

## Sustainable Development Report 2008/09



Ref: 141/09

**Date of publication:** 20 November 2009

---

**Target audience:** consumer and environmental groups, gas and electricity market participants, Government departments and regulators, energy consumers and other interested parties.

---

### Overview:

This annual report assesses our contribution to the achievement of sustainable development, providing updates on our activities and intentions for the coming year, as well as reflections on wider events. We have an important role in shaping the gas and electricity industries, and place issues such as climate change, security of supply and fairness at the heart of our activities.

This year we have announced our own schemes to deliver low carbon networks, ensure secure and reliable energy supplies and end unfair energy pricing practices, and have been working closely with the Government to deliver on these and other sustainable development themes. We have also made significant changes to the way we work with the creation of a new Sustainable Development Division and Ofgem E-Serve. These moves give prominence to our sustainable development focus and prepare for the delivery of new environmental programmes.

---

### Contact:

Tom Handysides  
Policy Manager, Sustainable Development  
020 7901 7289  
[tom.handysides@ofgem.gov.uk](mailto:tom.handysides@ofgem.gov.uk)

Graham Knowles  
Senior Manager, Sustainable Development  
020 7901 7103  
[graham.knowles@ofgem.gov.uk](mailto:graham.knowles@ofgem.gov.uk)

## Ofgem statement on sustainable development

The UK Government and Devolved Administrations set out a strategy for sustainable development, *Securing The Future*, in 2005. Drawing on this framework and stakeholder feedback, we focus on the five themes which we think capture how the Gas and Electricity Markets Authority should contribute to the sustainability challenges of the 21<sup>st</sup> century:

- ***Managing the transition to a low carbon economy.*** We are responsible for the framework for the efficient functioning of gas and electricity markets. Our decisions on the industry rules governing the wholesale and retail markets and the regulation of monopoly networks facilitate the development of lower carbon technologies. We are clear that any assessment of economic efficiency should incorporate the environmental costs associated with a proposal.
- ***Eradicating fuel poverty and protecting vulnerable customers.*** While the causes of fuel poverty go beyond energy markets, we are committed to driving forward the debate and working with Government to eradicate fuel poverty. Competitive markets can deliver lower prices, better service and more innovative products than regulated markets, but some regulation remains necessary to protect vulnerable energy customers. Our position recognises the potential conflicts between seeking to tackle climate change and reducing fuel poverty but we aim to ensure that sustainable development is achieved at least cost.
- ***Promoting energy saving.*** Energy conservation and improved energy efficiency are critical elements in any sustainable development strategy. We recognise the huge range of benefits – environmental, social and economic – that energy saving can bring and are committed to playing our part to encourage all energy consumers to be more energy efficient and to facilitating the provision of energy services by market participants.
- ***Ensuring a secure and reliable gas and electricity supply.*** Our regulation of the electricity and gas networks, and our commitment to sustaining a regulatory environment that supports investment, underpin our goal to ensure that cost-effective, reliable and diverse energy supplies are always available to consumers.
- ***Supporting improvement in all aspects of the environment.*** Beyond the climate change agenda, the gas and electricity industries affect the environment through other emissions and their impacts on our countryside and communities. We are committed to working with all stakeholders to ensure that we take these wider considerations into account in all of our decisions and provide advice where relevant.

## Table of Contents

<b>Foreword</b> .....	<b>1</b>
<b>1. Our sustainable development work</b> .....	<b>2</b>
Ofgem and sustainable development .....	2
Embedding sustainable development principles into our decision making .....	3
Ensuring a secure and sustainable low-carbon energy supply .....	3
Meeting the challenge .....	4
The coming year .....	5
<b>2. Managing the transition to a low carbon economy</b> .....	<b>7</b>
Our progress in the past year .....	7
Commitments for 2009/10 .....	10
Charts and analysis for Theme 1 .....	13
<b>Indicator 1: Electricity and gas sector greenhouse gas emissions</b> .....	13
<b>Indicator 2: Impact of carbon price on costs of generation</b> .....	14
<b>Indicator 3: Renewable electricity generation</b> .....	15
<b>Indicator 4: Electricity capacity for combined heat and power</b> .....	17
<b>Indicator 5: Green tariffs</b> .....	17
<b>3. Eradicating fuel poverty and protecting vulnerable customers</b> ....	<b>18</b>
Our progress in the last year .....	19
Commitments for 2009/10 .....	21
Charts and analysis for theme 2 .....	22
<b>Indicator 6: Total number of households in fuel poverty</b> .....	22
<b>Indicator 7: Competition and vulnerable customers</b> .....	23
<b>Indicator 8: Disconnection for debt</b> .....	23
<b>4. Promoting energy saving</b> .....	<b>24</b>
Our progress in the past year .....	24
Commitments for 2009/10 .....	25
Charts and analysis for theme 3 .....	26
<b>Indicator 9: Energy intensity</b> .....	26
<b>Indicator 10: Carbon dioxide savings from the CERT</b> .....	27
<b>Indicator 11: Gas and electricity losses</b> .....	28
<b>5. Ensuring a secure and reliable gas and electricity supply</b> .....	<b>29</b>
Our progress over the past year .....	29
Our commitments for 2009/10 .....	30
Charts and analysis for theme 4 .....	31
<b>Indicator 12: Reliability of supply - network performance</b> .....	31
<b>Indicator 13: Security and diversity of supply - market response</b> .....	33
<b>Indicator 15: Quality of service: supply market performance</b> .....	35
<b>Indicator 16: Product innovation</b> .....	35
<b>6. Supporting improved environmental performance</b> .....	<b>36</b>
Our progress in the past year .....	36
Commitments for 2009/10 .....	37
Charts and analysis for theme 5 .....	38
<b>Indicator 17: Impacts of electricity generation</b> .....	38
<b>Indicator 18: Impacts of electricity and gas networks</b> .....	39
<b>Appendix – The Authority’s Powers and Duties</b> .....	<b>41</b>

## Foreword

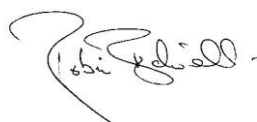
As global leaders continue to build consensus on actions to tackle climate change in Copenhagen this December, the UK is preparing the way for an effective transition to a low carbon economy. Energy is at the core of this transition. Recent EU legislation and this year's UK budget have set the levels for legally binding UK carbon budgets. The Government's summer Low Carbon Transition Plan, and accompanying strategies for renewable energy and heat, has provided the initial structure required to deliver ambitious greenhouse gas reduction targets to the middle of this century.

This report highlights the actions that have been taken by Ofgem over the past year to support this low carbon transition. Our work has included a new proposal that will allow electricity distribution networks to invest £500 million in low carbon innovation in 2010-2015 – this represents a substantial increase in previous initiatives. We have been working on solutions to enable renewable energy to access more easily the transmission networks. Ofgem's Project Discovery has been examining the security of supply issues that will be faced over the next 10-15 years; the Energy Supply Probe has developed new measures to improve consumer engagement in the energy market and protect vulnerable customers. Ofgem's RPI-X@20 project represents a root and branch review of the approach to energy network regulation to enable network companies to meet the challenges of moving to a low carbon economy.

We have also been active in the broader policy debate, engaging with the full range of stakeholders to share knowledge, pool expertise and learn from others. An example of this is the publication in July of 'Can energy charges encourage energy efficiency?', the first in a series of discussion papers. We have also tested and published views from our newly formed Consumer First panel of householders on a wide range of issues including meeting the interests of future consumers, energy efficiency, and network regulation. This work has helped to strengthen our insight and shape our work to protect the interests of existing and future consumers.

EU legislation, the Energy Act 2008 and the Government's Low Carbon Transition Plan (with plans for further clarifications to Ofgem's duties) have put sustainable development at the forefront of energy policy. In addition to the actions outlined in this report, Ofgem itself has restructured its organisation to put in place a new Sustainable Development division. This will help give a greater voice to sustainability and low carbon priorities within Ofgem and at Authority level. Sarah Harrison, an Ofgem Senior Partner, is reviewing how the new Division's work will further embed sustainable development into Ofgem's policies and decision making. The creation of a new business unit, Ofgem E-Serve, will ensure continued efficient delivery of an expanding range of Government environmental programmes.

Transitioning to a low carbon economy will not be easy – but I am confident that Ofgem will address the challenge.



**Robin Bidwell**

Non-executive member of GEMA and Chair of Ofgem's Sustainable Development Committee

## 1. Our sustainable development work

Working towards sustainable development includes not only tackling climate change but also ensuring secure and reliable energy supplies whilst attending to affordability issues for those least able to pay. Although Ofgem has had, since 2004, a secondary duty to contribute to the achievement of sustainable development, the debate and the impetus for change have progressed significantly since then. In recognition of this the Energy Act 2008 made significant changes to our statutory duties. Our revised Principal Objective makes clear that we must have equal regard to future and current consumers. The Act also gave increasing prominence and weight to our duty to contribute to the achievement of sustainable development. We welcomed these changes, and have evolved our thinking on our approach to regulation. This report reflects some key themes that have informed our work recently and will continue to develop in the months and years ahead.

### Ofgem and sustainable development

1.1. In September 2009 we announced a major organisational restructure with the aim of further increasing our role in helping to meet Britain's targets to cut carbon emissions by 34 percent compared to 1990 levels by 2020. The creation of a new Sustainable Development Division reflects the increased profile of sustainable development within Ofgem, with an executive member of the Authority now holding responsibility for sustainable development. A new business unit, Ofgem E-Serve, was set up to respond to the rapid growth of climate change programmes and offshore transmission, together now worth £3.9 billion annually. Meeting the challenges of sustainable development and reforming electricity networks to enable them to support renewable energy are the key themes of the reorganisation, which has also redoubled our European focus which is more vital than ever given issues surrounding security of energy supplies.

1.2. This reorganisation builds on the leadership of the Sustainable Development Committee and the work undertaken over a number of years to embed the principles of sustainable development into Ofgem's structure and ways of working. The Chairman of the Authority leads Environmental<sup>1</sup> and Social Action Advisory Groups through which external experts provide the Chairman directly with advice and guidance on areas of our work that may have significant environmental or social impacts. The Authority's Offshore Electricity Transmission Committee has played a key role in advising on the delivery and administration of the new offshore transmission regime which is facilitating Government targets for 33GW of offshore wind by 2020 which Government estimates will cost £15bn. In addition, in February 2009 the Scottish Executive and the Crown Estate announced the award of 10 exclusivity agreements to build offshore wind farms in Scottish territorial waters. The total awarded capacity equates to over 6GW.

1.3. At working level, we have embedded sustainable development into the detail of the policy development process with new guidance in 2008 on the incorporation of

<sup>1</sup> See [www.ofgem.gov.uk/Sustainability/Environment/Policy/EnvAdvGrp/Pages/EAG.aspx](http://www.ofgem.gov.uk/Sustainability/Environment/Policy/EnvAdvGrp/Pages/EAG.aspx)

the value of carbon into internal and external impact assessments. We will revisit this in the remainder of this year to value carbon both in terms of its market value through the EU Emissions Trading Scheme (EU ETS) and also for sectors not captured within the EU ETS. The Sustainable Development Review being led from the new SD Division will, among other things, shape ways of working internally.

## **Embedding sustainable development principles into our decision making**

### **Ensuring a secure and sustainable low-carbon energy supply**

1.4. One of the key areas we have been focusing on is developing a broader understanding of how future energy supplies can be delivered in a low carbon energy sector. We are entering a period of significant change which presents challenges for the industry as a whole, and for Ofgem as the energy regulator. The depletion of North Sea gas supplies, the slow pace of evolving markets in Europe, the tapering of output from carbon-intensive coal plant, the commencement of the closure of Britain's nuclear fleet, and doubts over the security of gas supplies in mainland Europe all present a challenge to ensuring a secure and sustainable low-carbon energy supply.

1.5. This can be addressed by the development of a new generation set coming forward to fill the gap left by the retirement of old plant. This is likely to include a new generation of nuclear stations, a large increase in renewables and in particular wind generation, and the potential development of new coal plant, provided it can demonstrate carbon capture and storage (CCS) capabilities. The recent economic downturn may also have curbed the level of energy demand in the short term. Management of demand will also play a key role as the economy recovers and output increases.

1.6. From a regulatory perspective, this evolution in the make-up of Britain's energy supplies presents a range of challenges, including:

- Ensuring adequate levels of generation over the period that old plants are phased out and new plants are bought on-line. Ambitious renewables targets could see around 30% of electricity being produced from renewable sources by 2020 compared with 5% today, filling the gap left by retiring coal and nuclear plant;
- Ensuring the transmission and distribution networks evolve to facilitate the new sources of generation (including at household level) both in terms of the physical demands on the system and in ensuring the network extends to connect the new sources of generation. This will require tens of billions of pounds worth of investment over the next decade through price controls set by Ofgem;
- A major expansion in the market for renewable heat, with up to 12% of heating coming from renewable sources by 2020 (from less than 1% today); and
- Examining opportunities for demand to respond to variable supply while maintaining consumer protection, ensuring that energy is used efficiently and that loads are less prone to peaks and troughs.

---

## Meeting the challenge

1.7. We have initiated and been involved in a number of projects to contribute to the achievement of sustainable development:

- Ofgem's Project Discovery concerns the adequacy of Britain's energy supplies over the next 10-15 yrs with a view to the longer-term outlook. Project Discovery is discussed further in Chapter 4.
- Ofgem's Long-term Energy Network Scenarios (LENS) project examined the scenarios for the different demands that may be placed on networks out to 2050. The final report published in November 2008 will help inform debate on future network investments.
- The Transmission Access Review (TAR) project, undertaken jointly with Government and industry, is reforming the transmission access arrangements to help facilitate the entry of new renewable, nuclear and clean coal generators as well as new interconnections with Europe and to aid the diversification of sources of electricity. This is discussed further in Chapter 2.
- Ofgem began a series of discussion papers with a think piece on the role of energy charges in encouraging energy efficiency. This will be followed by further papers over the coming months with the aim of stimulating and informing policy thinking.

1.8. We have made significant progress in incorporating sustainable development within existing work and functions, for example by:

- Placing a strong emphasis on environmental issues in the fifth electricity distribution price control review (DPCR5) and building on our discretionary award scheme for actions which benefit vulnerable customers;
- The commencement of a new incentive scheme to encourage gas transporters to extend gas networks into fuel poor communities with the aim of 10,000 fuel poor households being newly connected within five years;
- Putting vulnerable and low income consumers at the heart of the Energy Supply Probe, which has led to the introduction new domestic supply licence conditions to prohibit undue discrimination and to secure more cost reflective payment methods;
- Strengthening insight into the priorities of existing and future consumers via our Consumer First programme;
- Issuing a final version of new green supply guidelines and establishing a new expert panel to oversee implementation which together will help build consumer confidence and interest in green tariffs;
- Setting new voluntary minimum criteria for 'social tariffs' to give consumers and their advisers confidence in the value of a social tariff. The last year has seen a significant rise in social tariffs with over 1 million customer accounts now registered on social tariffs corresponding to Ofgem's minimum criteria; and
- Agreeing with industry and Consumer Focus new guidelines and measures to better protect vulnerable consumers at risk of being, or who have been, disconnected from their energy supply.

