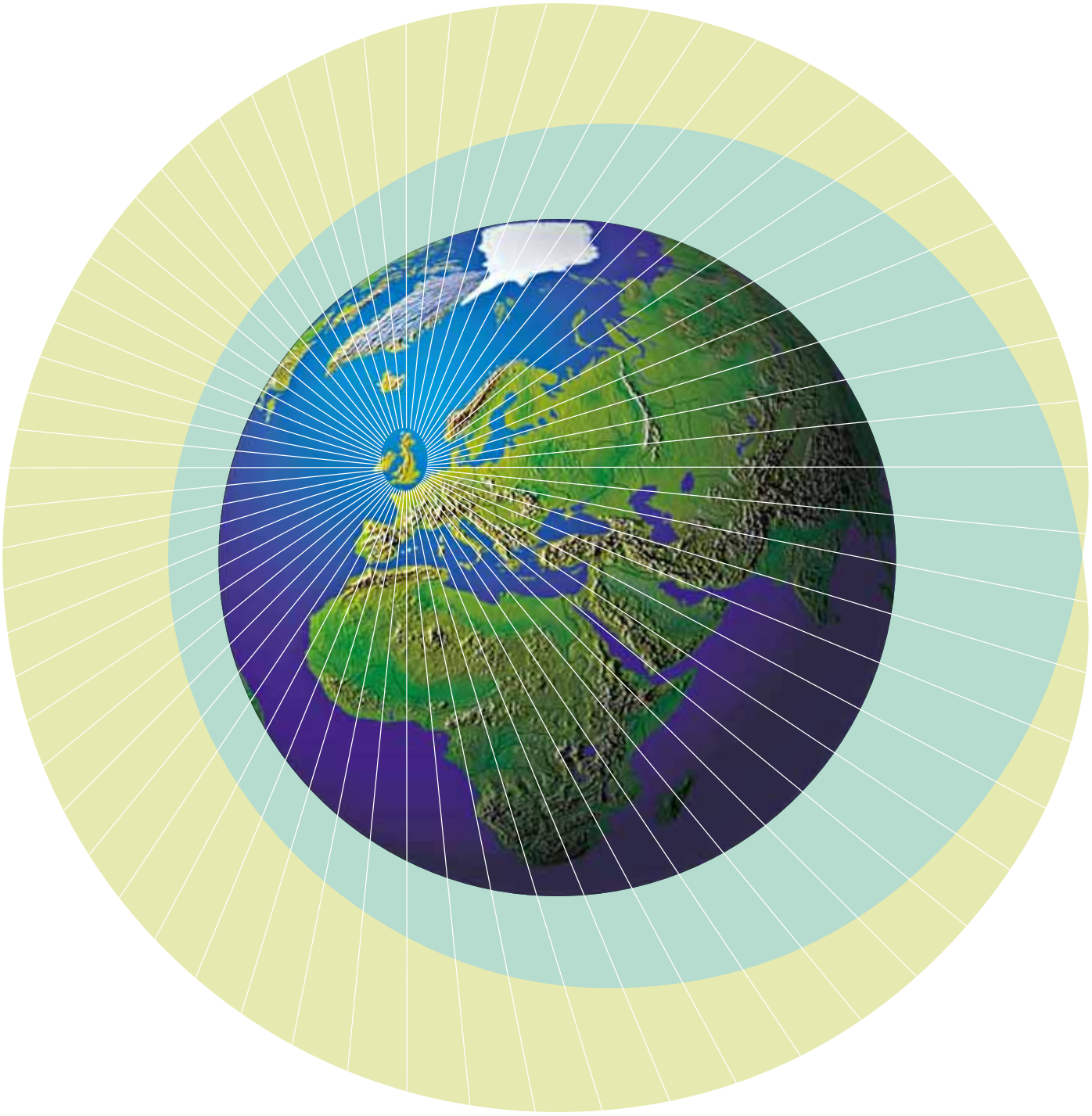
HM Government



DEPARTMENT OF ENERGY & CLIMATE CHANGE

AMENDMENTS TO THE CARBON EMISSIONS REDUCTION TARGET

Consultation Proposals

FEBRUARY 2009

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Full text of the consultation, Executive Summary and Partial Impact Assessment can be found on DECC's website: www.decc.gov.uk/consultations

