DEPARTMENT OF ENERGY & CLIMATE CHANGE

Annual Energy Statement

DECC Departmental Memorandum

27 July 2010

Introduction

This Statement fulfils the commitment in our Coalition Programme for Government to present an annual statement of our energy policy to Parliament.

The mission of this Government is to support the transition to a secure, safe, low-carbon, affordable energy system in the UK, and mobilise commitment to ambitious action on climate change internationally.

The rationale for action is economic as well as environmental. Demand for fossil fuels is set to increase with the huge rise in population and wealth of emerging economies. In parallel, as recent events in the Gulf of Mexico have shown, the costs and risks of extracting fossil fuels from more remote locations are rising. With the UK's own oil and gas resources declining, unless we act now, we will become more vulnerable to high and volatile oil and gas prices.

We have inherited an energy system and an energy market that has suffered from a lack of clear direction. There is clear consensus that large levels of private sector investment are needed to develop new low carbon infrastructure. The reliable provision of energy is critical to the country's prosperity and is a primary duty of government. Yet the previous Government let the public down by failing to take the necessary decisions.

As the 2050 pathways analysis published alongside this statement sets out, moving to a secure, low-carbon energy system in a cost-effective way is extremely challenging, but achievable. It requires major investment in new technologies to renovate our buildings, electrification of much of our heating, industry and transport, and cleaner power generation. And it requires major changes in the way energy is used by individuals, by industry, and by the public sector. The promise of transformation is a huge economic opportunity as we grow out of recession.

The role of government in this transformation is clear. With severe constraints on public expenditure in the near-term, the state's role is to act as a catalyst for private sector investment in new infrastructure and in energy efficiency, by developing a clear, transparent, long-term policy framework.

This statement sets out how we will do this, outlining the programme and timetable for decisions in four key areas:

I. Saving energy through the Green Deal and supporting vulnerable consumers

II. Delivering secure energy on the way to a low carbon energy future

III. Managing our energy legacy responsibly and cost-effectively

IV. Driving ambitious action on climate change at home and abroad

1. SAVING ENERGY AND SUPPORTING VULNERABLE CUSTOMERS

Reducing the amount of energy we use is the cheapest way of meeting our climate change and energy security objectives. It also reduces energy bills and provides investment which supports the development of the low carbon economy and green jobs. All parts of society have a part to play. This section deals with a) energy use in the home; b) protecting consumers, especially the most vulnerable; c) energy use by business and industry; and d) energy use in the public sector.

a) Saving energy in the home through the Green Deal

Britain has some of the oldest housing stock in Europe: three-quarters of it was built before 1975 and almost 20% of it dates back to before the First World War. We use more energy to heat our homes than Sweden does, where winters are longer and colder. And most of the homes we will be using in 2050 have already been built.

Many of the energy efficiency measures needed for the existing housing stock are cost-negative: that is, they pay for themselves over time through lower energy bills. However, current take-up rates are very low. At least seven million lofts could still be lagged, and at least three million more cavity walls could be filled. The barriers are well-known but have yet to be tackled effectively:

- many people do not want to, or are unable to, make the up-front investment, even though they understand that they will save money through lower energy bills in the long term. The payback period may be longer than they intend to remain in that particular home, or the costs and benefits may be split between landlords and tenants;
- in many cases there is a lack of recognition of the need to act, a lack of knowledge about energy consumption generally, and a lack of information about what measures are available;
- many potential consumers do not trust the products or installers.

ACTION 1: The Government is tackling the barriers to investment in energy efficiency by launching the Green Deal and rolling out smart meters.

Green Deal

The aim of the Green Deal is for every participating householder to save money by insulating their home. Participating energy companies and high street stores would help guide customers through a simplified process and pay for the work upfront. Householders will then pay back the money over time on their energy bills, through the savings they make. A competitive market will provide best value and confidence in products for the customer.

Many people live in rented accommodation. Because the tenant typically pays the energy bills, they would benefit from energy efficiency measures. The Green Deal provides a way forward by

linking payment for energy saving to the benefits through bills. We are looking at how to make a success of the Green Deal for tenants in private and social housing.

Providers of the Green Deal may choose to form partnerships with local authorities, registered social landlords and social enterprises to offer locally-based solutions. The Department is looking for early involvement by Green Deal providers ahead of legislation being introduced in the forthcoming Energy Security and Green Economy Bill.

The need for legislation and other changes means that it is not possible for the full roll-out of the Green Deal to take place immediately. In the meantime, it is essential that we do everything we can to maintain and where possible quicken the pace of energy efficiency improvements, so that householders' access to support is not interrupted.

ACTION 2: The Government has committed to extending the Carbon Emissions Reduction Target (CERT) to the end of 2012. As part of this we are increasing the target for the scheme by over 100 million lifetime tonnes of CO_2, and restructuring it to drive insulation measures.

This will help ensure that householders are supported in receiving the measures that can make the greatest difference to them. The amendments to the scheme are currently before Parliament, and will drive a step change in insulation delivery, providing insulation to over 3.5 million households, and in doing so will provide certainty for the energy efficiency supply chain, allowing the industry to invest early and grow its capacity to help meet future challenges.

ACTION 3: The Government will include powers in the forthcoming Energy Security and Green Economy Bill to introduce a new obligation on energy companies from 2012, to take over beyond CERT.

This new obligation will underpin the Green Deal, and focus particularly on those householders (e.g. the poorest and most vulnerable) and those types of property (e.g. the hard to treat) which cannot achieve financial savings without a measure of support. We will consult publicly on the detail of the new arrangements.

This sector accounts for a quarter of carbon emissions and offers further potential for cost-effective emissions reductions through energy efficiency. The Government wants to see demand for such measures to be maintained until the process of improving the UK's old housing stock is complete and will use these policies to deliver this objective.

Smart Meters

The lack of consumer information about energy consumption will be addressed through the deployment of smart meters. Smart meters will give energy consumers real-time information about the energy they are using, enabling them to better manage their energy use and reduce their carbon emissions. Smart meters are also the necessary first step towards a smart grid. At present, the vision of a "smart grid" providing interactive electricity that can balance supply and demand remains just that: a vision. Yet it is a crucial building block for an energy secure, low carbon future, because supply companies need better information in order to marry renewable but intermittent resources like wind power with much higher demand as we progressively electrify transport and heat over the decades to come.

ACTION 4: Alongside this Statement, the Government and Ofgem are together publishing a Prospectus for Smart Meters today.

The Prospectus sets out our detailed plans for delivering a smart meter to every home in the country, covering a wide range of proposals from consumer engagement and protection to technical issues such as the minimum requirements for the smart meter system. The Prospectus makes clear that we want to see a significant acceleration of smart meter roll-out compared to previously published targets. In order to bring forward the start of rollout and help deliver early benefits, we are proposing a staged approach to implementation. We are also looking to the industry to examine all the opportunities for realising more ambitious but achievable targets for the rate at which suppliers must install smart meters.