1.9. We also have our on-going work in engaging with and influencing others on SD issues. This has included:



- Engaging with Government in the key policy development it has undertaken as part of its Low Carbon Transition Plan white paper, launched in July 2009<sup>2</sup>, and the associated policy development papers on Renewable Energy, Heat and Energy Saving Strategy and Carbon Capture and Storage;
- Working with Government on its plans to roll out smart meters by 2020;
- Developing the new offshore transmission arrangements and commencing the tender process to facilitate the connection of an initial 2GW of offshore renewable generation;
- Continuing to efficiently administer a range of environmental support schemes, including the Renewables Obligation (RO), Carbon Emissions Reduction Target (CERT), Community Energy Saving Programme (CESP) and exemptions from the Climate Change Levy (CCL); and
- Engaging with Government on its proposals for a social price support scheme to replace the existing voluntary arrangements.

1.10. We have taken an active role in Europe and pro-actively promoted sustainable development within the Council of European Energy Regulators (CEER), and together with our fellow European regulators have actively engaged with Government and industry at European level. Our role in Europe has included:

- Chairing the CEER Sustainable Development Task Force;
- Engaging with the European Commission, MEPs, and DECC on the Green Package;
- Publishing (with CEER) a comparison of European renewable electricity support schemes and the first ever comparison of energy efficiency support schemes;
- Drafting on behalf of CEER the first ever European Sustainable Development report; and
- Hosting the Citizen's Energy Forum in London in September, at which consumer issues were discussed on a European-wide basis.

## The coming year

1.11. The year ahead will be one of our most challenging. With the creation of our new Sustainable Development division we have positioned ourselves to meet the challenge and Sustainable Development will be at the heart of many of our flagship projects. Examples of these include:

- Undertaking the second phase of the Discovery project, which will present a set of policy options for delivering secure and reliable energy in a low carbon environment;
- Publishing the final proposals for DPCR5, which will set new incentives to curb electrical losses and to provide better customer service, for example on electricity connections. The package will also deliver unprecedented levels of innovation funding to trial low carbon network solutions;
- Working with DECC to shape the policy framework that will see smart meters installed in every home by the end of 2020;

---

<sup>2</sup>

Low Carbon Transition Plan and related documents available at

[http://www.decc.gov.uk/en/content/cms/publications/lc\\_trans\\_plan/lc\\_trans\\_plan.aspx](http://www.decc.gov.uk/en/content/cms/publications/lc_trans_plan/lc_trans_plan.aspx)



- Working with the Government on the implementation of a new Transmission Access Regime with the aim of securing connections for renewable and new generators on more equitable and predictable terms at a fair cost to consumers;
- Publishing further discussion papers including on ways to manage energy demand and continuing to contribute expertise and analysis to Government consultations, for example on the development of financial incentives to support renewables development and on energy efficiency;
- Publishing (with CEER) a discussion paper that examines the regulatory treatment of wind generation across the EU;
- Completing a review of best practice on debt prevention and management across all energy suppliers with particular focus on how suppliers are responding to tougher economic times and ensuring that they take customers ability to pay into account when setting repayment rates; and
- Contributing to DECC's development work to establish a new Social Price Support mechanism.

1.12. Much of our day-to-day work also retains a strong SD focus. We will complete the current SD review and implement recommendations that further embed sustainable development into our work to protect existing and future consumers. We will also continue to make an impact through:

- Efficiently administering environmental support schemes, including the development of arrangements for the revised CERT and potential revisions to the RO, feed-in tariffs for renewable and low carbon electricity, the renewable heat incentive and the incentive for coal with carbon capture and storage capabilities;
- Completing the first round of offshore transmission tenders and commencing the second round;
- Leading on European sustainable development issues through CEER;
- Continuing to work in partnership with Government on implementing low carbon energy policy; and
- Continuing to play our part in helping to tackle fuel poverty alongside Government and other stakeholders.

## 2. Managing the transition to a low carbon economy

In this chapter we explain how we influence the energy sector in a number of ways to move towards a low carbon future. We have a direct influence through the way in which we regulate monopoly network businesses, and through decisions we take in relation to the competitive parts of the industry. As administrator we ensure that support schemes operate smoothly which provides confidence for investors and ensures better value for customers. We also have an influential voice in the policy debate. Energy efficiency and smart metering issues which are also important elements of the transition are addressed in Chapter 4.

In this chapter we examine developments against the following indicators:

- greenhouse gas emissions from the gas and electricity sectors
- impact of carbon price on the cost of generation
- renewable electricity generation
- electrical capacity from combined heat and power

### Our progress in the past year

#### Network regulation

**2.1. Distribution Price Control Review 5 (DPCR5).** The transition to a low carbon economy is one of the major themes of DPCR5. In the DPCR5 Initial Proposals we have proposed a range of measures, including our flagship new £500 million fund to encourage Distribution Network Operators (DNOs) to try out new technologies and new commercial arrangements needed to serve the low carbon economy<sup>3</sup>. In addition we are proposing a requirement for DNOs to report on business carbon footprints. In parallel we have been progressing work to improve cost reflectivity of DNOs' use of system charges to ensure, among other things, they reflect the benefits that distributed energy can bring to local systems<sup>4</sup>. Work is continuing to develop a common charging methodology for use of system at high and low voltage levels, with a target implementation date of 1 April 2010. We plan to introduce cost reflective charging methodologies at extra

*'We would like to encourage Distribution Network Operators to...*

*...reduce their own environmental impact...*

*...make it easier for customers to adopt low carbon or energy saving measures over the next five years...*

*...make sure they adjust in a timely manner to the profound changes to network use that are anticipated over the next five years and beyond...'*

*DPCR5 Initial Proposals, July 2009*

<sup>3</sup> See [www.ofgem.gov.uk/Pages/MoreInformation.aspx?docid=254&refer=Networks/ElecDist/PriceCntrls/DPCR5](http://www.ofgem.gov.uk/Pages/MoreInformation.aspx?docid=254&refer=Networks/ElecDist/PriceCntrls/DPCR5)

<sup>4</sup> See [www.ofgem.gov.uk/Networks/ElecDist/Policy/DistChrgs/Pages/DistChrgs.aspx](http://www.ofgem.gov.uk/Networks/ElecDist/Policy/DistChrgs/Pages/DistChrgs.aspx)

high voltage level a year later.

**2.2. Transmission Access Review.** The TAR project, conducted in cooperation with Government and industry, began after the publication of the Energy White Paper in May 2007 which mandated Ofgem and BERR (now DECC) to review the present technical, commercial and regulatory framework for the delivery of new transmission infrastructure and the management of the grid. This collaborative approach, necessary as normal governance arrangements mean that the industry will have to propose and eventually agree to changes, was initially successful in bringing forward recommendations in a concluding report in 2008. Following this, three models of grid access were developed by industry. We have expressed concerns that the model attracting majority support within the industry would give rise to significantly higher charges for new, low carbon generation (such as renewables) than for existing high carbon emitting coal and gas generation in similar locations. Attempts that were made to develop a "fourth model" to deal with these concerns have unfortunately been frustrated by the industry process which has prevented that model being further developed and consulted upon. In view of this situation, the Authority formally recommended to the Secretary of State to use his powers under the Energy Act 2008 to facilitate reform of the transmission access arrangements<sup>5</sup>. We have also expressed our readiness to work with DECC and National Grid to help bring about an enduring transmission access regime. We have therefore made publicly available our preliminary assessment of the access models, continue to be actively involved with the reform of access arrangements and are engaging with the Government on bringing forward reform<sup>6</sup>.

**2.3. 2020 transmission study.** From now until 2020 and beyond, the electricity transmission system will change significantly, requiring the electricity industry to tackle new legal, technical, commercial and regulatory challenges. For this reason, Ofgem and DECC convened an Energy Networks Strategy Group to identify the transmission reinforcements needed to support the 2020 targets. The 2020 Transmission Study<sup>7</sup>, undertaken jointly by the transmission owners (TOs) and overseen by the ENSG, was published in March this year. It identified a large number of major reinforcement projects to facilitate the increase in conventional and renewable generation likely to be needed by 2020. The combined cost of these projects is c£4.7bn. The results of this study are now used in the assessment of TOs' investment decisions. This report is an important contribution to the ongoing work to identify network solutions to facilitate the achievement of the 2020 renewable targets whilst ensuring that electricity supply remains secure and affordable.

**2.4. Incentives to encourage anticipatory investment.** The TAR Final Report concluded that, to facilitate the 2020 targets, TOs needed to be allowed to make investments ahead of user commitment. In response we implemented enhanced short-term TO incentives on 1 April 2009, and have been developing long term measures for implementation this winter. To drive short term work to address immediate barriers to investment, primarily associated with pre-works funding, we invited nominations from the transmission companies of projects for consideration as

---

<sup>5</sup> See [www.ofgem.gov.uk/Networks/Trans/ElecTransPolicy/tar/Documents1/Miliband - 250609.PDF](http://www.ofgem.gov.uk/Networks/Trans/ElecTransPolicy/tar/Documents1/Miliband - 250609.PDF)

<sup>6</sup> See [www.ofgem.gov.uk/Networks/Trans/ElecTransPolicy/tar/Documents1/Enduring\\_Transmission\\_Access\\_Reform\\_FINAL\\_PUBLISHED.pdf](http://www.ofgem.gov.uk/Networks/Trans/ElecTransPolicy/tar/Documents1/Enduring_Transmission_Access_Reform_FINAL_PUBLISHED.pdf)

<sup>7</sup> See [www.ensg.gov.uk/assets/1696-01-ensg\\_vision2020.pdf](http://www.ensg.gov.uk/assets/1696-01-ensg_vision2020.pdf)

part of the proposed short term measures. On 1 April, following further consultation , we implemented licence changes allowing the TOs to recover £12.5m for 2009/10 for preconstruction works related to specific grid reinforcement projects. This means that we have enabled the transmission companies to initiate work that will ensure that future market entrants will be connected as quickly as possible.

**2.5. Regulatory review.** Finally, the RPI-X@20 review is considering whether the existing regulatory model for the gas and electricity networks is still fit for purpose after twenty years. This year we have published a number of working papers to stimulate industry debate, which are available on our website<sup>8</sup>. Challenges such as the transition to a low carbon economy will require significant changes and we are considering how the regulatory framework may need to evolve to deliver them.

### **Administration of environmental programmes**

**2.6. Home Energy Saving Programme.** Since the September 2008 Home Energy Saving Programme announcement we have been busy preparing for the new Community Energy Saving Programme, which will trial whole house energy refurbishments in low income areas, and the revised Carbon Emissions Reduction Target scheme, with a target revised upwards by 20 percent. In addition we are working with Government to put in place the Feed-in Tariff schemes for renewable and low carbon generation, the Carbon Reduction Commitment, the Renewable Heat Incentive, and the proposed Carbon Capture and Storage levy.

**2.7. Offshore transmission<sup>9</sup>.** A new regulatory regime for offshore transmission networks has been developed, in partnership, by Ofgem and the Government. It provides a framework to encourage the new investment needed to deliver the networks required to connect offshore renewable generation to the national electricity grid. A key feature of this regime is that Ofgem will run competitive tenders to select parties to own and operate offshore transmission assets.

2.8. In July, shortly after the regime was made active by the Secretary of State, Ofgem launched the first transitional tender round in which £1.1 billion of transmission connections are currently being tendered. It is expected that the first offshore transmission owner (OFTO) licences will be granted in June 2010.

### **Engaging in the low carbon debate**

2.9. In 2008/09 Ofgem responded to a number of Government consultations relating to reducing energy-related carbon emissions, including the

*'We have encouraged...a sustainable low carbon energy sector'*

*'We have emphasised the cost-effectiveness of decarbonising heat supply and improving energy efficiency in the built environment'*

<sup>8</sup> See [www.ofgem.gov.uk/Networks/RPIX20/](http://www.ofgem.gov.uk/Networks/RPIX20/).

<sup>9</sup> For further information please see the offshore transition pages of our website: [www.ofgem.gov.uk/networks/offtrans](http://www.ofgem.gov.uk/networks/offtrans).

CESP, CERT uplift, Renewable Energy Strategy<sup>10</sup> and the Heat and Energy Saving Strategy<sup>11</sup> consultations. We have encouraged Government to think about how to deliver a sustainable low carbon energy sector in the most efficient and effective way, for example by emphasising the cost-effectiveness of decarbonising heat supply and improving energy efficiency in the built environment, and by exploring the scope for using competition where appropriate to drive down costs, improve efficiencies and improve the consumer experience. We are also working with DECC to develop industry arrangements for low carbon community heating schemes in a way that provides a stable and attractive environment for market entrants alongside appropriate safeguards for consumers.

### **Overhaul of industry code governance arrangements**

2.10. In July 2009 we issued our initial proposals on a framework under which Ofgem would manage major policy changes by initiating and leading high level policy reviews rather than simply relying on industry to bring forward code modifications as required under the current arrangements<sup>12</sup>. These reforms are designed to allow a quicker response to the need to tackle climate change and enable a more considered and holistic approach to the major changes required to industry arrangements.

### **Improving market access for small scale generation**

2.11. In February 2009 we published our final proposals to introduce additional licensing options to make it easier for small energy companies, including distributed energy schemes, to operate as a licensed supplier in the community on the public network<sup>13</sup>. In conjunction with the Energy Saving Trust (EST) we have also published information to ensure that domestic customers can easily compare the range of export/generation reward available from energy suppliers, including export and generation tariff prices, fact sheets and guidance for customers on how to choose the best tariff for their individual circumstances. This is now provided by the Green Homes advisory service and through the EST website<sup>14</sup>.

2.12. **Green Supply Certification Scheme.** In February 2009 we published our final green supply guidelines, and have been working with suppliers to put this policy into practice<sup>15</sup>.

## **Commitments for 2009/10**

2.13. **Network regulation.** We intend to publish DPCR5 Final Proposals in December this year, for implementation from 1 April 2010<sup>16</sup>. In addition, our RPI-X@20 review will publish an 'Emerging Thinking' document this winter to set out our

<sup>10</sup> Published online at [www.ofgem.gov.uk/Sustainability/Environment/Policy/Pages/Policy.aspx](http://www.ofgem.gov.uk/Sustainability/Environment/Policy/Pages/Policy.aspx)

<sup>11</sup> Published online at [www.ofgem.gov.uk/sustainability](http://www.ofgem.gov.uk/sustainability)

<sup>12</sup> Published online at [www.ofgem.gov.uk/Pages/MoreInformation.aspx?docid=198&refer=Licensing/IndCodes/CGR](http://www.ofgem.gov.uk/Pages/MoreInformation.aspx?docid=198&refer=Licensing/IndCodes/CGR)

<sup>13</sup> Available online at: [www.ofgem.gov.uk/Sustainability/Environment/Policy/SmallrGens/DistEng](http://www.ofgem.gov.uk/Sustainability/Environment/Policy/SmallrGens/DistEng)

<sup>14</sup> Information available online at <http://www.energysavingtrust.org.uk/Generate-your-own-energy/Sell-your-own-energy>

<sup>15</sup> [www.ofgem.gov.uk/Pages/MoreInformation.aspx?docid=322&refer=Sustainability/Environment/Policy](http://www.ofgem.gov.uk/Pages/MoreInformation.aspx?docid=322&refer=Sustainability/Environment/Policy)

<sup>16</sup> For further information please see [www.ofgem.gov.uk/Networks/ElecDist/PriceCtrls/DPCR5/Pages/DPCR5.aspx](http://www.ofgem.gov.uk/Networks/ElecDist/PriceCtrls/DPCR5/Pages/DPCR5.aspx)

vision for an effective regulatory regime that can encourage regulated networks to facilitate the delivery of a sustainable energy sector<sup>17</sup>. This will incorporate challenges such as climate change targets, security of supply and social objectives.