If you wish to obtain a hard copy of this consultation, please email cert_uplift@decc.gsi.gov.uk

Please send hard copy responses to:
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Or email your response to cert_uplift@decc.gsi.gov.uk

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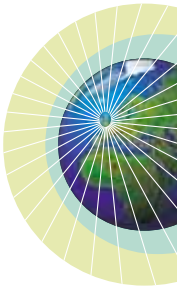
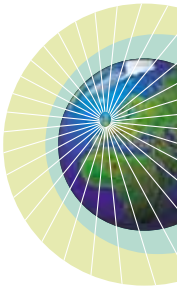


Foreword

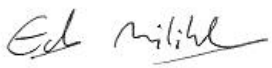


To achieve a radical shift in the energy efficiency of homes in Britain we need to think deeply about the best way of acting.

To make sure the families that need help most are able to get it, and to act on CO_2, this consultation proposes changes to the Carbon Emissions Reduction Target - above all, increasing the level by 20 per cent. To give companies the certainty to plan we are also proposing to extend a CERT obligation to 2012 as part of the Heat and Energy Saving Consultation.

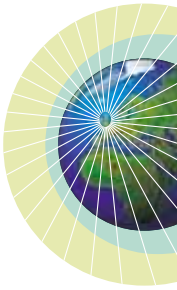
To ensure it is fair, at least 40 per cent of the benefits of CERT will go to people aged over 70 and households on low incomes.

This consultation sits alongside two others: one on a new Community Energy Saving Programme and the other on the Government's wider strategy for heat and energy saving. Together they form a coherent package of measures to save carbon and energy: heating and powering our homes produces more than a quarter of all Britain's CO_2 emissions, and cutting household emissions will be a crucial part of meeting Britain's contribution to action on climate change, an 80 per cent cut in greenhouse gases by 2050.



Ed Miliband

Executive summary



1. This document is the Government's statutory consultation on proposals to make changes to the Carbon Emissions Reduction Target 2008-11 (CERT) via an amendment to the Electricity and Gas (Carbon Emissions Reduction) Order 2008, S.I. 2008/188. CERT was introduced in April 2008 as the successor to the Energy Efficiency Commitment (EEC)[1].

2. The Government proposes to:

   - increase the overall CERT target by 20% (from 154 to 185 million lifetime tonnes of CO_2);
   - provide new incentives to encourage professionally installed top-up loft insulation and DIY loft insulation;
   - encourage energy suppliers to promote Real Time Display Devices and provide energy-related advice by giving these measures a pre-determined carbon score;
   - increase from 6 to 10% the proportion of a suppliers' obligation that can be met through innovation activity;
   - enhance existing reporting arrangements.

3. These proposals are intended to enact the CERT-related elements of the Prime Minister's announcement on 11 September 2008 on the Government's Home Energy Saving Programme[2]. To help people with fuel bills and to tackle climate change, the Government wishes to see increased levels of energy-saving measures going in to consumers' homes and an expanded CERT will make a major contribution to this objectives.

4. We believe that an amended CERT obligation continues to strike a balanced approach, which sets very challenging but achievable carbon reduction targets, while continuing to contribute effectively to our fuel poverty objectives and affordability generally.

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1 Further information on the existing CERT programme is available from www.defra.gov.uk/environment/climatechange/uk/household/supplier/cert.htm

2 http://www.number10.gov.uk/Page16806

Level of the CERT obligation

5. The Government proposes that the amended overall CERT obligation for the period 1 April 2008 to 31 March 2011 should be savings of 185 million lifetime tonnes of carbon dioxide. This would equate to an annual saving of about 5.3 $MtCO_2$ at the end of the programme. These are an increase from an existing baseline of 154 million lifetime tonnes of CO_2, and around 4.2 $MtCO_2$ annual savings by 2011.

6. The savings from energy efficiency measures promoted under CERT and its predecessor programmes typically last for many years. The annual carbon savings from CERT will therefore add to the expected annual carbon savings of about 1.1 $MtCO_2$ and about 2.1 $MtCO_2$ by 2010 respectively from EEC 2002-05 and EEC 2005-08, a total of over 8 $MtCO_2$.