As it develops, the Green Deal could create opportunities for householders to install cost effective micro-generation technologies. There is more on decentralised energy in Section 2 – Secure Low Carbon Energy.

The Coalition programme has set out our contribution to drive forward the energy efficiency of new homes, and we are taking this forward in our approach to zero carbon homes.

The Government is also working to reduce the energy consumption of electrical appliances, using minimum energy efficiency standards and the familiar “A to G” efficiency scale. In addition, the Government has been working with product manufacturers and retailers to develop voluntary commitments to reduce their energy consumption, most recently on televisions.

b) Protecting consumers, especially the most vulnerable

For many low-income and vulnerable households, the problem is how to afford the energy they need to heat their homes to an adequate standard, as well as how to afford the up-front cost of the insulation and heating measures necessary to improve their home’s thermal efficiency. The latest projections suggest that there were around 4.6 million fuel poor households in England in 2009. In many cases, the fuel poor live in houses that are hard to heat – often because they are poorly insulated or because they do not have a working heating system. There are a number of policies currently in place to provide support to low-income and vulnerable households and the Government is now reviewing how effectively these deliver, and whether we need new policies to make further progress towards our fuel poverty goals.

In designing the suite of policies under the Green Deal, we will ensure that we help more of the most vulnerable households on the lowest incomes It is clear, however, that, although low-income and fuel poor households will benefit from more energy efficient homes through Green Deal, many will not realise the energy bills savings needed to pay back the up-front costs of measures, as their first priority will be to heat their homes to a more comfortable level. These types of households are likely to require additional support – which could be met through refocusing the obligations on energy companies.

The unit cost of energy is likely to rise considerably in the future, and it is therefore important that energy companies do not inflate bills unnecessarily. All consumers and especially the most vulnerable must be respected and treated fairly. To deal with this, the Government is committed to strong regulation and zero tolerance of market abuse and poor customer service.

Last month, we announced the extension of the Carbon Emissions Reduction Target (CERT) to the end of 2012. As well as supporting our energy efficiency and carbon reduction objectives, CERT will be re-designed to support the most vulnerable.

ACTION 5: As part of the CERT extension, we are introducing a "super priority" group, to ensure that the poorest, most vulnerable households stand to benefit from the scheme.

In addition, direct support with energy bills is made available under the current voluntary agreement between Government and energy suppliers. This agreement comes to an end in March 2011. The Energy Act 2010 contains powers that enable the Secretary of State to create schemes in secondary legislation to mandate energy companies to provide support for the fuel poor. We will take a decision on whether to introduce mandatory support following the Spending Review.

c) Helping business and industry use energy more efficiently

Business needs assistance and encouragement to use energy more efficiently. Currently they face a confusing mix of regulatory incentives. While targeted at different energy users, Climate Change Agreements and the Carbon Reduction Commitment Energy Efficiency Scheme (CRC) can involve organisations in making information returns under both schemes.

The introduction of CRC has already increased attention on energy efficiency amongst the target group of large energy users and there are emerging signs of the financial and reputational drivers influencing participants' behaviour. We will keep the operation of this scheme under active review with a particular eye on simplifying it and ensuring it properly incentivises those who do most to improve energy efficiency. We will aim to introduce changes ahead of the capped phase.

ACTION 6: We will keep the CRC under review and look at the future of Climate Change Agreements in order to ensure that we deliver significant improvements in energy efficiency with minimal complexity and policy overlap.

We recognise the significant cost savings that could benefit UK business through increased energy efficiency. The Government is also looking at how to extend the Green Deal approach from the domestic sector to the business sector to encourage business to take advantage of such savings.

Finally, we know the importance to industry of having regular, reliable data on the costs and future price impacts of our energy and climate change policies. In the past, the focus has been heavily on the domestic bill impact at the expense of the industrial, where competitiveness impacts can be a significant concern.

ACTION 7: Alongside this Statement, the Government is publishing analysis on the impact of energy and climate change policies on both household and business energy bills up to 2020, and will continue to do so on an annual basis.

This will lead to greater transparency and understanding for energy consumers about the impact of individual policies as well the aggregated impact of all measures now and in the future.

d) Improving energy efficiency in the public sector

The Government consumes large amounts of energy and could do a great deal more to improve its own energy efficiency**.** It is vital that Government leads by example. If citizens and businesses are being encouraged to make changes to the way they live their lives and run their businesses in the name of greater energy efficiency, then it is only right that we show we can manage the same in Whitehall. Saving energy is good financial sense as well as good energy policy. In the week he took office, the Prime Minister made a commitment to cut ten per cent from central government carbon emissions in the following twelve months. Not only will this require us to make our operations more efficient, we will also need to ensure that products purchased and used within central government are more energy efficient. The Prime Minister also asked all departments to make real time energy use data for the main headquarters building available on their web sites.

Our ambition is to apply the experience and example of central government to the wider public sector. We will continue to develop models that will make a significant step change in how public sector energy use is managed, making real energy efficiency savings and releasing money for front line services.

ACTION 8: All 17 central Government Departments now have comprehensive plans in place to meet the 10% reduction target and all have a real-time energy display in place.

2. SECURE LOW CARBON ENERGY

The UK economy is reliant on fossil fuels, and is likely to be so for some time to come. Most of our power stations are fuelled by coal and gas. The majority of homes have gas central heating. And on our roads, in the air and on the sea, our transport is almost wholly dependent on oil.

There are two important reasons why the UK needs to wean itself off such a high carbon energy mix: to reduce greenhouse gas emissions, and to improve the security, availability and affordability of energy through diversification. Under some of our 2050 pathways, energy would need to be virtually emission-free, given that we would expect some emissions from industrial and agricultural processes, transport and waste to persist. And by 2050, we can expect that fossil fuels will be scarcer, will still be in demand, and that prices will therefore be far higher. The UK's own oil and gas resources will be depleted, and worldwide, the costs and risks of extracting oil in particular will increase. We also know that the transition to low carbon energy, while it will not be cost-free, will offer significant economic opportunities. The UK must be well placed to exploit these.

It would be wrong to assume that climate change measures automatically mean higher energy bills than would otherwise be the case, even though some of these measures do impose costs. The balance between costs and benefits depends crucially on assumptions about fossil fuel prices and in particular the future price of oil. Depending on what happens to the oil price, a continued reliance on fossil fuels could cost the economy more than taking measures to reduce emissions. The initial costs analysis of the 2050 pathways, carried out for the large-scale electricity sector, highlights the sensitivity to fossil fuel price assumptions. The low-carbon pathways to 2050 reduce our exposure to the risk of high fossil fuel prices.