**2.14. Administration of environmental programmes.** We will continue to work with the Government to develop an efficient and effective policy framework for reducing energy use in the built environment. We will also begin to administer the CESP, and continue to work with Government on implementation of the RHI, Feed-in Tariffs for renewable and low carbon electricity, amendments to the RO for implementation in April 2010, and a levy to support CCS demonstration for coal-fired power stations.

**2.15. Offshore transmission tender process.** We expect to launch a second, and final, transitional tender round in summer 2010. We also anticipate that the first enduring tender process will be launched in summer 2010<sup>18</sup>. Under the enduring arrangements the appointed OFTO will be responsible for the design and construction of the transmission assets, in addition to the operational responsibilities required under the transitional arrangements.

**2.16. Engaging in the low carbon debate.** We will continue to contribute to the development of Government policy through responses to consultations and engaging in the debate. We are also embarking on further discussion papers looking at the potential to manage demand, which we plan to publish next year.

**2.17. Working with Government on heat policy.** We will be working with Government to develop incentives and market frameworks for renewable and low carbon heat. We will provide expertise and advice where appropriate for the Government's autumn publication of the final Heat and Energy Saving Strategy. We will also work with DECC on district heating policy, including network access arrangements, consumer protection and practical issues with market development.

**2.18. Incentives to encourage anticipatory investment.** The TAR Final Report concluded that in order to facilitate the 2020 targets the TOs should have the freedom and incentives to invest ahead of signalled need, so that transmission capacity can be ready for when new generation connects. We suggested that such incentives might include enabling the TOs to earn a higher return on efficient investments where they take on some of the risk of investing ahead of firm user commitment from generators while ensuring they face some financial exposure when they make inefficient or poor decisions, as well as other approaches. Ofgem invited proposals from the three transmission companies on their willingness to accept a "different" incentive package for investments undertaken before user commitment is obtained, such as those that are likely to be required to meet the 2020 targets. We published a consultation on these proposals in December 2008<sup>19</sup>, and again in September<sup>20</sup>, and will continue to develop our thinking over the winter. At present,

---

<sup>17</sup> For further information please see [www.ofgem.gov.uk/networks/rpix20](http://www.ofgem.gov.uk/networks/rpix20).

<sup>18</sup> The arrangements for the enduring regime will be finalised over the winter. For further information please see:

<http://www.ofgem.gov.uk/Networks/offtrans/pdc/cdr/cons2009/Documents1/Offshore%20Open%20letter.pdf>

<sup>19</sup> [www.ofgem.gov.uk/Pages/MoreInformation.aspx?docid=94&refer=Networks/Trans/ElecTransPolicy/tar](http://www.ofgem.gov.uk/Pages/MoreInformation.aspx?docid=94&refer=Networks/Trans/ElecTransPolicy/tar)

<sup>20</sup> [www.ofgem.gov.uk/Pages/MoreInformation.aspx?docid=166&refer=Networks/Trans/ElecTransPolicy/tar](http://www.ofgem.gov.uk/Pages/MoreInformation.aspx?docid=166&refer=Networks/Trans/ElecTransPolicy/tar)

we are working closely with the TOs to develop the regulatory funding regime for projects due to require funding before the end of the current price control (31 March 2012).

2.19. **Green Supply Certification Scheme.** We will work with industry to develop the certification scheme, which we expect to be operational in early 2010.



## Charts and analysis for Theme 1

### Indicator 1: Electricity and gas sector greenhouse gas emissions

Figure 1 - CO<sub>2</sub> emissions by end user<sup>21</sup>

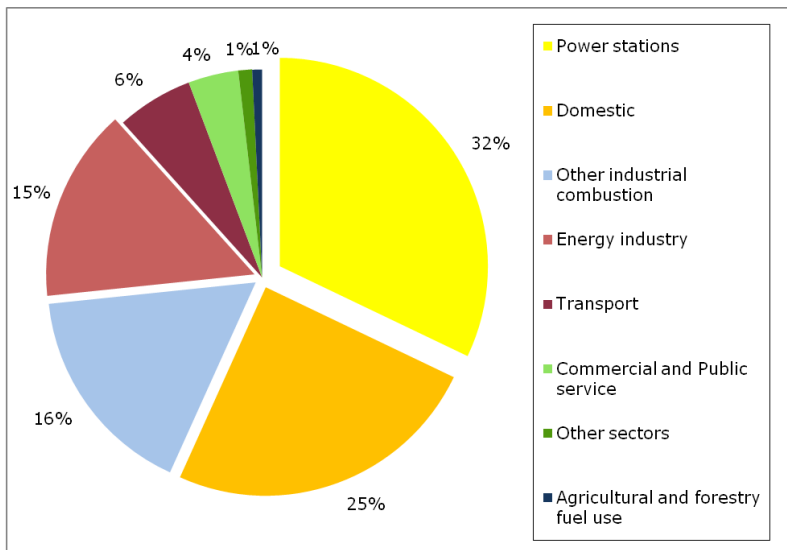
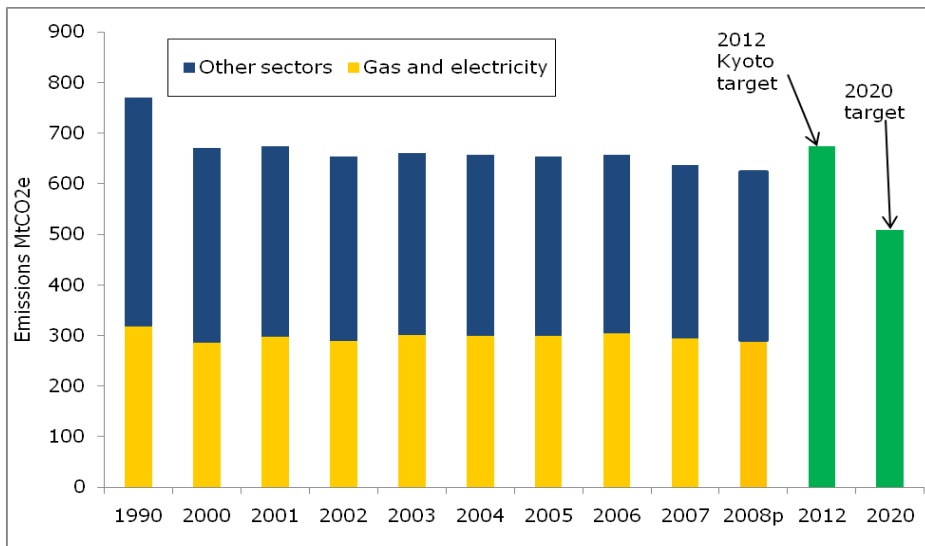


Figure 1 shows that electricity generators, households and the industrial sector continue to represent around two-thirds of CO<sub>2</sub> emissions.

Figure 2 - Gas and electricity sector contributions to UK emissions<sup>22</sup>

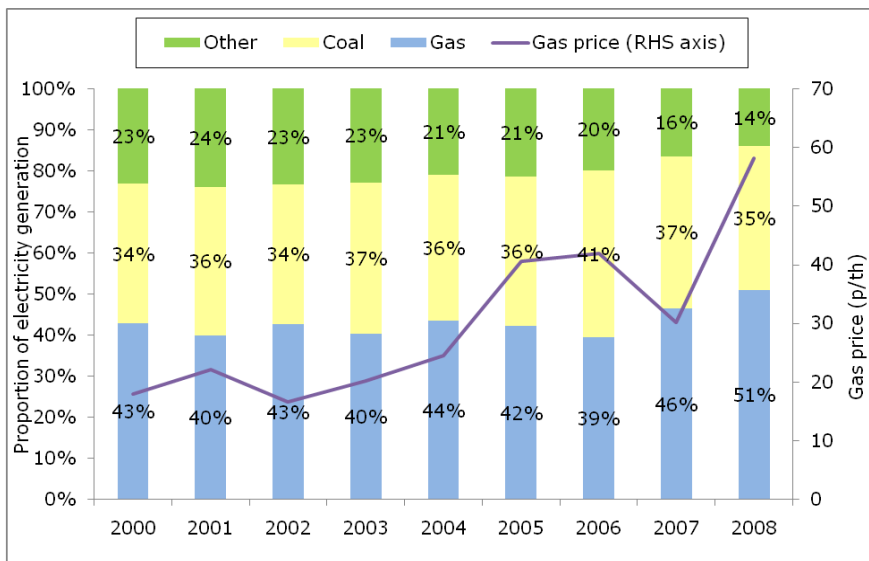


In figure 2, provisional data for 2008 shows that greenhouse gas emissions continued to fall, and are comfortably below the level required by the Kyoto Protocol. Gas and electricity emissions fell slightly, reflecting a continued switch from coal to gas as shown in figure 3.

<sup>21</sup> Data sourced from DECC's Digest of UK Energy Statistics (Dukes) 2009, available online at [www.decc.gov.uk/en/content/cms/statistics/publications/dukes/dukes.aspx](http://www.decc.gov.uk/en/content/cms/statistics/publications/dukes/dukes.aspx)

<sup>22</sup> Data sourced from Dukes 2009, NAEI emissions data and Government emissions target commitments.

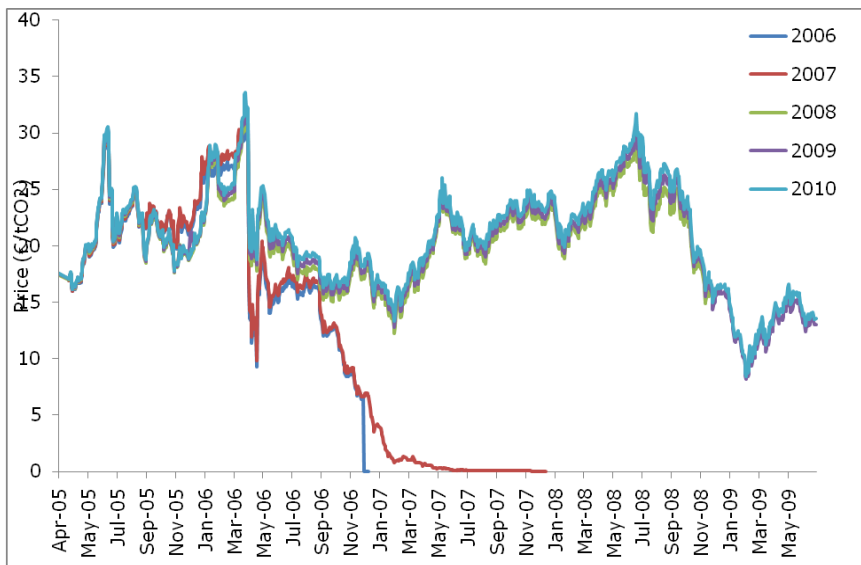
Figure 3 - Fuels used in electricity generation<sup>23</sup>



It is interesting to note that in spite of the sharp rise in gas prices in 2008 a shift from coal to gas generation continued apace, as shown in figure 3. This may be due to the resilience of the carbon price during much of this period, as shown in figure 4.

**Indicator 2: Impact of carbon price on costs of generation**

Figure 4 - EU ETS carbon price<sup>24</sup>

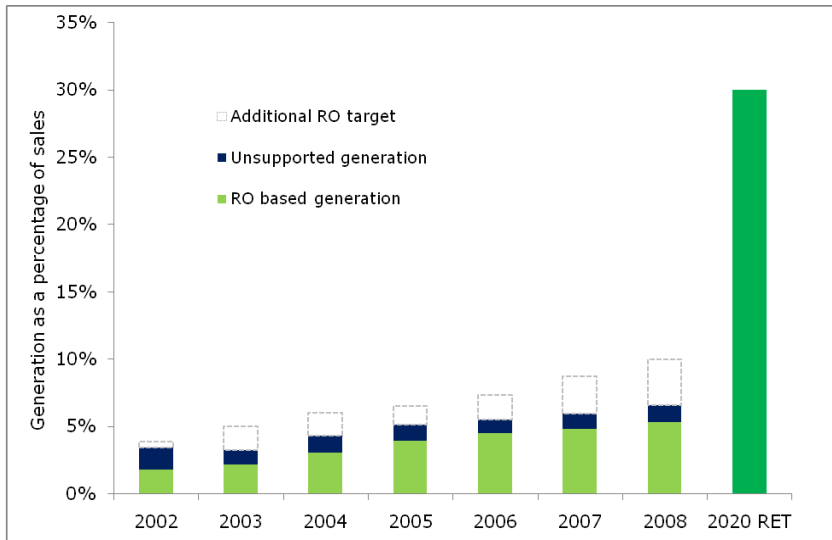


<sup>23</sup> Data sourced from Dukes 2009 and Bloomberg gas prices.

<sup>24</sup> Data sourced from European Climate Exchange at [www.ecx.eu/](http://www.ecx.eu/)

**Indicator 3: Renewable electricity generation**

Figure 5 - Renewable electricity generation<sup>25</sup>

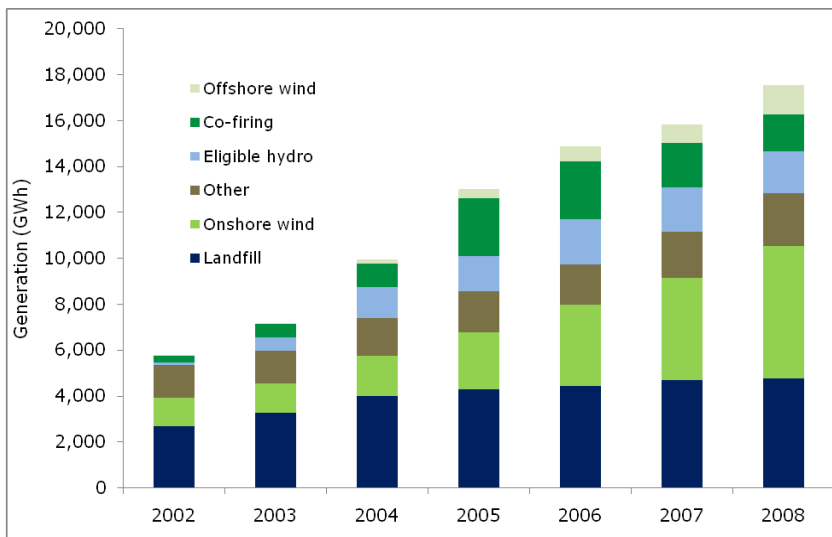


The proportion of electricity generated from renewable sources is growing, as figures 5 and 6 show. In particular, onshore wind production increased by 29 percent and offshore wind production grew by 67 percent in 2008.

However, energy suppliers are still some way off achieving their obligations for sourcing electricity from renewable sources. A trend in recent years has been suppliers' increasing use of the buyout fund to meet their obligations.

Major obstacles include securing planning permission for renewable electricity projects, and ongoing work to provide access to electricity networks.

