance with the existing	unconstrained nature of the
	regime as set out in the Energy Act	Secretary of State's existing
	2008.	powers to amend and FDP
		potentially reducing the cost of
		capital. The exact benefits of this
		measure cannot easily be
		calculated for prospective nuclear
		operators, however, the cost of
		new nuclear generation is very
		sensitive to the cost of capital
		faced by investors.

Coal Authority

27. The Coal Authority has responsibility for: licensing coal mining activity, repairing subsidence damage, treating minewater pollution, disseminating certain mining and other information and managing former coalfield property. However, the Coal Authority is prohibited from undertaking any commercial mining operations itself. The proposals in the Bill will give powers to enable the Coal Authority to participate in the market and charge for services regarding subsidence damage repairs and the treatment of contaminated water in non-mining situations on a commercial basis. This may lead to a reduction in public funding for the Coal Authority as a result of increased commercial revenue.

Table 4: Measure related to the Coal Authority		
Policy	Costs	Benefits
Coal Authority vires	There are no direct costs associated with this measure. The Coal Authority may have an uncompetitive advantage over private contractors as they are the first to arrive to investigate the affected site. This may distort competition, although given the anticipated scale of revenues this impact will be negligible.	for the provision of services regarding subsidence. This is the result of the lower marginal cost to the Coal Authority of completing a project after fulfilling its statutory

Equality Impacts

28. The impact of all the measures in the Energy Bill have been assessed for their impact on equality. Potential impacts have only been identified for the measures associated with the Green Deal, and as a consequence a full equality impact assessment has been carried out alongside the detailed IA. As a result of this discussion no negative impacts have been identified from the possible Green Deal policies that might result from the secondary legislation. However it is expected that there may be certain instances where a positive impact is seen. It will be important to look closely at likely outcomes during the development of secondary legislation.

Net costs to business (including One in One Out)

- 29. As part of the impact assessment process we have identified where we expect there to be a no significant direct net cost to business from regulation. In general the costs that directly accrue from the primary powers are very small with all the component parts identified as having a positive zero or negligible negative impact. As such in terms of one-in one-out the net direct effects of the Bill does not constitute an "in". A discussion of these are contained in the detailed IAs.
- 30. However we do recognise that there could be indirect costs associated with the measures, such as the impact of any regulatory changes on the potential demand for the goods or services of businesses. For example, powers to allow the Coal Authority to charge for services regarding subsidence damage repairs and the treatment of contaminated water in non-mining situations on a commercial basis could lead to a reduction in the demand for services of existing private firms. This cost is not the result of a new regulatory or administrative burden on business and therefore no offsetting savings need to be identified under the One-in, One-out rules.
- 31. Also there could be potential additional costs to business that result from **secondary legislation**. The exact extent of these costs will be assessed in future impact assessments, however where known a discussion is attached in the following IAs. The most significant potential direct cost on business that may result from secondary legislation will be the associated with the Green Deal, and in particular the Energy Company Obligation. There will also be smaller costs associated with additional information on customer bills associated with cheaper tariff information, marketing the Green Deal, and the finance mechanism.

Public sector impacts

32. The impact assessments have identified where applicable any impacts on the public sector. As a result of the primary powers being taken there is expected to only be small resource implications. There are no costs imposed on the public sector as a result of the Green Deal primary powers, though they will need to be measured in more detail for the secondary legislation. In particular, for the powers related to the private rented sector DECC is committed to carrying out a local authority burdens assessment. There are expected to be some one-off development costs for Ofgem and DECC as a result of the electricity security measures and the special administration regime. Small administration savings should be expected for DECC and local authorities as a result of the HECA repeal.

Privacy impacts

33. There have only been impacts associated with privacy for the proposal to provide greater access to energy performance data. A full privacy impact assessment has been carried out.