This section of the Statement considers: a) the international context of energy supply; followed by the major sectors that must be decarbonised: b) oil and gas; c) heating; d) a broad energy market outlook; and e) electricity. Because we have some policies for electricity which apply to the whole market, and others which are specific to particular generating technologies, sub-section e) is split between general and technology-specific.

a) Working for secure, low carbon energy on the international stage

This country's energy security is heavily dependent on international developments. With the decline in oil and gas production in the North Sea, the UK - in common with many other developed economies - is increasingly dependent on imports to meet its energy needs. We currently import approximately 8% (net) of our oil, 32% of our gas and 70% of our coal. By 2020 our oil import dependence is likely to be in the region of 45 - 60%, and some estimate gas import dependency could be 70% or more. Overall, energy import dependency is set to rise from 27% in 2009 to 46 - 58% in 2020. At the same time, global demand is increasing; high levels of investment are needed just to maintain current production levels; supply can be constrained and prices volatile. In the near term we judge the greatest risk to UK energy consumers to be increases in the level and volatility of oil prices due to rising demand, production constraints and the magnifying impacts of financial markets.

As we move to a low carbon economy, we need to deepen our engagement with energy producers and consumers both bilaterally and in multilateral forums in order to:

- encourage the necessary investment in oil and gas production;
- promote more reliable supply of energy (particularly for gas), including through strengthened bilateral relationships with key suppliers such as Norway and Qatar, and more effective EU gas markets;
- enhance price stability (particularly for oil), through greater transparency, strengthened dialogue between producers and consumers, and shared analysis of energy and financial markets;
- promote low carbon growth - reducing competition for fossil fuel supplies and helping tackle climate change - through greater energy efficiency, low carbon technology and reduction in fossil fuel subsidies.

The European Commission will shortly publish its Energy Strategy to 2020. This must focus on driving commercial sector investment in infrastructure and making EU energy markets work properly. This will help ensure that we have the networks needed for a low carbon future and that the EU is better able to respond to any future disruptions in supply. Better functioning and better connected markets must, however, go hand in hand with increased diversity in the types, routes and sources of EU energy supply as well as a reduction in energy demand. To be successful, the EU must look beyond the next decade and set out a clear, coherent vision for its move to a secure, competitive and sustainable low carbon economy in 2050.

ACTION 9: We will press the European Commission to set out a clear vision for a secure, low carbon EU economy out to 2050, and to ensure that the forthcoming EU Energy Strategy proposes policies to enable the energy sector to play its full role in this.

b) Securing oil and gas supplies

Much of the world's oil and gas is concentrated in a few strategically important regions of the world. New sources of gas – so-called unconventional gas or shale gas – are being developed but there is not yet a clear consensus on what the implications of this might be. The extraction of oil is almost certain to become a riskier and more expensive operation. The tragedy at Deepwater Horizon in the Gulf of Mexico underlines the need for the highest standards of safety management, and tough environmental standards. In Europe, recent gas disputes have only served to underline the importance of further action to improve Europe's energy security and the urgent need to develop low carbon sources of supply while reducing energy consumption.

The UK is currently enjoying healthy gas capacity margins but we cannot afford to be complacent. Businesses understand risk, and how to price it into their investment decisions. The job of Government is to provide a firm policy framework to reduce risk, remove unnecessary barriers and address market failures.

The UK's own indigenous supplies of oil and gas remain important. There are potentially twenty billion barrels of oil equivalent remaining in the UK Continental Shelf. We must maximise economic production while applying effective environmental and safety regulations.

ACTION 10: We are doubling environmental inspections of offshore oil and gas drilling rigs and will undertake a full review of the oil and gas environmental regime following the outcome of investigations into the causes of the Gulf of Mexico incident.

ACTION 11: In the forthcoming Energy Security and Green Economy Bill, we will seek to ensure that access to UK oil and gas infrastructure is available to all companies. This will help the exploitation of smaller and more difficult oil and gas fields, allowing us to make the most of our natural resources.

ACTION 12: We will introduce further measures on gas security as promised in the Coalition Programme for Government. In the future, we need more gas storage capacity, more gas import capacity, and greater assurance that our market will deliver gas when it is needed. This means that our gas market arrangements must have a sharper focus on increased flexibility and resilience.

c) Developing low carbon forms of heat

At present around two thirds of the gas we burn in the UK is used for heating, both industrial and domestic. Yet we know we cannot continue to rely on gas, or oil, for our heating needs indefinitely. The Green Deal will help to deliver much more heat efficient buildings and more energy-aware consumers. But we need to go further and progressively reduce our dependence on conventional fossil fuel heating through the coming decades. We will also need to deliver a reduction in carbon emissions from heat, which now account for a greater proportion of the UK total than electricity. Without moving towards low carbon heat we will be unable to stay within our carbon budgets or meet our greenhouse gas (GHG) emissions target of at least an 80% reduction by 2050.

Our 2050 pathways work shows that future heat supply will need to involve some combination of electrification (through heat pumps for example) and the use of bio-gas, bio-materials and other renewable heat technologies. In some cases these will be delivered via local and community-level heat networks using the co-generation of heat and power (CHP). This offers a way of producing heat more efficiently and with fewer emissions, and will often complement our energy system as it becomes more decentralised.

A rapid uptake in renewable heat will also reduce pressure on fossil fuel imports, and increase the diversity of the UK's energy system. The Government's National Renewable Energy Action Plan estimated that the share of UK heat demand met by renewables needs to increase from 1% today to around 12% in 2020 to help us to meet our overall 2020 target on renewable energy.

This Government is fully committed to taking action on renewable heat. The Government is considering responses to the Renewable Heat Incentive consultation and will set out detailed proposals on how to take forward action on renewable heat through the Spending Review.

To support communities and increase awareness and understanding of the opportunities that renewable and low carbon heat offers, we are developing an online portal, Community Energy Online. This will provide a comprehensive guide to designing and delivering low carbon community-scale energy infrastructure.

ACTION 13: We will set out detailed proposals for taking forward the Government's commitment to renewable heat through the Spending Review.

ACTION 14: We will launch Community Energy Online in autumn 2010 to support local authorities and communities who wish to develop local renewable energy solutions.

d) Energy Outlook

Looking across all these sectors, the UK's open energy markets put us in a good position to access sufficient gas and other fuels in the short term. Electricity capacity margins are high relative to historic levels and the UK has sufficient gas import infrastructure to access European and global gas markets. Although in the short term we unavoidably depend on a limited number of key producers, our ability to access global markets should stand us in good stead if markets are disrupted.