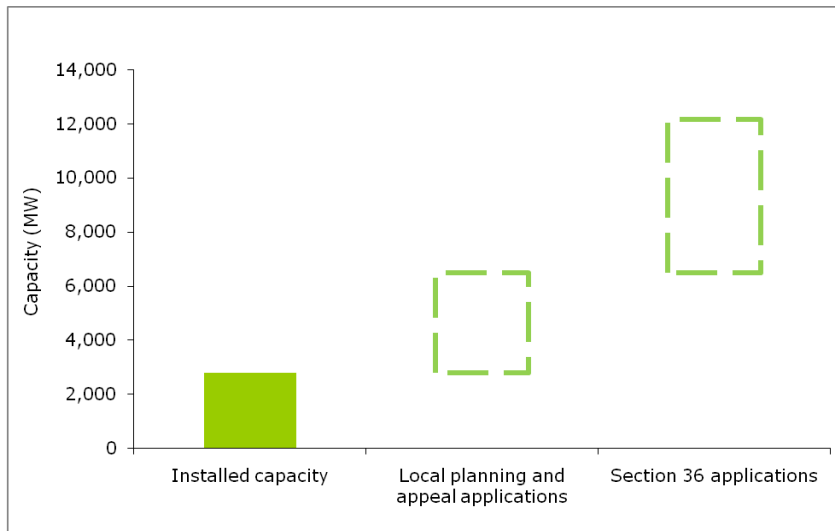
Figure 6 - Supported generation technologies<sup>26</sup>



<sup>25</sup> Data sourced from Dukes 2009 and Ofgem internal data. "Unsupported generation" is renewable generation that was built and operational prior to the Renewables Obligation and which does not receive support from it. These are typically large hydro generators.

<sup>26</sup> Data sourced from Dukes 2009.

Figure 7 - Onshore wind in the planning process<sup>27</sup>



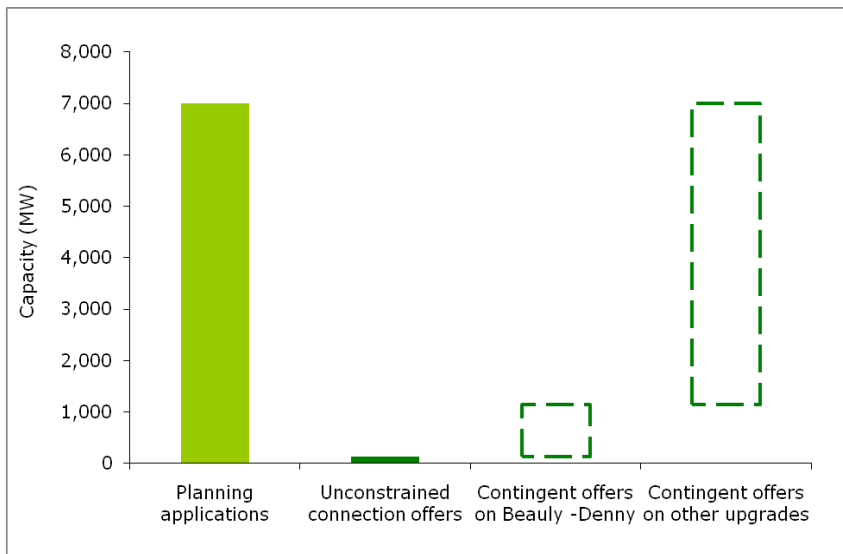
Considerable challenges remain in getting onshore wind connected, as figures 7 and 8 show.

Figure 7 shows onshore wind farms installed or in the planning process. Installed capacity has grown by a third since last year, and applications in the planning process have increased by a fifth.

Figure 8 shows that the majority of planned onshore wind projects are dependant on electricity transmission network upgrades, for example the 1GW Beaully to Denny line. Just 140MW of connection offers are currently not contingent on future upgrade work.

However, interim arrangements are likely to yield an improvement in connection of onshore wind as 900MW of capacity has been allocated in recent months.

Figure 8 - Scottish grid upgrades required<sup>28</sup>

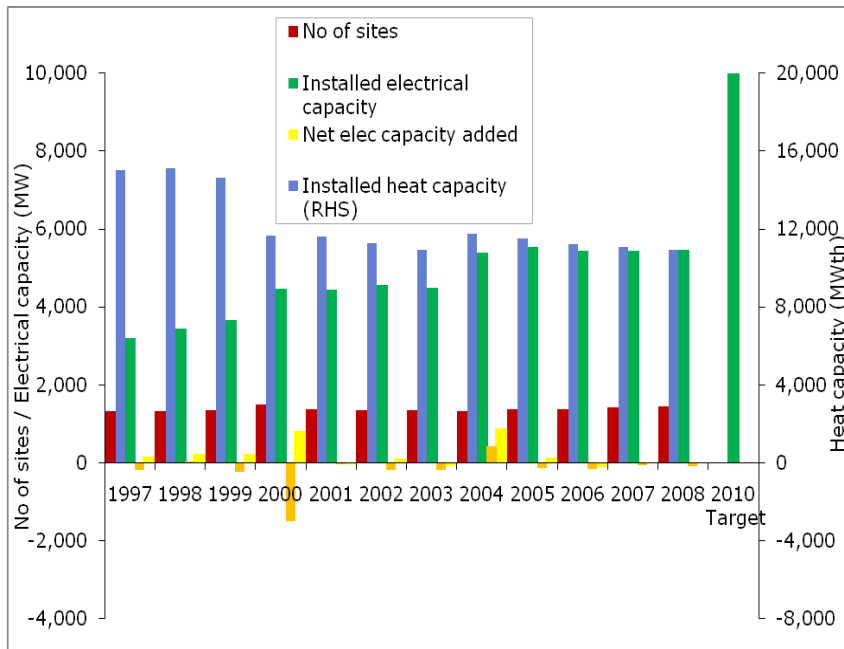


<sup>27</sup> Data sourced from [www.bwea.com](http://www.bwea.com). Applications for wind farms with a capacity greater than 50MW are dealt with by the Secretary of State under Section 36 of the Electricity Act 1989, whereas smaller installations are dealt with by local planning systems.

<sup>28</sup> Upgrades required for Scottish onshore wind projects in the planning process. Data sourced from National Grid.

**Indicator 4: Electricity capacity for combined heat and power**

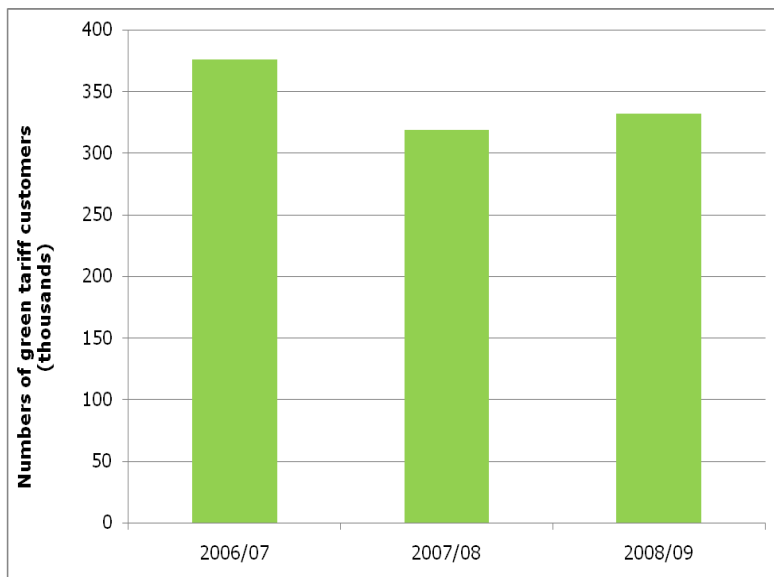
Figure 9 - CHP capacity 1996 - 2008 including the 2010 target<sup>29</sup>



As figure 9 shows, connection of combined heat and power generation plant has levelled off in the past few years, and the 2010 target no longer appears attainable. However, renewable and low carbon heat will increasingly contribute to renewable and low carbon targets and we expect to report on progress made by incentives and other policies in future reports.

**Indicator 5: Green tariffs**

Figure 10 - Numbers of customers signed up to green tariffs<sup>30</sup>



2008/09 witnessed an increase of four percent in the numbers of consumers choosing a 'green' tariff. Green tariff customer numbers decreased in 2007/08, though this was due in part to a revised and more stringent classification of green tariffs.

The introduction of the Green Supply Certification Scheme will help to boost consumer confidence and guarantee that a customer's green tariff purchase will result in an additional environmental benefit.

<sup>29</sup> Data sourced from Dukes 2009.

<sup>30</sup> These figures relate to tariffs that are currently marketed as 'green' which may or may not be eligible for certification under the Green Supply Certification Scheme once this is in place.

### 3. Eradicating fuel poverty and protecting vulnerable customers

This chapter sets out how we work to protect vulnerable customers and help the Government meet its targets for eradicating fuel poverty. It shows that the estimated number of households living in fuel poverty has increased as a result of higher energy prices. Though some customer groups are benefiting from competition, our Supply Market Probe has shown that these benefits have not reached all customers; vulnerable customers are disproportionately affected. This chapter sets out further work planned in this area for the coming year in relation to the following indicators:

- total number of households in fuel poverty
- competition and vulnerable customers
- disconnection for debt

3.1. The Government defines fuel poverty as where a household needs to spend more than 10 percent of its income on energy to maintain a satisfactorily warm home. A lack of affordable energy can have a significant impact on the health, wellbeing and economic prosperity of UK citizens. The Government and devolved administrations aim to eradicate fuel poverty in the UK by 2018<sup>31</sup>.

3.2. We have statutory obligations to vulnerable customers and work to meet our social objectives and to help the Government meet its targets for eradicating fuel poverty. Our aim is to:

- improve the ability of all households to adequately heat their homes;
- ensure that more vulnerable customers can and do access the lower prices and better services and products available to them; and
- ensure that customers who are having difficulty paying their bills are given help to manage their debt and prevent their energy supply being disconnected.

3.3. Ofgem's Social Action Strategy sets out how we will seek to meet our social obligations and contribute to the Government's targets to eliminate fuel poverty<sup>32</sup>.

<sup>31</sup> In England, the Government's target is to eliminate fuel poverty for vulnerable households (containing children or those who are elderly, sick or disabled) by 2010 and 2016 for all households. For the Devolved Administrations the target is for overall elimination, for Scotland by 2016 and Wales by 2018.

<sup>32</sup> Since 2005 our Social Action Strategy has provided an overview of progress and key deliverables for the coming year. Our latest report is available on our website:

[www.ofgem.gov.uk/Pages/MoreInformation.aspx?docid=50&refer=Sustainability/SocAction](http://www.ofgem.gov.uk/Pages/MoreInformation.aspx?docid=50&refer=Sustainability/SocAction)

## Our progress in the last year

### Tackling fuel poverty

**3.4. Targeted support for vulnerable customers.** A key commitment from our Fuel Poverty Summit 2008 was for the Department of Work and Pensions to share its information on pension credit recipients with energy suppliers, who could then target assistance towards these vulnerable customers. Provisions to enable this to happen have been included in the Pensions Act 2008.

**3.5. 'Energy Best Deal'.** In 2007/8 we ran a pilot campaign to train Citizens Advice Bureau and other front line advice workers. Following this successful pilot DECC funded a roll out of the programme in 2008/9. This campaign has been shown to successfully target more vulnerable consumers, enabling and encouraging them to shop around and access support from Government and suppliers to reduce their energy bills.

**3.6. Dissemination of best practice – suppliers' social programmes.** Our monitoring framework, published July 2008, specifies that in order for a supplier's tariff to be labelled as a social tariff it must offer vulnerable and fuel poor customers a deal at least as good as the lowest tariff they offer in an area, including online deals, on an enduring basis. Five of the six suppliers now have a social tariff that meets this tough definition.

*Suppliers' social programmes spend has increased from £57m in 2007/08 to £157m in 2008/09.*

*Over 1 million customer accounts now benefit from some form of social or discounted tariff.*

*Government has proposed mandatory social tariffs from 2011.*

**3.7. Smart meters.** We continue to manage the three-year Energy Demand Research Project (EDRP) on behalf of Government and industry to trial better billing and a range of smart meter technologies. Following its announcement mandating the rollout of smart meters to all households by 2020, we have been working with Government to maximise the consumer benefits of smart meters, and to start to explore the accessibility and consumer protection issues involved.

**3.8. Government energy efficiency schemes.** We have been working with DECC on the revised CERT (where the target has been increased by 20 percent) and new CESP schemes. The CESP scheme aims both to target consumers in the lowest income decile and reduce carbon emissions. We will monitor suppliers' activity for these programmes.



**3.9. Gas network extensions.** We published our decision to extend the eligibility criteria of the gas distribution networks extension scheme to provide a discount for connection to anyone qualifying for fuel poverty programmes<sup>33</sup>.

### Competition and vulnerable customers

**3.10. Market participation.** Our Energy Supply Probe showed that significant numbers of consumers, particularly vulnerable consumers, had never switched supplier, and those who did often did not access the best deal. Reasons for low switching rates may include lack of awareness or interest, or loyalty to an existing supplier. Vulnerable or low income customers also struggle to access the best deals if they do not have a bank account or internet access (the cheapest deals are often online tariffs paid by direct debit), and low income consumers may be obliged to use prepayment meters. However, the Probe also found areas for improvement in suppliers' behaviour, including lack of easily understandable information, debt blocking and sales tactics.

**3.11.** In response we have developed detailed remedies to improve consumer engagement in the market. We undertook research using our Consumer First Panel of 100 everyday customers across GB, together with groups covering those aged 75+ and people with low levels of literacy, to test consumer reaction as we developed our proposals.

**3.12.** These detailed proposals are supported by overarching standards of conduct for suppliers intended to ensure that consumers are able to engage in market more effectively and are protected when they do so. We recently published our decision to amend the electricity and gas licenses to bring these changes into effect<sup>34</sup>.

**3.13. Discretionary reward schemes.** A discretionary reward scheme has been in place for electricity DNOs since 2005, and has this year been introduced for gas GDNs. The schemes are designed to encourage better service for consumers in areas that cannot be easily measured or incentivised by recognising leading performance within the industry and driving innovation and creativity through the promotion of best practice. This year the electricity distribution scheme made awards to companies that had demonstrated creative and proactive approaches that exceed obligations relating to priority customer care and corporate social responsibility<sup>35</sup>. The gas distribution scheme awarded companies that had raised awareness of the

*The Probe remedies will require suppliers to:*

*- improve information provided to customers, for example by detailing tariff and improved consumption information on bills, providing an annual statement and a reminder of their right to switch;*

*- improve customer confidence in the process of switching supplier; and*

*- help vulnerable and indebted consumers who may, at present, be blocked from switching suppliers due to outstanding debts.*

<sup>33</sup> Available online at <http://www.ofgem.gov.uk/Pages/MoreInformation.aspx?docid=195&refer=Networks/GasDistr/GasDistrPol>

<sup>34</sup> See [www.ofgem.gov.uk/Pages/MoreInformation.aspx?docid=234&refer=Markets/RetMkts/ensupro](http://www.ofgem.gov.uk/Pages/MoreInformation.aspx?docid=234&refer=Markets/RetMkts/ensupro).

<sup>35</sup> See [www.ofgem.gov.uk/Pages/MoreInformation.aspx?docid=108&refer=Networks/ElecDist/QualofServ/CustServRewSch](http://www.ofgem.gov.uk/Pages/MoreInformation.aspx?docid=108&refer=Networks/ElecDist/QualofServ/CustServRewSch).

dangers of carbon monoxide, connected vulnerable and fuel-poor households to the gas grid, and reduced the environmental impact of gas networks<sup>36</sup>.

### **Disconnection for debt**

**3.14. Preventing debt accumulation.** Following concerns about suppliers' approaches, raised by Consumer Focus and followed by our review in January 2008, we fast-tracked a review (undertaken jointly with Consumer Focus) looking at protections in place for vulnerable customers to prevent them from being disconnected<sup>37</sup>. This showed that suppliers' procedures in this area are generally sound but improvements can be made. For example, suppliers should ensure consistent application of the Safety Net commitment (for example when dealing with customers with mental health problems or apparently vacant properties), and proactively investigate a customer's circumstances to ensure they are not vulnerable before they are disconnected. Suppliers should actively follow up any customer who has been disconnected and should reconnect within 24 hours a customer who subsequently turns out to be vulnerable. This will be followed up by tougher audit arrangements by the ERA to check that suppliers are keeping to the Safety Net Commitment. We are also undertaking a wider review of suppliers' debt practices, again jointly with Consumer Focus, due for publication in early 2010.

## **Commitments for 2009/10**

**3.15. The Probe remedies.** We will work to implement the remedies identified in the Probe. In addition to addressing unfair differentials between payment methods and regions, the remedies are designed to help customers make more informed switching decisions and ensure that marketing information is transparent. In our future monitoring of switching by vulnerable customers we intend to focus on the quality of switching decisions to aid our understanding of vulnerable customers' engagement with the energy market.

**3.16. Suppliers' social programmes.** We will continue to monitor suppliers' social programmes using the reporting framework and guidance we established in 2008. In light of the recent White Paper announcement to mandate a social tariff from 2011, we will work closely with Government on the design of the new mandatory scheme and on the pilot of data sharing arrangements.

**3.17. Debt and disconnection.** We will undertake a review of suppliers' approaches to customers in debt and at risk of disconnection, particularly given the tougher economic conditions facing consumers.

**3.18. Discretionary reward schemes.** The discretionary reward schemes for electricity and gas distribution will continue next year. The electricity scheme will assess DNOs' efforts to develop wider communications strategies and corporate social responsibility. The scope of the gas scheme is yet to be announced.

---

<sup>36</sup> See [www.ofgem.gov.uk/Pages/MoreInformation.aspx?docid=223&refer=Networks/GasDistr/QoS](http://www.ofgem.gov.uk/Pages/MoreInformation.aspx?docid=223&refer=Networks/GasDistr/QoS).

<sup>37</sup> Review of Protection for customers from disconnection:

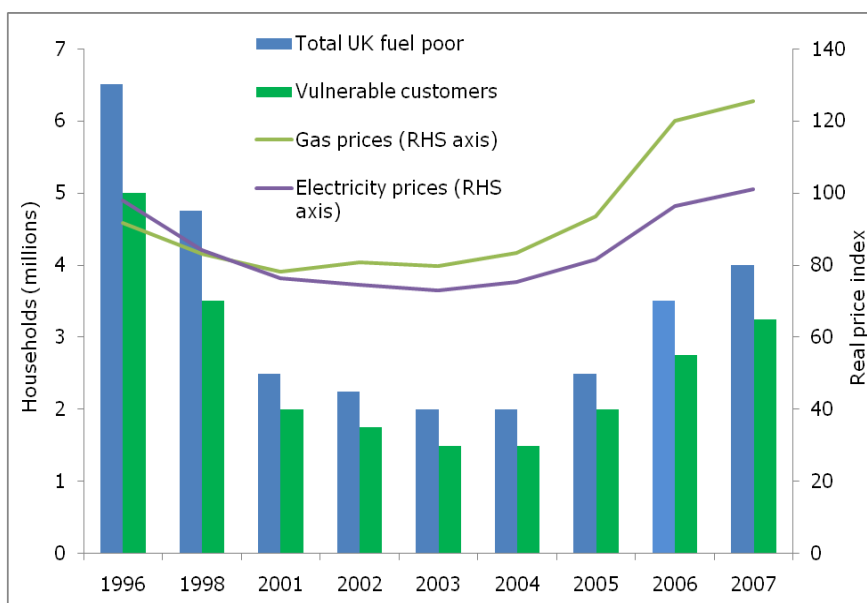
[www.ofgem.gov.uk/Sustainability/SocAction/Publications/Documents1/Review\\_of\\_vulnerable\\_customer\\_disconnections\\_report.pdf](http://www.ofgem.gov.uk/Sustainability/SocAction/Publications/Documents1/Review_of_vulnerable_customer_disconnections_report.pdf)

**3.19. Contributing to the debate.** With the cost of environmental programmes set to add significantly to customers’ bills we are seeking to engage with the Government on issues around who pays and who benefits from these programmes to ensure that costs are recovered in the least regressive way possible and that thought is given to how to mitigate the higher costs for those in fuel poverty. As part of this we intend to work closely with Government on the forthcoming fuel poverty review.

## Charts and analysis for theme 2

### Indicator 6: Total number of households in fuel poverty

Figure 11 - Estimated number of UK households living in fuel poverty 1996 - 2007<sup>38</sup>

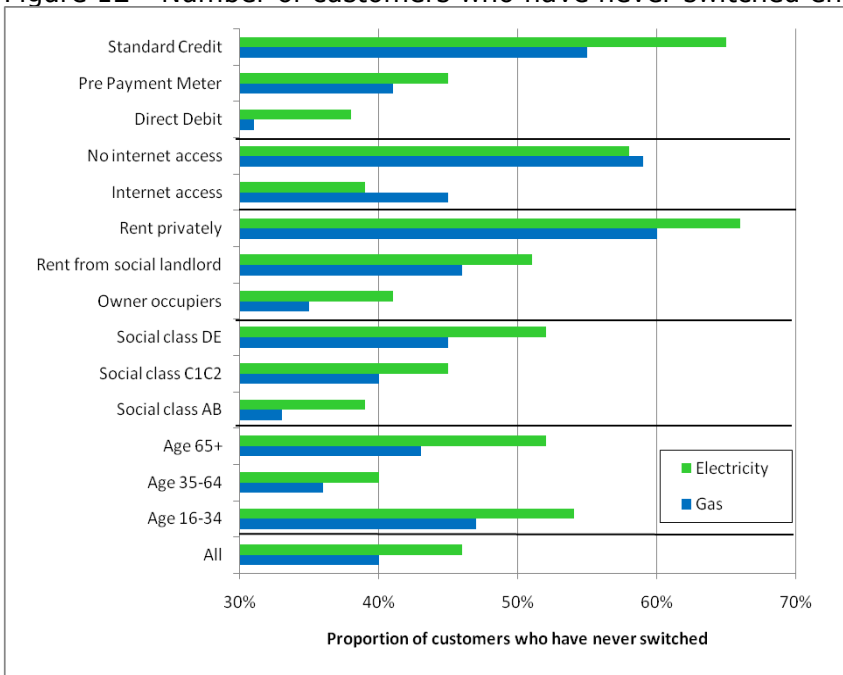


This graph shows that the number of households in fuel poverty has continued to increase in response to energy price rises. DECC figures project further significant increases in the numbers of fuel poor (to 4.6m in England by 2009).

<sup>38</sup> See [www.decc.gov.uk/en/content/cms/what\\_we\\_do/consumers/fuel\\_poverty/strategy/strategy.aspx](http://www.decc.gov.uk/en/content/cms/what_we_do/consumers/fuel_poverty/strategy/strategy.aspx).

**Indicator 7: Competition and vulnerable customers**

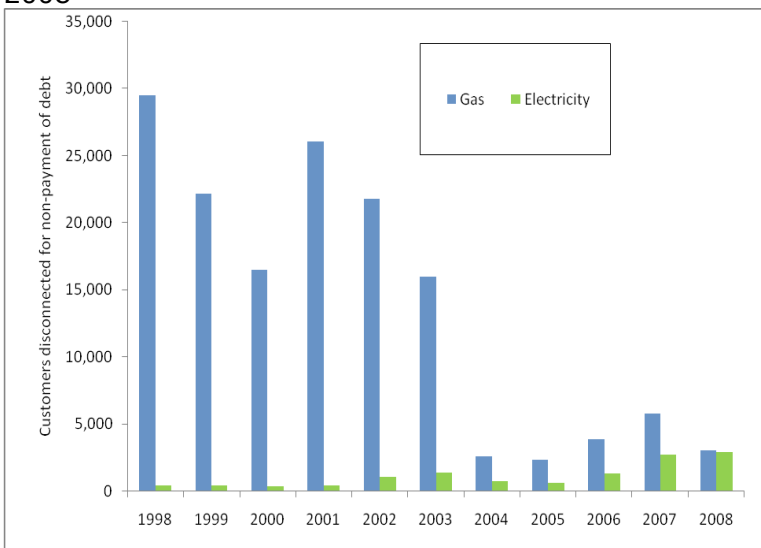
Figure 12 - Number of customers who have never switched energy supplier<sup>39</sup>



Ofgem commissioned Ipsos MORI to undertake research to inform our Probe work providing information on switching amongst particular consumer. Those in social group E, aged over 65, without internet access and in rented accommodation are less likely than others to have ever switched supplier.

**Indicator 8: Disconnection for debt**

Figure 13 - Total number of customers disconnected for non-payment of debt 1998 - 2008<sup>40</sup>



The total number of customers disconnected for non-payment of their energy bill decreased by 30 per cent in 2008 to 5,890 customers. The number of gas disconnections halved in 2008 to 2,999, while electricity disconnection continued to increase slightly to 2,891. With the difficult economic conditions we expect to see numbers in debt increasing.

<sup>39</sup> Source: Ipsos MORI Ofgem Consumer Engagement Survey, July 2008

<sup>40</sup> Domestic Suppliers Social Obligations: 2008 Annual report

[www.ofgem.gov.uk/Pages/MoreInformation.aspx?file=2008\\_Supplier\\_Social\\_Obligations\\_Annual\\_Report.pdf&refer=Sustainability/SocAction/Monitoring/SoObMonitor](http://www.ofgem.gov.uk/Pages/MoreInformation.aspx?file=2008_Supplier_Social_Obligations_Annual_Report.pdf&refer=Sustainability/SocAction/Monitoring/SoObMonitor)

## 4. Promoting energy saving

Reducing energy consumption is the best way to tackle climate change and energy affordability in tandem. Considerable scope remains to increase the energy efficiency of buildings, improve the use of heat generated as a by-product of electricity generation and reduce losses from delivering gas and electricity from source to consumer.

Our energy efficiency activity covers both administration of Government schemes and contribution to policy formation. On the former we administrate Government schemes including the Carbon Emissions Reduction Target (CERT) and the Community Energy Savings Programme (CESP). On policy formation we work towards delivering the most cost-effective means of helping customers to use energy efficiently, and ensuring that energy is transferred from its point of origin to its point of end use with minimal losses.

We track efficiency using the following indicators:

- energy intensity
- carbon dioxide savings from CERT
- gas and electricity losses

### Our progress in the past year

**4.1. Networks efficiency.** Losses in both gas (where it is termed shrinkage) and electricity contribute to the inefficient overall use of energy. For example, electricity losses on the distribution networks represent approximately 1.3 per cent of total GB GHG emissions. As such, we have sought to develop and refine incentives on network companies to minimise losses. In the initial proposals for the latest Distribution Price Control Review we set out that we expected DNOs to achieve an efficient level of losses on their distribution networks by making appropriate investments, optimising networks operation, influencing users and influencing and working with third parties to improve data accuracy and reduce theft. DPCR5 sets out our proposals for incentivising the DNOs to manage an efficient level of losses on their networks. We propose to retain an output based incentive on losses, but to fund explicit investments to reduce losses where justified.

**4.2. Leading the debate.** In July we published the first of a series of discussion papers to inform debate on SD issues with a paper entitled "Can energy charges encourage energy efficiency?" We aimed to encourage constructive debate on the development of a charging structure that encourages greater efficiency in the use of energy by households. We hope the paper will stimulate further thinking and new initiatives.

**4.3. Engaging with Government on Heat and Energy Saving Strategy.** In our response to the Government's Heat and Energy Saving Strategy consultation we acknowledged the scope for further energy efficiency measures to be one of the most cost effective ways to meet the UK's renewable energy and carbon emissions reduction targets. We encouraged Government to think strategically about the best

way to accomplish this ambition, whilst giving particular attention to effects on fuel poverty and vulnerable customers. Since then we have been actively engaged on the development of thinking in this area.

**4.4. Effective administration of Government schemes.** Over the past year we have actively engaged with Government on the development of its recently announced £1bn Home Energy Savings Programme, which expanded the CERT and introduced the Community Energy Savings Programme (CESP). We have offered our knowledge and experience of administering the CERT and other environmental programmes to assist the Government in developing and implementing the CERT and CESP schemes.

## Commitments for 2009/10

**4.5. Electricity losses.** As figure 18 shows, losses from the distribution network continue to increase. As part of the DPCR5 process we have recognised the current weaknesses in the measurement and reporting of losses. We are proposing to introduce a reporting lag to reduce the volatility and improve the quality of losses data. Another development is for a DNO to be able to justify and include investment upfront as part of the price control, with a consequential adjustment to its losses target, which we hope will lead to investment in loss-reducing infrastructure. We are currently working on our DPCR final proposals, due for publication in December 2009, to apply from 1 April 2010.

**4.6. Smart meters.** We will continue to manage the EDRP, the three year smart metering trial on behalf of government and industry to assess customers' long term response to energy consumption information. We are working closely with Government on the future of smart metering and stand ready to work on the roll-out once DECC has taken a decision on the model for delivering smart metering to households by 2020. We will continue to work with Government and consumer groups on the rollout and functionality of these meters to ensure that consumers are appropriately protected.

**4.7. Effectively administer energy saving environmental programmes.** We will continue to administer the existing CERT scheme efficiently and effectively ensuring that resources are well targeted and that measures interact effectively with fuel poverty programmes such as Warm Front. Our recent organisational restructure created Ofgem E-Serve to acknowledge our growing function as environmental programmes administrator. This change also helps to further delineate our policy and administration functions.

**4.8.** We are currently working with Government to extend the CERT from its current end-date of March 2011 to December 2012. In addition we are administering the CESP scheme which became operational on 1 September 2009. CESP places a target on obligated suppliers and generators to make energy saving improvements to low income households between October 2009 and December 2012<sup>41</sup>. Building on our experience of administering these programmes we will advise Government on further development of these schemes.

<sup>41</sup> Further information available at [www.ofgem.gov.uk/Sustainability/Environment/EnergyEff/cesp/Pages/cesp.aspx](http://www.ofgem.gov.uk/Sustainability/Environment/EnergyEff/cesp/Pages/cesp.aspx)

### Charts and analysis for theme 3

#### Indicator 9: Energy intensity

Figure 14 - Non-transport energy demand<sup>42</sup>

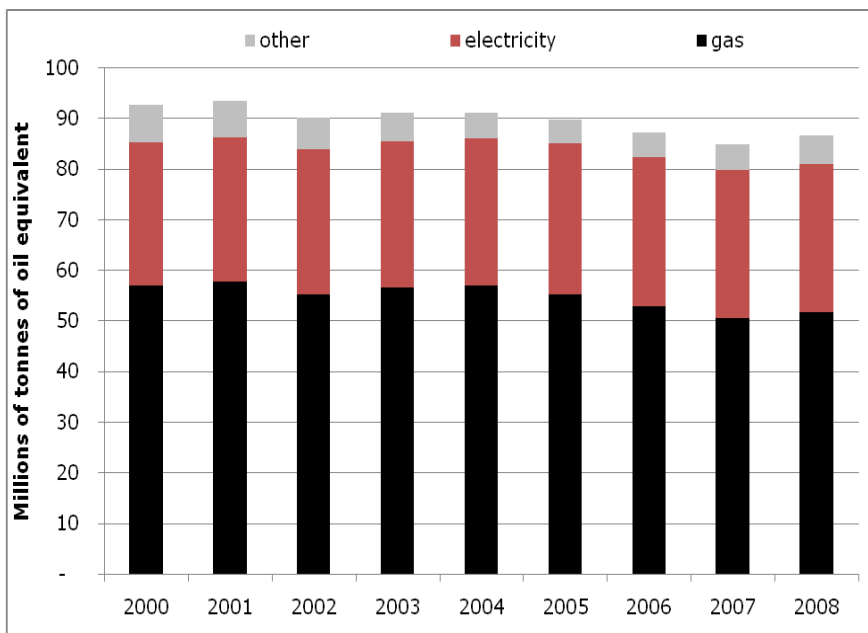


Figure 14 shows final energy consumption excluding transport fuels. In 2008 non-transport energy demand grew by around two percent, ending the three years of consecutive decline in energy demand from 2004 to 2006.