In the medium term, as well as reducing demand, our declining domestic production of oil and gas and closure of existing plants (as EU environmental directives take effect and ageing nuclear plants close) mean we need to build additional infrastructure to maintain and improve our security and access to competitive supplies – particularly for electricity generation and gas importation and storage. This investment challenge makes it crucial that we ensure our gas and electricity markets are structured to deliver security of supply, and drives much of the reform outlined in this statement.

e) Developing a market that will deliver secure, low carbon electricity

Most of the 2050 pathways in our study show that demand for electricity will double over the coming forty years, as a result of the need to electrify large parts of the heat and transport sectors. For this to have the required impact on emissions, the electricity being consumed will need to be almost exclusively from low carbon sources. In the first quarter of 2010 nearly 80 per cent of our electricity was generated by burning gas and coal. Coal is more plentiful, comes from a wider range of countries and is usually cheaper than gas, but it is also dirtier. The future of coal powered generation in Britain therefore, is intimately wrapped up with the future of carbon capture and storage technology. As the Committee on Climate Change has recently pointed out, the issue of Carbon Capture and Storage (CCS) on gas-generated electricity also needs to be addressed when looking further into the future.

The over-riding imperative is to enable the low carbon revolution in electricity generation to take place without jeopardising the reliability, security or cost of our power supply. For the time being, electricity margins are healthy. However, with the total investment requirement in the electricity sector estimated at over £100 billion by the end of this decade, much more has to be done to unlock this investment. The remainder of this section deals with the challenge in two parts: I) Reforming the market and removing barriers across the whole electricity sector; II) technology-specific policies.

I) Reforming the market and removing barriers across the whole electricity sector.

All low carbon technologies require large upfront capital investment. This investment will not be forthcoming unless we deal with five major constraints that go across all technologies:

- while the EU ETS is delivering emissions reductions via its effective cap across the UK and Europe, the carbon price it sets has not been sufficient in giving stable, long-term signals to generators and has therefore not been incentivising the required levels of new low carbon investment;
- the structure of the electricity market does not support the scale of new investment required;
- it can be hard to tap into the financial markets to catalyse private sector investment;

- public acceptability of new infrastructure. The previous Government's approach to planning in particular increased opposition by failing to support democratic decision making at the appropriate level; and
- ensuring timely grid connection for new infrastructure at all scales.

Tackling these issues is central not only to our energy security, but to enabling UK businesses to seize the economic opportunities of the move to a low carbon energy supply.

First, underpinning all low carbon technologies, we need a stronger carbon price. As the Chancellor set out in his Budget on 22nd June, in the autumn we plan to reform the climate change levy to provide more certainty and support to the carbon price. Subject to that consultation, the Government will bring forward relevant legislation in Finance Bill 2011.

ACTION 15: In the autumn, the Government will publish proposals to reform the climate change levy in order to provide more certainty and support to the carbon price. Subject to the outcome of that consultation, the Government intends to bring forward relevant legislation in Finance Bill 2011.

To further incentivise investment and bolster the EU-wide carbon price, we also support a move across the EU from a 20% to a 30% emissions reduction target by 2020. The cost to the EU of moving to this higher target is significant but manageable – only 0.1% of EU GDP (€11 billion) more than the original estimates of achieving a 20% target. Yet the potential prize is very large: better progress on international action; a stronger carbon price here to incentivise new investment, and the green growth and green jobs that will follow.

ACTION 16: We are pressing for the EU to move from the current 20% target to a 30% target for GHG emission reductions by 2020.

In addition, we want to see more auctioning of allowances in the EU Emissions Trading System (EU ETS). The electricity generation sector will face 100% auctioning from 2013, reducing opportunity for participants to make windfall profits. We are committed to increasing auctioning levels in the EU ETS while continuing free allocation to the few sectors at genuine risk of carbon leakage.

Radical change will require renegotiation of the Directive which was revised only last year. In the meantime, we see the current negotiations in Europe over the free allocation rules as an opportunity to address both genuine competitiveness and reduce use of the EU ETS as a provider of subsidies.

Providing more support and certainty about the carbon price is a pre-requisite for driving the decarbonisation of the power sector, but by itself it will not deliver the new investment that is needed, nor will it keep the lights on in the meantime. What is required is a clear market design that provides consistent, long term signals for investment, helping to secure the billions of pounds of new generating capacity and transmission and distribution infrastructure that is required. In addition, we must enable effective financial market involvement.

The Government is currently conducting a detailed appraisal of the way the electricity market should be designed. The Electricity Market Reform project will assess the role that a carbon price, emissions performance standard, revised renewables obligation, Feed-in Tariffs, capacity mechanisms and other interventions could play in delivering a system that supports the delivery

of a secure, low carbon, affordable electricity mix for the 2020's and beyond. It is vital that industry, Ofgem and others are fully involved in this process.

ACTION 17: The Electricity Market Reform project will issue a consultation document in the Autumn and a White Paper in Spring 2011.

In his Budget speech, the Chancellor also confirmed that the government will be putting forward detailed proposals on the creation of a Green Investment Bank, following the Spending Review, to help the UK meet the low-carbon investment challenge. The Government is considering a range of options for the scope and structure of the Bank, and will evaluate for effectiveness, fiscal affordability and transparency.

ACTION 18: The Government will publish proposals for a Green Investment Bank following the Spending Review.

Infrastructure is vital to the health and well-being of the nation. Its proper maintenance and renewal is critical for economic growth. Because decisions on major infrastructure are of national interest, we have recently announced changes to ensure that they will in the future be taken at the national level by democratically elected ministers in accordance with National Policy Statements ratified by Parliament.

On 29th June the Rt. Hon Greg Clark, Minister for Decentralisation, set out the Government's plans for reforming the planning system for major infrastructure. The Infrastructure Planning Commission will be replaced by a new unit to be established within the Planning Inspectorate and interim arrangements will apply to ensure a seamless transition for live applications. We will be consulting on revised draft energy National Policy Statements in the autumn, with a view to presenting the finalised statements to Parliament for ratification next Spring. A detailed implementation plan for planning reform on major infrastructure - including transitional arrangements and a revised timetable - will be published later in the summer. These National Policy Statements will clearly set out Government's policy insofar as it relates to planning applications for major infrastructure and will give investors the certainty they need to bring forward proposals to maintain security of supply and ensure progress towards decarbonisation.

We are also radically reforming the planning system to give local communities far more ability to determine the shape of the places where they live. We will provide incentives for local authorities to deliver sustainable development, including for new homes and businesses. In particular, we will encourage community-owned renewable energy schemes where local people benefit from the power produced and allow communities that host renewable energy projects to keep the additional business rates they generate.

ACTION 19: We will publish a detailed implementation plan later in the summer and consult on revised draft energy National Policy Statements in the autumn.

If the UK is to meet its climate change and renewable energy targets and ensure security of supply, large amounts of renewable and other low carbon generation need to be able to connect in the next decade. Grid access arrangements can delay or prevent these investments from coming forward. In some cases, new generators were being offered grid connection dates as late as 2025. Timely and effective enduring reform is therefore essential.

We are announcing today the implementation of a new enduring regime for grid access, enabling new generation to connect to the network quickly, removing a key barrier to new renewables. We will implement the 'Connect and Manage' regime in August 2010. This will provide greater certainty for all new generators about the rules for access to the grid over the long term.

ACTION 20: We will implement the 'Connect and Manage' regime in August 2010.

As set out in the Coalition Work Programme, this Government is committed to ensuring the development of a smarter grid, working closely with industry.
We will be involved in work with industry to develop a framework for smart grid interoperability, to encourage competitive and cost-effective technology development and innovation, and to ensure that different parts of the evolving smart grid are able to work together. This will commence over the summer, and will position us well to input into any future discussions on the issue at the EU level

There are other alternative resources such as demand-side management, storage, interconnection and distributed generation that are likely to play important future roles and, in conjunction with the Electricity Market Reform project, we will be exploring their potential.

The Government will also consider options for future legislation as appropriate.

Offshore wind will be crucial to delivering our renewable and low carbon targets. We have commenced powers to establish the new offshore transmission regime for transitional offshore generation projects. This means that the tender process that Ofgem is currently running to appoint new Offshore Transmission Owners for nine such projects can move to conclusion.

We have also approved new offshore transmission tender regulations which will enable Ofgem to run the next transitional tender round. These new regulations include greater flexibility than the previous regulations for tender qualification, meaning that more projects will be eligible for the transitional tender and not delayed by the tender process. We have also listened to stakeholder concerns and decided to consult with Ofgem on the enduring regime for offshore transmission to seek views on an additional 'generator build' option, on potential changes to the 'Offshore Transmission Owner build' option; and how the onshore and offshore networks can be best coordinated to ensure value for money for consumers.

ACTION 21: We have decided to consult further with Ofgem on the enduring regime for offshore transmission.

Looking forwards, as the move to low carbon sources of generation accelerates, some stakeholders have expressed concern about the continuing suitability of the transmission charging regime. Historically these arrangements were put in place for sound economic reasons in order to promote efficient use of the network. The Select Committee investigation into Britain's electricity networks heard a range of views about the existing regime while questions have been raised more widely about whether the regime is suited to the timely delivery of a low carbon future, in particular, the changing nature and location of our generation.

Ofgem is responsible for transmission charging arrangements. The Government understands that Ofgem intends to undertake its own independent review of the issue. The Government will provide Ofgem with its view of the overall policy context for transmission charging in Great

Britain and the high level outcomes that the regime needs to promote. Ofgem will consult in the normal manner in due course.

II) Technology-specific actions

Our 2050 pathways work shows that there are various possible combinations of three different low carbon technologies which would work in the power sector: renewables, nuclear, and carbon capture and storage.

The Government continues to invest in low carbon innovation. The Committee on Climate Change has estimated UK public RD&D spending to be £550 million for 2009/10. As the NAO has recently highlighted, in the past Government has been less effective at coordinating funding, or at reporting spending figures that capture the full range of activity. We will address this by improving coordination, and by publishing more comprehensive spending figures annually.

Renewables

The Coalition Document is clear that this government will seek to increase the target for energy from renewable sources, subject to the advice of the Climate Change Committee. We must have a greater focus on all forms of renewable energy including heat and transport fuel in addition to electricity. In this section we focus on renewable electricity. Renewable heat is covered in the section (above, see Action 12) on low carbon heat.

The UK has been blessed with a wealth of potential renewable energy resources, both on and offshore. We also have a significant resource going to waste – literally. We want to exploit as much as is economically possible of the 100 million tonnes of manures, sewage and food waste that we generate each year and convert it to heat, power and transport fuel. In Germany, energy from waste already accounts for 7.5% of renewable energy. Defra and DECC are leading a cross-Government project on Energy from Waste which will report late in 2010, and will provide guidance on how and where Energy from Waste could best be used. Successfully exploiting our renewable resources will make a strong contribution to our energy needs and allow us to be less reliant on others, provide opportunities for investment in new industries and technologies, and contribute to efforts to reduce emissions of harmful greenhouse gases and tackle dangerous climate change.

The current levels of deployment make clear the last administration's failure to exploit these resources – the latest cross-Europe statistics on overall renewable energy consumption shows that in 2007 the UK had the lowest contribution from renewables of any major EU country, ahead of just Malta.

This Government is committed to being the greenest Government ever, which includes a firm commitment to renewable energy. The coalition document sets out a wide range of policies that will enable us to go further. This includes engaging with the independent UK Committee on Climate Change to advise on whether it is possible to increase our ambition for the level of energy from renewables for 2020 and beyond.

Our approach to deployment will be different to that of the last administration. We will take positive action to drive renewables deployment through the implementation of a robust Delivery Plan for renewables. The Delivery Plan will:

- set clear priorities reflecting cost, market and investor views, technical deliverability reflecting impacts on people, the wider environment, building community support;
- set out milestones, roles for government, industry, local government and other partners;
- establish a set of metrics to monitor deployment progress.

The goal is to work with the market and our delivery partners over the summer before publishing the roadmap for implementation.

In addition to developing the Delivery Plan, we will get on with the business of deployment. We are committed to establishing a comprehensive programme of appropriate financial support for renewable electricity and as part of this we are today announcing action to exploit the potential for renewable electricity from dedicated biomass, energy from waste, and anaerobic digestion. In addition to this we are looking forward to helping newer technologies.

The Government will support the development of marine energy in the UK by providing opportunity for deployment of marine energy devices alongside onshore infrastructure such as grid, industry and supply chain development, economic regeneration, skills and academic excellence. We will consider how the development of Marine Energy Parks around the British coast can help to support marine energy in the UK and we will be making detailed proposals by the end of the year.

ACTION 22: We have asked the Committee on Climate Change for advice on the scope for a more ambitious target for renewables.

ACTION 23: We will publish a renewables delivery plan to drive faster deployment through the decade.

ACTION 24: The Government will support the development of marine energy in the UK.

'Grandfathering' is a policy intent not to amend support under the Renewables Obligation (RO) for a generator once it has been accredited by Ofgem. This provides investors with the confidence that the Government's policy is not to amend the level of support they receive at a future banding review.

ACTION 25: We are taking immediate action to exploit the potential of bio-electricity and energy from waste, by grandfathering support under the Renewables Obligation for electricity from dedicated biomass, energy from waste, anaerobic digestion and advanced conversion technologies, such as pyrolysis and gasification. We will publish in the autumn a joint industry/Government action plan to deliver a huge increase in energy from waste through anaerobic digestion.

Distributed energy and micro-generation

Renewables do not always have to be at large scale. Opportunities for renewable energy deployment exist at a wide range of scales, from large scale power and heat production to microgeneration. As we move towards a less carbon intensive economy we will make increasing use of more efficient, low carbon decentralised energy such as micro-generation, combined heat and power systems and district heating networks. These technologies can make a significant contribution to our long term targets on reducing carbon emissions and increasing energy

security. We welcome the increased focus – particularly amongst communities and local authorities – on the opportunities offered by decentralised energy.