Figure 15 - Energy intensity by sector<sup>43</sup>

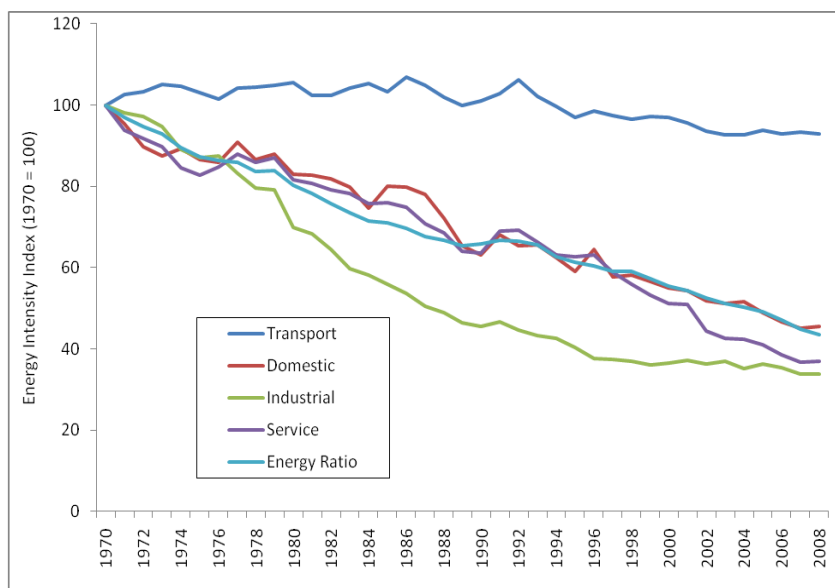


Figure 15 shows energy consumption by sector per unit of output since 1970. Although transport remains relatively energy intensive, all other sectors have shown a consistent decline in recent years.

<sup>42</sup> Source: DECC Dukes 2009

<sup>43</sup> Source: UK Energy Consumption - DECC 2009



Figure 16 - Energy intensity and CO2 emissions of the power generation sector

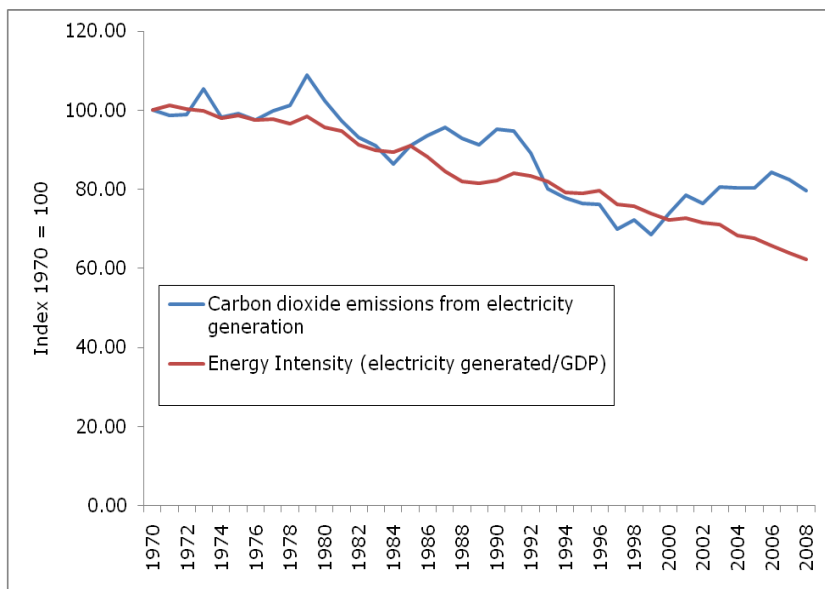
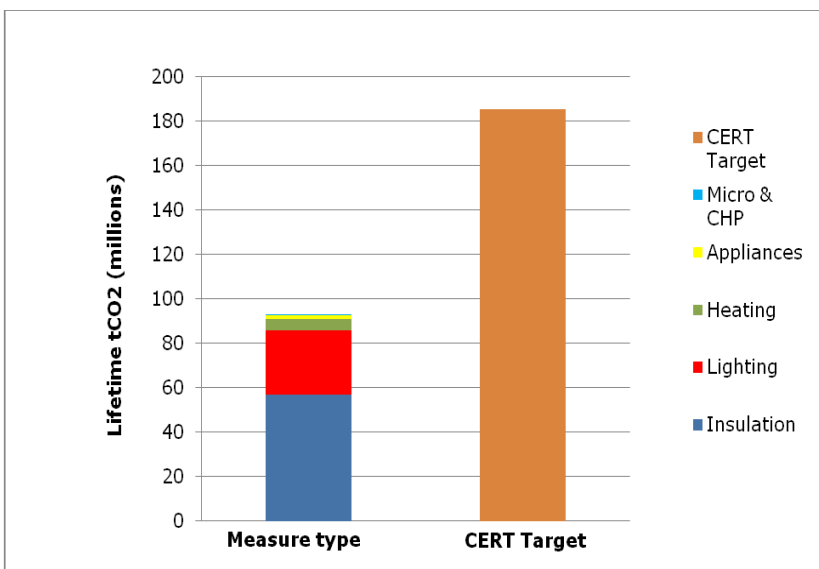


Figure 16 charts the energy intensity of the electricity generation sector with CO<sub>2</sub> emissions from power stations. Energy intensity has consistently declined since 1970. However CO<sub>2</sub> emissions, whilst down on 1970 levels, are higher than a decade ago. Contributing factors include relative use of coal and gas and increasing electricity demand, for example due to use of domestic appliances.

**Indicator 10: Carbon dioxide savings from the CERT**

Figure 17 - Carbon dioxide emissions savings from the CERT, including carry-over

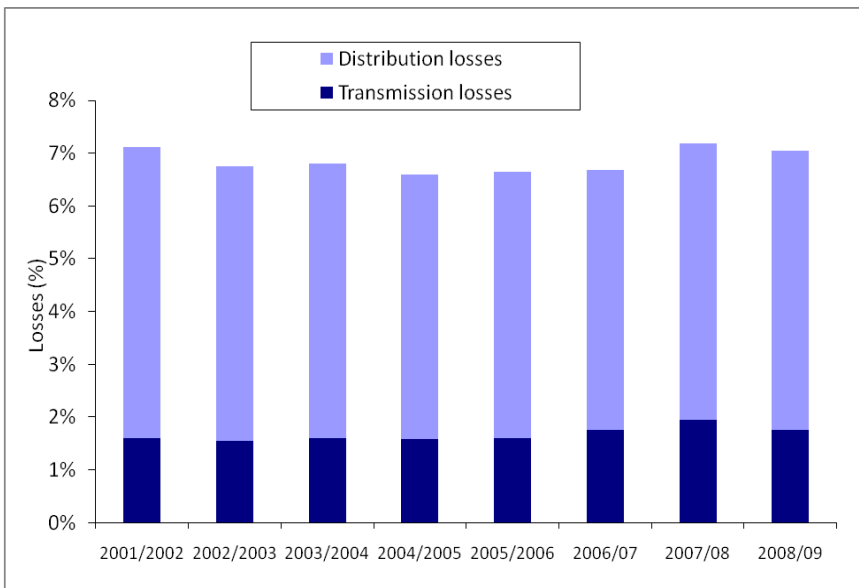


In the first year of CERT suppliers installed measures with lifetime savings of 93 million tonnes of CO<sub>2</sub>, including the carry over from EEC2. This represents around 50% of the overall target. The Priority Group received around 45 percent of the measures (including carry over). 94 percent of the CO<sub>2</sub> savings, excluding carry over, were achieved by insulation and lighting measures.

The Carbon Emissions Reduction Target 2008-2011 (CERT) requires gas and electricity suppliers to reduce carbon emissions in domestic properties. Each supplier is required to meet 40% of its obligation by targeting consumers in the Priority Group (those on certain benefits or over 70 years of age). The CERT therefore also contributes to the Government’s Fuel Poverty Strategy.

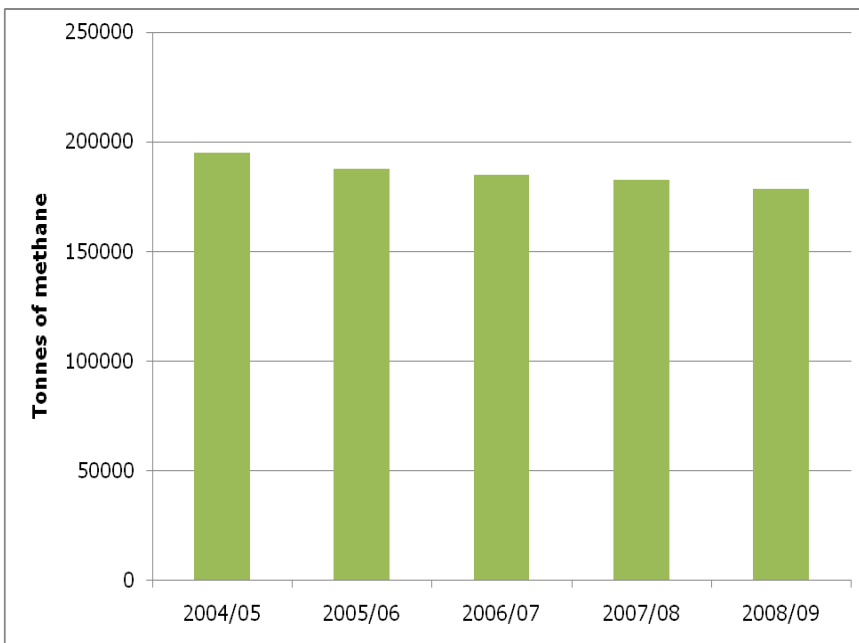
**Indicator 11: Gas and electricity losses**

Figure 18 - Electricity losses<sup>44</sup>



This year losses have fallen slightly, despite a further small rise in distribution losses. While the overall reduction is positive, the reasons for a reversal of the downward trend, particularly in distribution losses, is still unclear.

Figure 19 - Methane emitted from gas distribution networks<sup>45</sup>



This chart shows a continued decline in methane emissions from gas distribution networks as the gas mains replacement programme proceeds.

Ofgem is in the process of verifying the accuracy of data provided by one gas distribution network company. Pending the outcome of this work, the figures contained in this chart may be subject to change.

<sup>44</sup> Ofgem data

<sup>45</sup> Ofgem data

## 5. Ensuring a secure and reliable gas and electricity supply

We have direct influence over the security and reliability of gas and electricity supply in GB. This can involve regulatory tools and incentives, such as the networks quality of service frameworks and the incentives on the transmission system operator. We also participate in proactive market surveillance, including our flagship Project Discovery, Project Mercury which aims to track the financial health of network businesses, and our partnership with DECC to produce the Energy Markets Outlook and Winter Outlook publications. Elsewhere, our work to facilitate connection of renewable and low carbon generation could make real improvements to security of supply by reducing our dependence on imported gas.

We examine our progress against the following indicators:

- security and diversity of supply – market response
- future electricity generation mix
- quality of service – supply market performance
- product innovation
- green tariffs

### Our progress over the past year

**5.1. Transmission System Operator Incentives.** Primary responsibility for balancing the transmission network rests with the transmission system operator (TO). Following careful review during 2008/09 new SO incentive arrangements for both gas and electricity were implemented on 1 April 2009. We are continuing to work with National Grid and stakeholders to further develop the SO incentive arrangements which will apply from 1 April 2010. As part of this process National Grid has published a series of initial consultations that look at the development of possible incentive arrangements.

**5.2.** We also continue to monitor network reliability under the regulatory reporting arrangements introduced as part of the last price control review. Further work on access reform (covered in Chapter 2) should lead to greater security of supply in the medium term as the connection of further sources of generation is accelerated.

**5.3. Engaging in the European debate.** Now that it is law, our priority is to support DECC in the implementation of the Third Package and to ensure that British consumers can benefit from liberalised markets across Europe. Our previous work has highlighted the importance of competitive European markets to ensuring security of supply for GB consumers. We are also continuing to work with CEER and ERGEG in contributing to the establishment of the new EU Agency for Cooperation of Energy Regulators (ACER) and facilitating competitive European energy markets through increased transparency, adequate unbundling of transmission networks, and increased consumer protection. We are also continuing to monitor the European legislative process for the proposed new security of gas supply Regulation, and to consider its implications for GB and the internal market.

**5.4. Removing barriers to security of supply.** We have launched Project Discovery, a major piece of work to investigate the ability of the current market arrangements to continue to deliver security of supply. In October we published a consultation seeking views on the scenario and stress test analysis undertaken by Ofgem to identify the scale of the challenge and risks facing the GB and wider European and global energy markets over the next two decades<sup>46</sup>.

**5.5. Energy Markets Outlook.** We have worked with DECC to develop the 2009 Energy Markets Outlook report in the light of the EU Renewables Directive and UK Renewable Strategy. The report is due to be published at the end of October.

**5.6. Winter Outlook.** We have again worked with National Grid to ensure an effective Winter Outlook consultation process which benefits market participants by improving transparency. We have worked to increase the international dimension of these reports this year.

**5.7. Project Mercury.** We have set out our arrangements for responding in the event that a network company experiences financial distress. This project used simulation exercise to test our arrangements, and following consultation earlier in the year we released a decision document<sup>47</sup>.

## Our commitments for 2009/10

**5.8. Project Discovery.** At the turn of the year we will produce a report setting out a number of possible policy options for debate and development.

**5.9. Gas Distribution Quality of Service.** We will publish a balanced score card of GDNs' performance in Ofgem's 2008-09 Gas Distribution Quality of Service Report, which is due to be published in December. A comparison of quality of service data provides an incentive for GDNs to improve their quality of service and also helps to identify areas where further regulatory action may be required.

**5.10. Further work on SO incentives.** We are looking to develop together with National Grid Gas a stronger environmental incentive to further reduce emissions from the gas transmission network.

**5.11. Significant investment in electricity distribution networks.** The conclusion of DPCR5 should lead to significant investment in low voltage networks.

**5.12. Working with Government on the development of CCS technology.** We will continue to work constructively with Government on its plans to bring forward CCS technology.