On 12th July 2010, we launched a collaborative consultation exercise with industry to examine the barriers to increased take up of microgeneration technologies in industrial, community and household settings as part of our preparation of a new Microgeneration Strategy. We are also continuing to build the evidence base to support deployment of district heating networks in appropriate communities across the UK. This means, for example, working to ensure the planning system supports decentralised energy and that local authorities have the support and guidance they need. In short, this coalition wants to be more ambitious on this decentralised energy agenda.

Local authorities currently face a restriction in their ability to sell electricity which is limiting their ability to make the most of these opportunities. The Government has therefore announced its intention to remove this restriction by the end of the year so that local authorities will be able to sell electricity they generate themselves from renewables.

ACTION 26: We are currently consulting on a new micro-generation strategy aimed at ensuring that these technologies reach their full potential to deliver low carbon heat and electricity in households and at community scales.

One potential drawback of renewably-generated electricity is that much of it is 'intermittent' and cannot easily provide a predictable base load or a variable response to demand. Other technologies therefore need to be considered alongside renewable generation.

Nuclear

Nuclear power is a proven base-load technology, and it too can be a part of the low carbon future. One strength of the 2050 calculator that we are making available today is that it allows anyone to try out different combinations of these technologies and see how the carbon savings add up. It also includes some initial costings of the various pathways, both with and without nuclear.

The coalition agreement is clear that new nuclear can go ahead so long as there is no public subsidy. The Government is committed to removing any unnecessary obstacles to investment in new nuclear power, including by taking the following four facilitative actions:

ACTION 27: We will consult on a revised draft of the nuclear National Policy Statement in the Autumn and put it before Parliament for ratification next Spring.

ACTION 28: We will make a decision about Regulatory Justification of new nuclear reactor designs.

ACTION 29: The Government will ensure that the regulators have the ability to maintain the level of resource needed to deliver a meaningful end to Generic Design Assessment of new nuclear reactor designs in June 2011.

ACTION 30: We will finalise the arrangements to ensure that new nuclear operators set aside sufficient money from day one to pay for waste and decommissioning.

In addition, we are working to ensure that there is a supply chain and skills base in place to enable new nuclear to happen and ensure that the UK benefits from this activity.

Carbon capture and storage

In the medium term, coal and gas will remain important for electricity generation, providing secure base load generation alongside nuclear, and a flexible complement to intermittent renewables. Carbon capture and storage technology (CCS) is vital in this regard because it will enable coal and gas to continue to provide this function without jeopardising our emission reduction goals, thereby meeting our security of supply needs and giving the UK a head-start in a technology that can be exported across the world. This country has significant storage capacity for captured carbon dioxide in depleted oil and gas fields under the North Sea and considerable experience in offshore engineering.

The Coalition Agreement committed to I) continue public sector investment in four CCS demonstration projects and II) establish an Emissions Performance Standard to set limits on carbon dioxide emissions from coal-fired power stations in the future.

We are currently supporting detailed design work, as a key element of the first CCS demonstration competition. On 8 July we announced a market sounding exercise for CCS project developers. This is intended to help DECC to explore options for the selection of future CCS demonstration projects, and learn about potential projects being developed by industry.

ACTION 31: We will engage with industry on the development of the selection process for future CCS demonstration projects with the intention of launching a formal call by the end of the year.

We will be considering over the summer how best to achieve the objectives of the coalition agreement and the recent advice from the Committee on Climate Change (CCC), in respect of an Emissions Performance Standard, bearing in mind the need to ensure security of supply whilst driving decarbonisation. We aim to consult on our plans as a key element of the Electricity Market Reform consultation in the Autumn, and to include the outcome in the Spring 2011 White Paper. We are also considering the CCC's advice on the issue of CCS for gas.

We announced earlier this month that we are launching a CCS Development Forum to play a vital function holding DECC to account on delivery of its CCS commitments. A key focus of the Forum will be on delivering CCS in the UK as soon as possible, and in addressing practical barriers to delivery. In this context, we intend to publish a CCS Roadmap, which will articulate our proposed time-scale, and set out the key policy and commercial issues which have to be addressed, and by when.

3. MANAGING OUR ENERGY LEGACY

The Department of Energy and Climate Change is responsible, through the Nuclear Decommissioning Authority (NDA), for managing the country's nuclear legacy. It is essential that this issue is tackled vigorously and urgently. The NDA is funded by a combination of commercial income and direct Government funding. From 2011/12 to 2013/14, NDA's commercial income is projected to decline, while activities required to tackle the highest risks and hazards mean that expenditure may increase over this period. Government funding for the NDA in coming years will be set in the 2010 Spending Review.

A key element of managing the nuclear legacy is ensuring we can manage radioactive waste for the long-term in a way that provides safety, security and environmental protection. DECC and the NDA are currently engaged in an ongoing process to implement geological disposal of higher activity radioactive waste in the UK. This process draws from experience gained around the globe in managing this material and relies on positive engagement with willing communities who may consider hosting a deep geological disposal facility in the future.

At the 2010 Review Conference of the Non-Proliferation Treaty, held in May this year, agreement was reached on a number of recommendations including some relating to the management of fissile material. These recommendations recognised and reaffirmed the security and non-proliferation risks of plutonium and other fissile material. In acknowledgment of these recommendations the UK Government intends to review its current and anticipated holdings of plutonium and consider plans for its long term management.

While the plutonium is stored in custom built stores that afford safe and secure storage there are nonetheless security and proliferation sensitivities associated with such storage that mean we have to consider alternatives to indefinite storage.

In taking this forward we must ensure that the options for management of this material are considered carefully, tested and affordable before committing to a course of action that we can be confident will deliver the greatest benefits for the UK.

The Government has also inherited some financial liabilities in respect of the formerly-nationalised coal industry. One focus at present is litigation concerning osteoarthritis of the knee amongst coal miners, and respiratory and cancer diseases alleged to have arisen from certain coking operations.

4. DRIVING ACTION ON CLIMATE CHANGE AT HOME AND ABROAD

Climate change is the greatest global challenge we face. The UK accounts for only two per cent of global emissions so, if we are to address the challenge that climate change presents to our security and prosperity, we must do so by acting in partnership with other countries. But to make our position credible on the global stage, we also have to show that we are making real progress in cutting our own emissions, meeting our own targets, and moving our own economy on to a low carbon basis. And we have to show we are doing so without jeopardising economic success, energy security and UK business competitiveness. This section deals with three closely related issues: a) action by the UK Government to promote a concerted global effort on climate change; b) action by the UK Government to promote low carbon technologies and UK business' overseas interests; c) action in the UK to set and meet carbon budgets across the economy (including but also going beyond the actions on energy production and consumption set out above).

a) Promoting action on climate change around the world

The Copenhagen Conference, in December 2009, fell short of the high expectations of many countries seeking a comprehensive global agreement to reduce emissions. But despite the disappointments of Copenhagen, the case for collective global action remains strong. There is rapid action in China, Japan and South Korea to move towards lower carbon growth and exploit new markets in low carbon technologies. Major developing countries such as Brazil and Indonesia have come forward with emissions reduction plans on an ambitious scale. In the US, although the prospects of securing domestic cap and trade legislation this year are slim, the economic trend towards low carbon growth is clear: in 2008 for the first time the US wind industry employed more people than US coal mining.

In turn, Europe's lead in low carbon technologies is at risk. Our industrial future – our competitiveness and our prosperity – depends on being a pioneer of the new green industries that will decarbonise our economies. Europe needs to be at the head of the low carbon race. The Government wants to see the EU take ambitious action to accelerate the transition to low carbon growth in every member state. We will push for the EU to demonstrate leadership in tackling international climate change, including by supporting an increase in the EU emission reduction target to 30% by 2020 (see above).

To secure action on a sufficient scale to limit average global temperature increases to no more than 2 degrees Celsius, we need to create the right political and economic conditions globally for all countries to act. To help achieve this, the Government is committed to working for an ambitious global deal to reduce emissions and support action to adapt to the unavoidable consequences of climate change. A global agreement will provide a common framework in which countries can act on a transparent and consistent basis, underpinning the certainty that the private sector needs to make low carbon investments for the long-term.

The prospects for securing a global deal remain challenging. In the wake of Copenhagen many substantive issues remain unresolved between countries, and few expect to secure a comprehensive global agreement at the Cancun Conference this year. However, by taking

practical action which builds confidence amongst developed and developing countries, we believe that by Cancun we can make substantial progress towards international agreement on the key elements of a global deal and stimulate practical action in key countries to reduce emissions and promote low carbon growth.

To achieve this, the Government wants to see action in five key areas:

- **Delivery of countries' emissions reduction commitments**: It is essential that all countries sustain the emissions reductions offers they have put forward since Copenhagen. Over 70 countries, accounting for around 80% of global emissions, have submitted targets and actions under the Copenhagen Accord. If delivered in full, these should be consistent with global emissions peaking before 2020. The Government has made clear that we want to see the European Union demonstrate its leadership of the global effort by raising its emissions reduction target from -20% by 2020 to -30% below 1990 levels.

- **Sufficient finance to enable countries to reduce emissions and adapt to climate change**: The Government has confirmed its commitment to provide £1.5 billion fast start finance to developing countries between now and 2012 to support immediate action to tackle climate change. We are working closely with our EU partners to ensure that by Cancun, developed countries collectively have made substantial progress in delivering their pledge to provide approaching $30 billion of Fast Start finance by 2012. In the longer term, the Government will explore new sources of finance for climate purposes. We support the work of the UN Secretary General's Advisory Group on Finance, on which the Secretary of State for Energy and Climate Change sits, which will make recommendations on these issues in the autumn. And by Cancun, we want to make substantial progress in agreeing the design principles of an international Green Fund to disburse climate finance.

- **Rapid progress in promoting the development and deployment of low carbon technologies**: By Cancun we want to see progress in designing an international technology mechanism – a framework for practical collaboration between countries on low carbon technologies. To complement this work we aim to stimulate a wide range of practical action: through the work of the US-chaired Clean Energy Ministerial to draw up action plans for key technologies; through our bilateral partnerships with key countries; and by working through international technology institutions such as the International Energy Agency and the Renewable Energy and Energy Efficiency Partnership.

- **Establishing the core architecture and mechanisms needed to underpin global action:** The UK welcomes the dialogue which Germany and South Africa are leading on future arrangements for the Measurement, Reporting and Verification (MRV) of countries' actions to limit emissions. We also want to strengthen the dialogue between those countries which have established, or are seeking to establish, emission trading systems, including by providing bilateral support and working through the International Carbon Action Partnership.

- **Practical action in key emitting sectors and gases:** The Government has committed £300 million to support action to reduce emissions from deforestation and forest degradation. In May, with over 50 other nations the UK signed the international

REDD+ (Reducing Emissions from Deforestation and Forest Degradation) Partnership Agreement, which aims to agree a package of measures and support for forest nations in addressing deforestation. We will also explore what scope there might be to pursue further practical collaboration in other sectors and gases, such as agriculture, energy intensive industries and methane.

b) Promoting low carbon technologies overseas

Low carbon energy technologies such as renewable energy, CCS and low carbon transport, alongside energy efficiency, need to contribute the major share of global emission reductions required to stay on a 2°C trajectory. They also contribute to our energy security and will provide business opportunities for UK companies internationally. Analysis by the International Energy Agency shows that additional investment of around $46 trillion is needed over the period to 2050, requiring a substantial scaling-up of support, both for development of innovative technologies and deployment of commercially available technologies. The Government is working to support global development and deployment of low carbon technology, and UK company penetration of this market, in four ways:

- **Collaboration**: working with other countries in multilateral policy fora such as the G8, G20, the US-led Clean Energy Ministerial and the UN Framework Convention on Climate Change.
- **Assistance:** helping other governments to implement reforms and build capacity, primarily by working through international technology institutions.
- **Joint projects:** promoting RD&D and business collaborations with other countries through multilateral or bilateral projects. DECC works closely with UKTI to support UK companies developing export opportunities in low carbon technology.
- **Financing:** Enhancing provision of international finance for technology development and deployment, using public finance and leveraging private investment.

c) Action on climate change in the UK

The legal framework for action on climate change in the UK is provided by the Climate Change Act 2008. It sets targets for 2020 and 2050 and the system of five-yearly carbon budgets that ensure we remain on track in reducing emissions, and gives the Committee on Climate Change a statutory function to provide advice to the Government on these and other aspects of the Act. Meeting the first three carbon budgets, which were set in 2009 and run from 2008 up to 2022, requires action across the economy and in all sectors. The policies detailed in this Annual Energy Statement all play a key part in decarbonising our economy. We are also taking action in other sectors, in particular transport, waste and agriculture.

We will seek to implement cost-effective measures across different sectors of the economy to meet our targets and we seek to ensure targets are met in a way which supports economic growth and embraces opportunities for the economy.

Underpinning our efforts is a commitment in the UK to move to a low carbon economy. Action will continue to be taken to support economic growth in key sectors of the economy where the development of low carbon and renewable technologies is key to meeting our climate change targets, and to improve the energy efficiency of our businesses.

The Committee on Climate Change (CCC) published their second annual report on the UK's progress in meeting its carbon budgets on 30th June 2010. We are considering the report and

will respond by 15th October as determined by the timetable in the Climate Change Act. Next year we will set the level of the fourth carbon budget, taking into account the advice of the CCC. We will do this by the end of June 2011. This crucial fourth period will set the emission reduction trajectory for the 2020s, which is a critical period for ensuring we remain on track to meet our 2050 target.