---

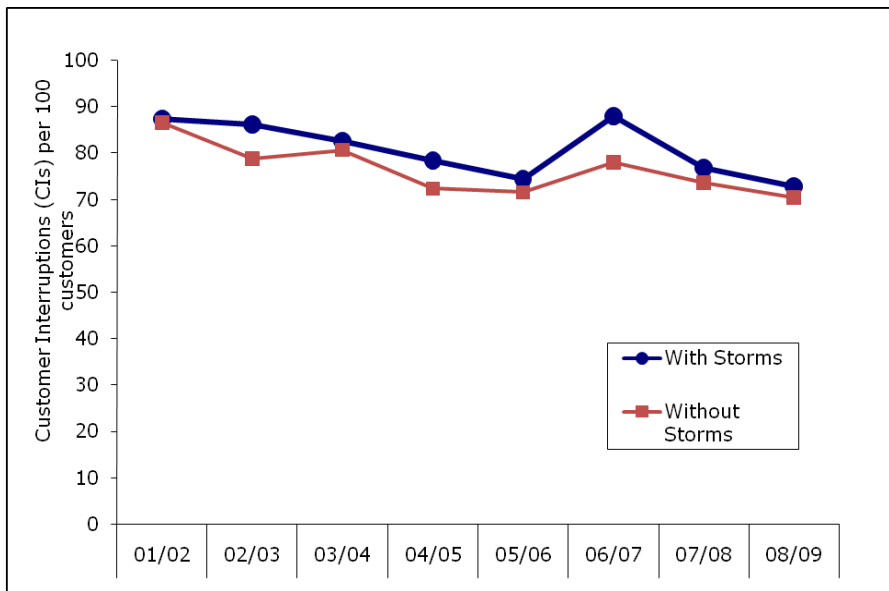
<sup>46</sup> See [www.ofgem.gov.uk/Pages/MoreInformation.aspx?docid=2&refer=Markets/WhIMkts/Discovery](http://www.ofgem.gov.uk/Pages/MoreInformation.aspx?docid=2&refer=Markets/WhIMkts/Discovery)

<sup>47</sup> See [www.ofgem.gov.uk/Pages/MoreInformation.aspx?docid=259&refer=Networks/Policy](http://www.ofgem.gov.uk/Pages/MoreInformation.aspx?docid=259&refer=Networks/Policy)

## Charts and analysis for theme 4

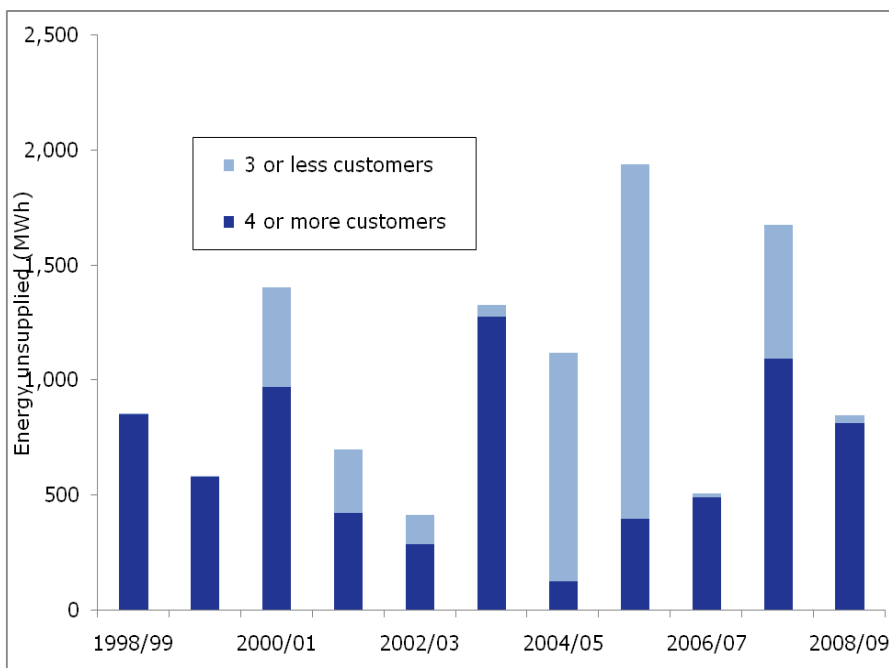
### Indicator 12: Reliability of supply - network performance

Figure 20 - Average customer interruptions (CI) per 100 customers



The performance of GB electricity networks has markedly improved since the introduction of quality of service incentives in 2002. In 2008/09 the number of customer interruptions continued to improve on the previous year.

Figure 21 - Electricity unsupplied due to transmission network faults<sup>48</sup>

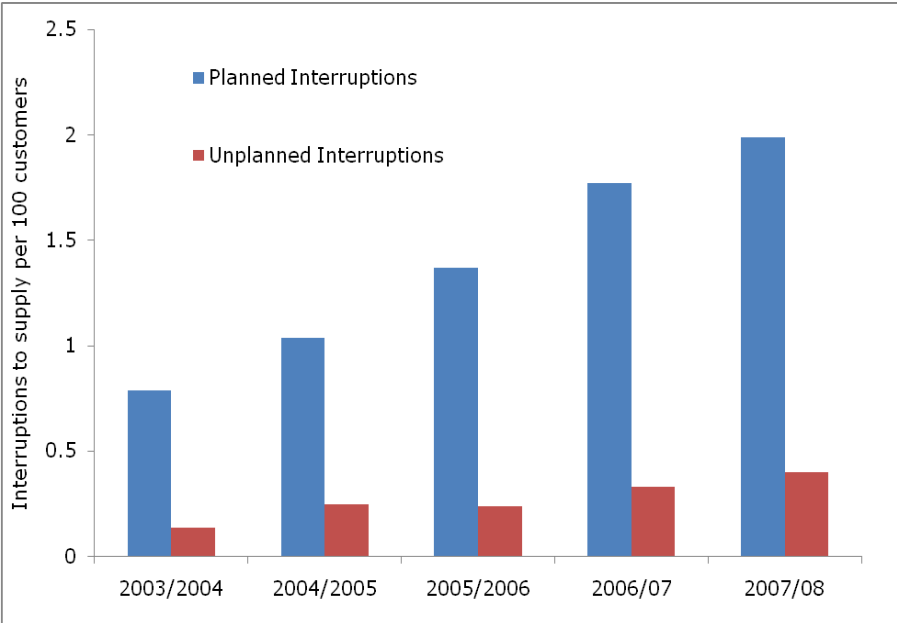


A reliability incentive under the transmission price control helps to keep the amount of electricity unsupplied due to transmission network faults to remain low.

In 2008/09 the amount of electricity unsupplied represented less than 0.001 percent of total energy supplied.

<sup>48</sup> Ofgem data

Figure 22 - Average gas customer CIs per 100 customers



In November 2008, one Gas Distribution Network company drew to Ofgem's attention potential misreporting of mains replacement data it had provided. We are currently in the process of verifying the accuracy of the data provided by this GDN. For this reason, we are not in a position to publish 2008/09 data on GDN non-contractual interruptions in this report.

**Indicator 13: Security and diversity of supply - market response**

Figure 23 - The UK electricity generation mix

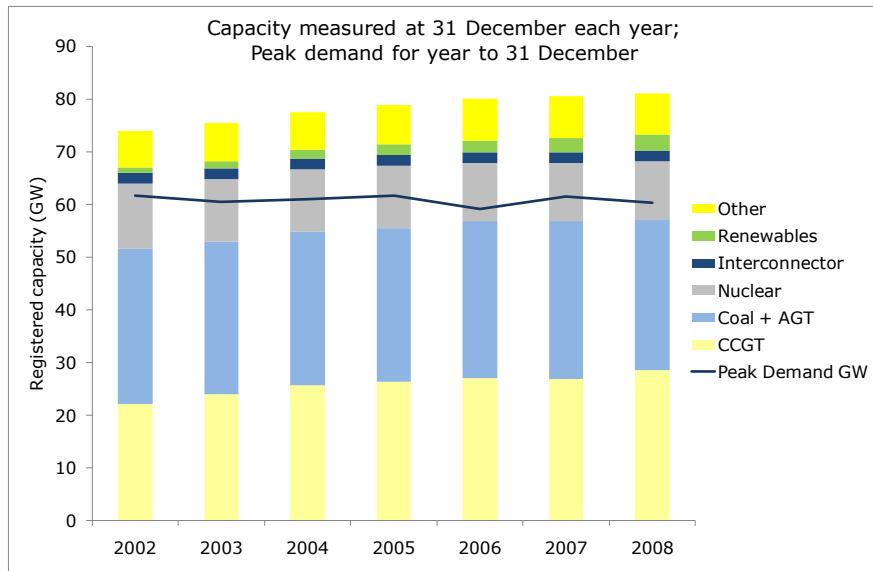
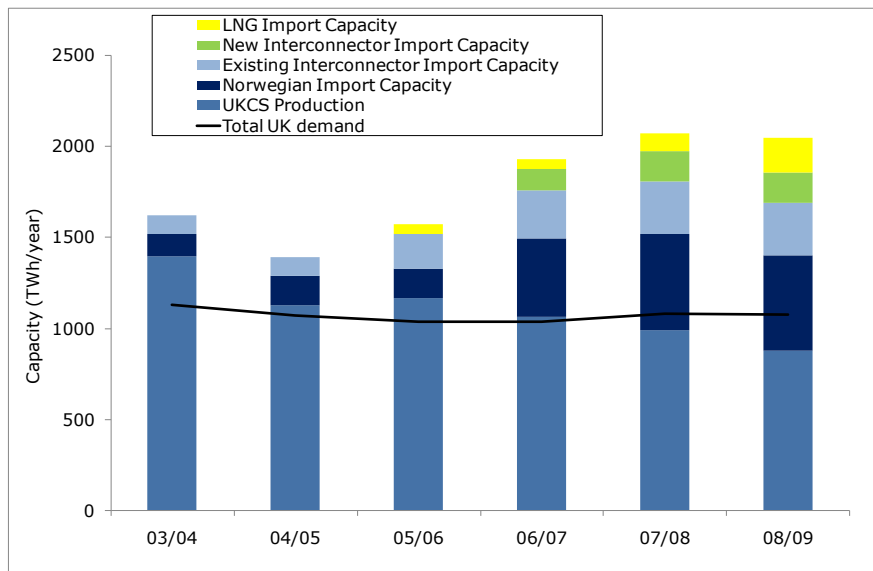


Figure 23 shows the proportion of electricity generation from declared fuels and the potential UK gas supply source, against annual peak demand.

Figure 24 - Gas supply capacity in the UK



Gas production from the UK continental shelf is declining, and from around 2004 the UK has been dependent on gas imports to ensure a secure and reliable gas supply. Imports arrive by a number of interconnector pipes, and liquefied natural gas (LNG), which is typically carried by sea. The chart shows that total capacity has steadily increased over the last five years.

**Indicator 14: Future electricity generation mix**

Figure 25 - Projected UK electricity generation mix

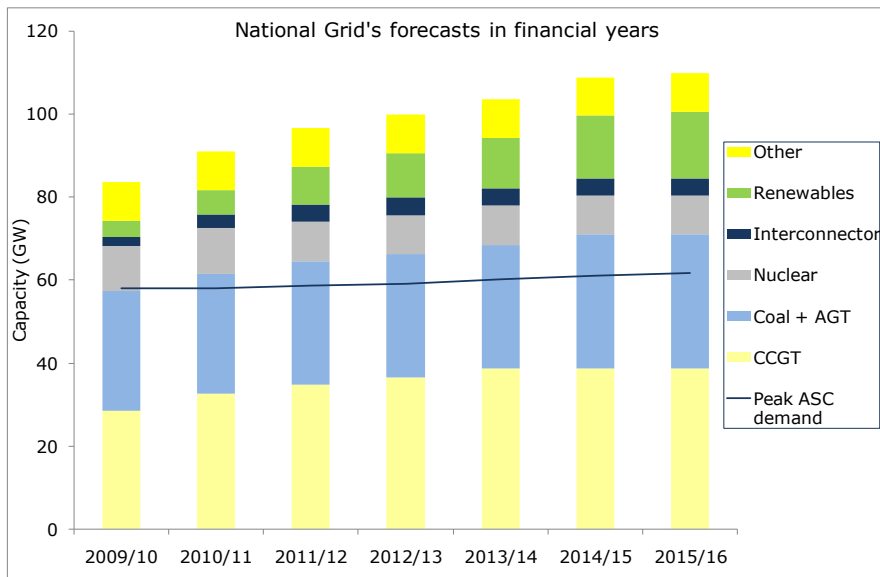
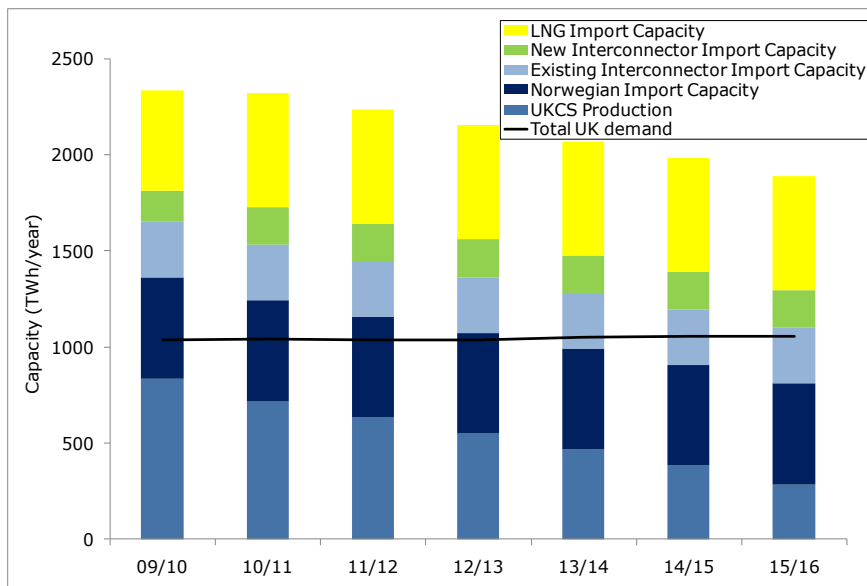


Figure 25 shows National Grid's predicted generation mix out to 2015/16.

Substantial growth in gas and renewable energy capacity is set to be a feature of the next decade. In addition, from 2014 we expect to see the first new UK coal plant demonstrating carbon capture and storage technology.

Figure 26 - Projected future gas supply capacity in the UK



UK domestic gas production is predicted to continue declining in the medium term, making the UK increasingly dependent on imports. By 2015/16 the UK will be importing around three-quarters of its gas. Nonetheless, as this graph shows, the UK's combined domestic production and import capacities are predicted to exceed demand by 79 percent by 2015/16.

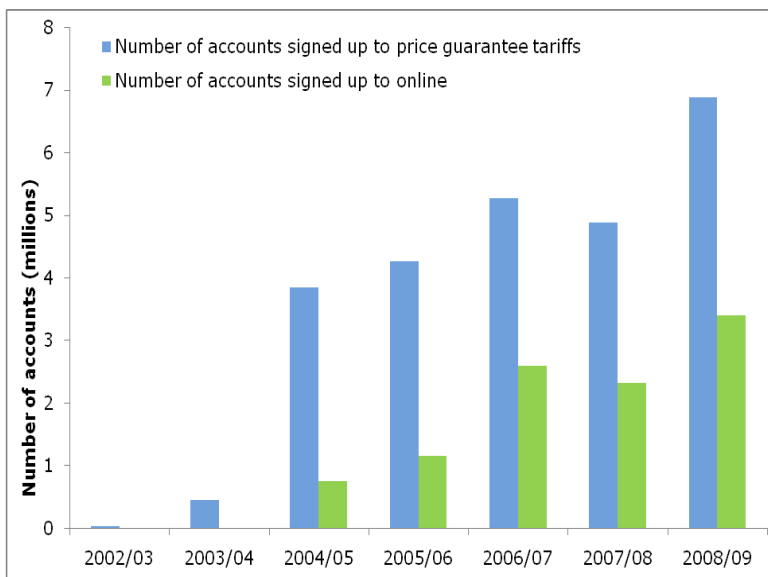


### Indicator 15: Quality of service: supply market performance

Last year the arrangements for consumer advocacy and redress were reformed, and the functions of energywatch were taken on by new bodies. Consumer Direct is now the first port of call for consumer questions and information, Consumer Focus acts as the consumer representative and new Energy Ombudsman arrangements. As such, the complaints and disputes data we published in previous years is no longer available.

### Indicator 16: Product innovation

Figure 27 - Numbers of consumers signed up to price guarantee or online tariffs



In 2008/09 the number of price guarantee accounts increased by 41 percent as consumers signed up to innovative products in the wake of substantial increases in energy tariffs in 2008.

The number of online accounts also increased substantially; 46 percent more than the previous year. This may indicate consumers' growing computer literacy and awareness of competitively priced online tariffs.

## 6. Supporting improved environmental performance

Aside from its impact on climate change and the global environment, the energy sector also impacts on the local environment. For example, fossil fuel power stations are one of the main sources of acid gases such as sulphur dioxide (SO<sub>2</sub>) and nitrogen oxides (NO<sub>x</sub>). These pollutants affect air quality, vegetation and lead to acidification as well as water pollution. Coal-fired stations produce large quantities of bottom and fly ash, the bulk of which has to be disposed of. Electricity generation can affect waterways when used as a source of cooling water and a depository of liquid wastes. Most flue gas desulphurisation processes also produce liquid effluent.

We have a duty to have regard to the effect on the environment of gas transported through pipelines, and of electricity generation, transmission, distribution and supply. In our networks price controls we regularly collect data on oil leakages from electricity networks, which are being progressively replacing with non-fluid filled cables. We also allow network companies to protect visual amenities in certain areas by replacing overhead wires with underground cables.

We examine progress against the following indicators:

- impacts of electricity generation
- impacts of gas and electricity networks

### Our progress in the past year

**6.1. DPCR5 visual amenity:** The current price control arrangements provide an allowance for DNOs to replace a certain amount of overhead lines in National Parks and Areas of Outstanding Natural Beauty (AONB) with an underground alternative. This is to improve visual amenity in these areas, subject to a maximum cost per kilometre at each voltage level (i.e. voltage caps)<sup>49</sup>. We have consulted on the future of the mechanism for the next price control period (2010-2015) and have proposed to retain the scheme with an overall cap, rather than the current voltage caps. This will retain the overall aim of the mechanism but allow for more flexibility in the schemes that can be undertaken.

**6.2. Adaptation to climate change.** We have been working with Defra to progress plans for reporting to the Secretary of State on network companies' preparations to adapt to climate change, and responded to the Defra consultation on this issue. Addressing adaptation to climate change has been an important issue for DNOs, given the nature of their assets. In previous price controls, we permitted increased allowances to fund improved network resilience. However, in anticipation of the next electricity and gas transmission price control, the companies are assessing the need for any works at their substations and they are involved in the industry task group on flood resilience. We are monitoring closely their annual regulatory reporting on proposals for carrying out adaptive work within this price control.

<sup>49</sup>

For further information please see the DPCR4 final proposals document, p.34:

[www.ofgem.gov.uk/Pages/MoreInformation.aspx?docid=51&refer=Networks/ElecDist/PriceCtrls/DPCR4](http://www.ofgem.gov.uk/Pages/MoreInformation.aspx?docid=51&refer=Networks/ElecDist/PriceCtrls/DPCR4)

## Commitments for 2009/10

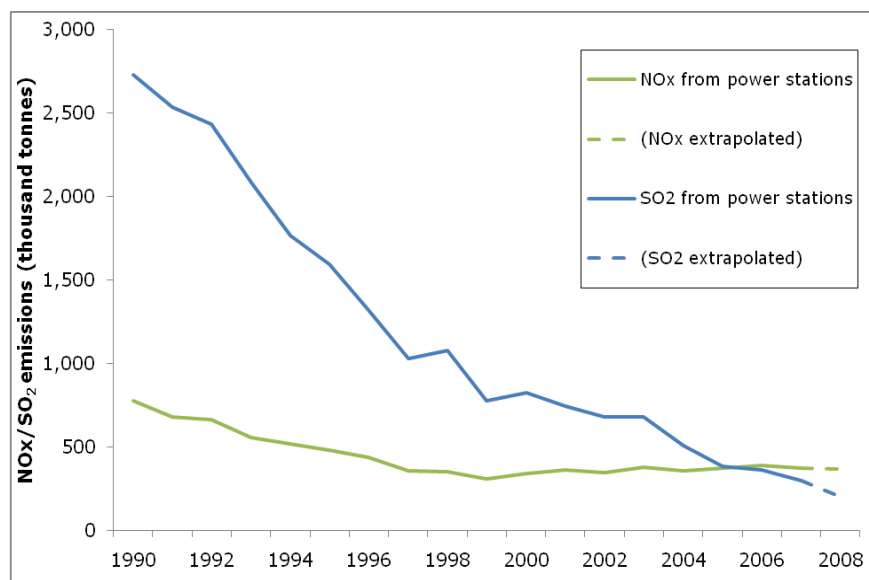
6.3. **DPCR5 visual amenity.** We will publish our final proposals at the end of the year, and propose to implement the price control settlement on 1 April 2009.

6.4. **Adaptation to climate change.** For DPCR5, we wish to encourage the electricity DNOs to play a more active role in adapting their networks to take account of current and anticipated climate change. For example, we are currently evaluating the case for adaptive work to be carried out on about ten percent of primary substations to address flood risks, and we are considering an incentive mechanism to address the increased frequency and impact of "exceptional events". More long-term and as part of the RPI-X@20 project, we will be considering the best way to provide ongoing incentives for the network companies to ensure resilience of their networks in the future.

## Charts and analysis for theme 5

### Indicator 17: Impacts of electricity generation

Figure 28 - NO<sub>x</sub> and SO<sub>2</sub> emissions from power stations



NO<sub>x</sub> and SO<sub>2</sub> emissions are both at historical lows. The introduction of the Large Combustion Plant Directive in 2008 placed further restrictions on operating power stations without emissions reduction equipment, which will drive further reductions in NO<sub>x</sub> and SO<sub>2</sub> emissions.

Table 1 - Volume of radioactive wastes in stock (in cubic metres)

Level of Waste	2001 Inventory	2004 Inventory	2007 Inventory	2008 inventory	Change
Low-level waste	14,700	20,900	160,000	242,000	82,000
Intermediate-level waste	75,400	82,500	21,000	96,200	75,200
High-level waste	1,960	1,890	648	1,700	1,052
<b>Total</b>	<b>92,060</b>	<b>105,290</b>	<b>181,648</b>	<b>339,900</b>	<b>158,252</b>

The Nuclear Decommissioning Authority (NDA) was set up in 2005 to take responsibility for the UK's public sector civil nuclear liabilities, and their subsequent management. Table 1 shows the latest data from the 2008 radioactive waste inventory. The total volume of processed radioactive waste has been steadily increasing over the past decade.

The total volume of radioactive waste that exists today or is forecast over the next century from existing facilities is about 3.4 million cubic metres. Most of the total radioactive waste that has already been produced is contained within existing nuclear reactors and other nuclear facilities and will not be processed until these are shut down and dismantled.

Figure 29 – Radioactive waste by supplier

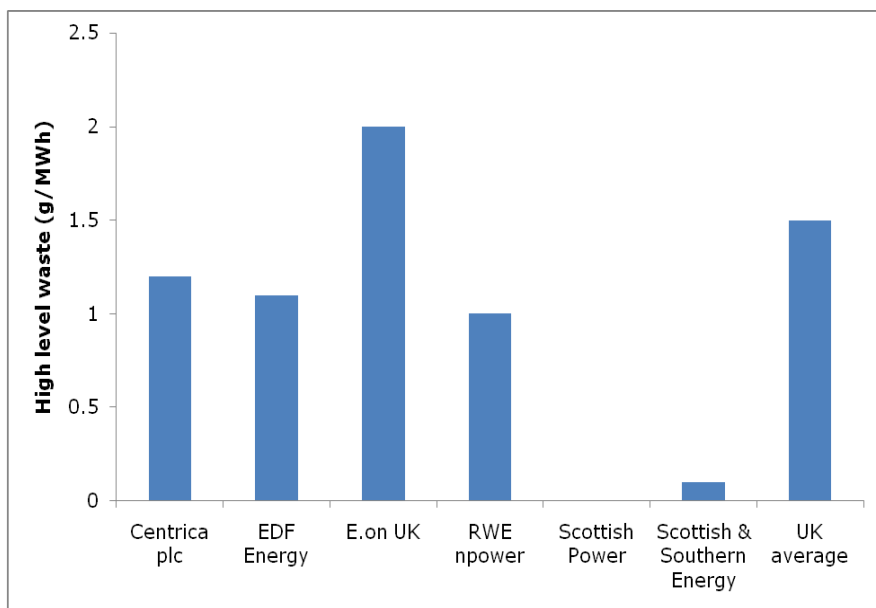
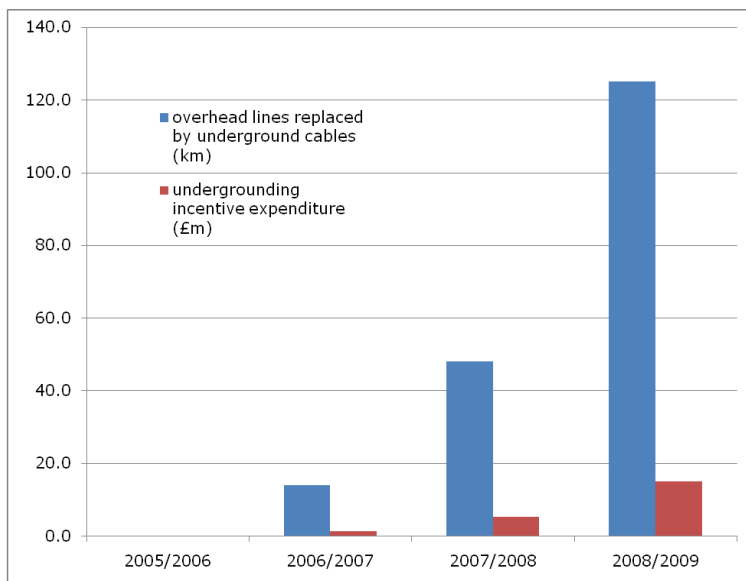


Figure 29 shows the proportion of high level radioactive waste generated by each unit of electricity, by supplier and averaged across the UK.

Levels have decreased overall due to the high incidence of nuclear reactors out for maintenance.

**Indicator 18: Impacts of electricity and gas networks**

Figure 30 – Electricity distribution visual amenity incentive<sup>50</sup>



Under their current price control arrangements DNOs have an incentive to replace overhead power lines with underground cables in national parks or areas of outstanding natural beauty. Figure 30 shows the cumulative work that DNOs have undertaken to improve the visual amenity in selected parts of the country. In the first four years of the price control, DNOs spent £15 million replacing 125km of overhead lines with underground cables.

<sup>50</sup> Source: Ofgem

Table 2 - Use of insulating oil in fluid filled cables<sup>51</sup>

Network Type	Year	Fluid-filled cables in use (km)	Volume of fluid used to top-up cables (litres)
Distribution	2005/2006	6,640	409,329
	2006/2007	6,600	451,939
	2007/2008	6,495	452,353
	2008/2009	6,475	372,303
Transmission	2005/2006	979	50,000
	2006/2007	982	43,132
	2007/2008	972	27,528
	2008/2009	971	34,617
Total	2005/2006	7,619	459,329
	2006/2007	7,582	495,071
	2007/2008	7,467	479,881
	2008/2009	7,446	406,920

A significant proportion of underground electricity cables are insulated with oil, which can cause local environmental damage when cables leak. As a result, network companies incrementally replace fluid-filled cables with solid-insulated cables. Table 2 shows that the total use of fluid-filled cables continues to fall, as does the overall volume of fluid used to top-up cables.

<sup>51</sup> Source: Ofgem

Put your title here

document date

## Appendix – The Authority’s Powers and Duties

1.1. Ofgem is the Office of Gas and Electricity Markets which supports the Gas and Electricity Markets Authority (“the Authority”), the regulator of the gas and electricity industries in Great Britain. This Appendix summarises the primary powers and duties of the Authority. It is not comprehensive and is not a substitute to reference to the relevant legal instruments (including, but not limited to, those referred to below).

1.2. The Authority's powers and duties are largely provided for in statute, principally the Gas Act 1986, the Electricity Act 1989, the Utilities Act 2000, the Competition Act 1998, the Enterprise Act 2002 and the Energy Act 2004, as well as arising from directly effective European Community legislation. References to the Gas Act and the Electricity Act in this Appendix are to Part 1 of each of those Acts.<sup>52</sup>

1.3. Duties and functions relating to gas are set out in the Gas Act and those relating to electricity are set out in the Electricity Act. This Appendix must be read accordingly<sup>53</sup>.

1.4. The Authority’s principal objective when carrying out certain of its functions under each of the Gas Act and the Electricity Act is to protect the interests of existing and future consumers, wherever appropriate by promoting effective competition between persons engaged in, or in commercial activities connected with, the shipping, transportation or supply of gas conveyed through pipes, and the generation, transmission, distribution or supply of electricity or the provision or use of electricity interconnectors.

1.5. The Authority must when carrying out those functions have regard to:

- the need to secure that, so far as it is economical to meet them, all reasonable demands in Great Britain for gas conveyed through pipes are met;
- the need to secure that all reasonable demands for electricity are met;
- the need to secure that licence holders are able to finance the activities which are the subject of obligations on them<sup>54</sup>;
- the need to contribute to the achievement of sustainable development; and
- the interests of individuals who are disabled or chronically sick, of pensionable age, with low incomes, or residing in rural areas.<sup>55</sup>

1.6. Subject to the above, the Authority is required to carry out the functions referred to in the manner which it considers is best calculated to:

<sup>52</sup> entitled “Gas Supply” and “Electricity Supply” respectively.

<sup>53</sup> However, in exercising a function under the Electricity Act the Authority may have regard to the interests of consumers in relation to gas conveyed through pipes and vice versa in the case of it exercising a function under the Gas Act.

<sup>54</sup> under the Gas Act and the Utilities Act, in the case of Gas Act functions, or the Electricity Act, the Utilities Act and certain parts of the Energy Act in the case of Electricity Act functions.

<sup>55</sup> The Authority may have regard to other descriptions of consumers.

Put your title here

document date

- 
- promote efficiency and economy on the part of those licensed<sup>56</sup> under the relevant Act and the efficient use of gas conveyed through pipes and electricity conveyed by distribution systems or transmission systems;
  - protect the public from dangers arising from the conveyance of gas through pipes or the use of gas conveyed through pipes and from the generation, transmission, distribution or supply of electricity; and
  - secure a diverse and viable long-term energy supply.

1.7. In carrying out the functions referred to, the Authority must also have regard, to:

- the effect on the environment of activities connected with the conveyance of gas through pipes or with the generation, transmission, distribution or supply of electricity;
- the principles under which regulatory activities should be transparent, accountable, proportionate, consistent and targeted only at cases in which action is needed and any other principles that appear to it to represent the best regulatory practice; and
- certain statutory guidance on social and environmental matters issued by the Secretary of State.

1.8. The Authority has powers under the Competition Act to investigate suspected anti-competitive activity and take action for breaches of the prohibitions in the legislation in respect of the gas and electricity sectors in Great Britain and is a designated National Competition Authority under the EC Modernisation Regulation<sup>57</sup> and therefore part of the European Competition Network. The Authority also has concurrent powers with the Office of Fair Trading in respect of market investigation references to the Competition Commission.

---

<sup>56</sup> or persons authorised by exemptions to carry on any activity.

<sup>57</sup> Council Regulation (EC) 1/2003