The Government is required, under the Climate Change Act, to publish a report setting out proposals and policies for meeting the fourth carbon budget as soon as possible after setting the level.

The Government will ensure that robust governance mechanisms help to deliver these carbon reductions and promote a sense of shared responsibility across all Whitehall Departments.

Looking further ahead, the 2050 pathways work draws out certain common messages, in particular the need for action across all sectors in terms of both energy demand and supply, in order to deliver the deep emissions cuts we need. Sustainable bioenergy is important where electrification is unlikely to be practical, such as in long-haul freight transport and aviation and some industrial high-grade heating processes. And while emissions from agriculture, waste, industrial processes and international transport make up a small proportion of emissions today, by 2050, if no action is taken, emissions from these sectors alone would be expected to exceed the maximum level of emissions for the whole economy. Tackling these emissions will therefore require a concerted effort across all aspects of Government, society and the economy.

To support this, a skilled workforce will be essential if we are to meet our carbon targets and realise the significant economic opportunities of the transition to a low carbon and resource efficient world. We will look to strengthen the skills provision, in particular the delivery of significantly higher volumes of science, technology, engineering, maths skills at all levels.

CONCLUSION

The next decade is both an opportunity and a huge challenge for DECC and its delivery partners. Together, we need to deliver a radical step change in how energy is produced and how it is used. The pace of delivery needs to step up substantially, and at a time when public spending is highly constrained. We also need to recognise that the tighter regulatory framework brings with it fresh challenges in particular the "one in, one out" regime. We will continue to play an active role in this coalition policy, and strive to identify deregulatory measures to reduce the regulatory costs imposed by DECC policies.

Within this context we are placing a high premium on:

- Ministerial accountability for the delivery of Government programmes;
- efficiency, including looking for synergies between different areas of DECC's and the Government's delivery landscape;
- cost savings, which means we must use limited public investment to maximum effect.

We will therefore consider how best to streamline delivery of the functions needed to meet our energy and climate change objectives. We will explore options over the Autumn, and taking account of the outcome of the Spending Review, publish our conclusions.

Ofgem's role as independent regulator of the gas and electricity markets is a critical part of the landscape that enables delivery of our ambitious energy and climate change objectives – whether by securing the investment in grid infrastructure needed to connect renewable generators, or ensuring that competition is working to minimise consumers' energy bills.

ACTION 32: We are announcing today a review of the role of Ofgem.

We will be exploring whether any changes are needed to the regulatory framework to enable the Government to achieve its goals, and will publish conclusions alongside the Electricity Market Reform White Paper in Spring 2011, and will consider in particular:

- Government's objectives for independent regulation of the energy sector.
- The boundary of responsibility between Ofgem and Ministers.
- Ofgem's statutory duties and whether they are fit for purpose, particularly within the context of the Government's energy and climate change objectives.

Being published alongside this statement are:

- DECC's Structural Reform Plan
- 2050 Pathways Call for evidence & Energy Calculator
- Impacts of climate change and energy policies on energy prices and bills to 2020
- Prospectus for Smart Meters
- Government Response to consultation on the grandfathering policy of support for dedicated biomass, anaerobic digestion and energy from waste under the Renewables Obligation.

SUMMARY OF ACTIONS

ACTION 1: The Government is tackling the barriers to investment in energy efficiency by launching the Green Deal and rolling out smart meters.

ACTION 2: The Government has committed to extending the Carbon Emissions Reduction Target (CERT) to the end of 2012. As part of this we are increasing the target for the scheme by over 100 million lifetime tonnes of CO_2, and restructuring it to drive insulation measures.

ACTION 3: The Government will include powers in the forthcoming Energy Security and Green Economy Bill to introduce a new obligation on energy companies from 2012, to take over beyond CERT.

ACTION 4: Alongside this Statement, the Government and Ofgem are together publishing a Prospectus for Smart Meters today.

ACTION 5: As part of the CERT extension, we are introducing a "super priority" group, to ensure that the poorest, most vulnerable households stand to benefit from the scheme.

ACTION 6: We will keep the CRC under review and look at the future of Climate Change Agreements in order to ensure that we deliver significant improvements in energy efficiency with minimal complexity and policy overlap.

ACTION 7: Alongside this Statement, the Government is publishing analysis on the impact of energy and climate change policies on both household and business energy bills up to 2020, and will continue to do so on an annual basis.

ACTION 8: All 17 central Government Departments now have comprehensive plans in place to meet the 10% reduction target, and all have real-time energy displays in place.

ACTION 9: We will press the European Commission to set out a clear vision for a secure, low carbon EU economy out to 2050, and to ensure that the forthcoming EU Energy Strategy proposes policies to enable the energy sector to play its full role in this.

ACTION 10: We are doubling environmental inspections of offshore oil and gas drilling rigs and will undertake a full review of the oil and gas environmental regime following the outcome of investigations into the causes of the Gulf of Mexico incident.

ACTION 11: In the forthcoming Energy Security and Green Economy Bill, we will seek to ensure that access to UK oil and gas infrastructure is available to all companies. This will help the exploitation of smaller and more difficult oil and gas fields, allowing us to make the most of our natural resources.

ACTION 12: We will introduce further measures on gas security as promised in the Coalition Programme for Government. In the future, we need more gas storage capacity, more gas import capacity, and greater assurance that our market will deliver gas when it is needed. This means that our gas market arrangements must have a sharper focus on increased flexibility and resilience.

ACTION 13: We will set out detailed proposals for taking forward the Government's commitment to renewable heat through the Spending Review.

ACTION 14: We will launch Community Energy Online in autumn 2010 to support local authorities and communities who wish to develop local renewable energy solutions.

ACTION 15: In the autumn, the Government will publish proposals to reform the climate change levy in order to provide more certainty and support to the carbon price. Subject to the outcome of that consultation, the Government intends to bring forward relevant legislation in Finance Bill 2011.

ACTION 16: We are pressing for the EU to move from the current 20% target to a 30% target for GHG emission reductions by 2020.

ACTION 17: The Electricity Market Reform project will issue a consultation document in the Autumn and a White Paper in Spring 2011.

ACTION 18: The Government will publish proposals for a Green Investment Bank following the Spending Review.

ACTION 19: We will publish a detailed implementation plan later in the summer and consult on revised draft energy National Policy Statements in the autumn.

ACTION 20: We will implement the 'Connect and Manage' regime in August 2010.

ACTION 21: We have decided to consult further with Ofgem on the enduring regime for offshore transmission.

ACTION 22: We have asked the Committee on Climate Change for advice on the scope for a more ambitious target for renewables.

ACTION 23: We will publish a renewables delivery plan to drive faster deployment through the decade.

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