7. The Government estimates that on average the annual ongoing benefit across all GB households, in terms of lower energy bills or increased comfort, will be around £35 a year, in today's money, for the lifetime of the measures. These benefits will continue for many years, in some cases several decades, beyond the CERT period.

8. Energy suppliers carried over 25% of their CERT targets from the previous scheme, EEC 2005-08. This means that a substantial share of the costs of CERT had already been met before CERT started. Taking this into account, we do not expect the annual costs of the expanded CERT to exceed original estimates. Any costs to consumers are exceeded by the benefits. Further detail is included in the impact assessment published alongside this consultation.

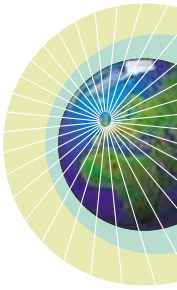
Low-income and vulnerable consumers

9. The Government remains committed to helping low-income and vulnerable households through CERT. It does **not** propose to alter the requirement that suppliers should deliver at least 40% of the carbon savings of the CERT obligation to a priority group of consumers – a group which comprises those in receipt of certain income or disability benefit or tax/pension credits as stated in schedule 3 of the existing CERT Order or those over 70 years of age. What is known as the "priority group obligation" ensures that those falling within this group have at least an equal opportunity to benefit from CERT measures as other consumers. The priority group makes up around 11 million households or 42% of the total, and we estimate that around 60% of supplier expenditure is on the priority group.

Innovation

10. CERT currently includes two features designed to promote innovation – a demonstration route for measures that do not yet have a carbon score, and incentives for market transformation activity, which qualifies for a 50% uplift in

its carbon score. At present suppliers can meet up to 6% of their target from these two types of qualifying action, with a further 2% allowed for microgeneration measures. The Government proposes to increase the 6% cap to 10%, whilst leaving the 2% microgeneration element unchanged.



New incentives for loft insulation

11. The Government proposes to introduce new uplifts for loft insulation, as follows:

- a 50% uplift for professionally installed loft top-up insulation (where there is 60mm or more existing insulation);
- a 100% uplift for professionally installed loft top-up insulation (where there is 60mm or more existing insulation) in the Priority Group;
- a 50% uplift for all forms of DIY loft insulation.

These uplifts will be applied to the current carbon score for loft insulation.

Measures relating to consumers' behaviour

12. There is growing evidence that changing the way people use energy at home offers substantial scope to save carbon and energy. It is already possible for suppliers to deploy behavioural measures within CERT, either through the demonstration route, or as a standard measure if they can demonstrate the carbon savings that they will deliver. However, neither of these are likely to offer rapid deployment of new behavioural measures at scale. The Government therefore proposes to set fixed carbon scores for two key measures, to encourage their early deployment:

- Real time displays – which provide information on electricity consumption;
- Home energy advice – which provides householders with information and face-to-face advice about carbon saving measures they can install in their home, and ways to reduce energy consumption through changes to behaviour – by better use of heating controls, for example.

In addition, these measures satisfy the relevant criteria for innovation measures set out in the existing Order and would therefore qualify as market transformation measures, benefitting from a further uplift, subject to the 10% cap (see paragraph 10 above).

Reporting

13. In light of the central role that CERT plays in delivering the Government's objectives in the household sector, the Government wishes to see fuller reporting on the delivery of CERT, in particular on where within Great Britain CERT measures are deployed. We will seek additional information on where measures have been installed in Scotland, Wales and England/English Regions on an annual basis; and on a more detailed basis possibly upon completion of the scheme. In the first instance we will explore this through a voluntary approach but the Government is prepared to consider regulatory approaches.

Longer term context

14. This consultation relates only to the proposed changes to the current CERT Order which ends in April 2011. Options for the post-2011 arrangements are included in a consultation on the Government's Heat and Energy Saving Strategy which is published by DECC alongside this consultation[3]. However, to provide sufficient certainty for future planning, we are proposing to commit:

- to continue with a measures-based CERT obligation until December 2012. The energy supplier target will be at least equivalent to that under CERT including the 20% increase[4];

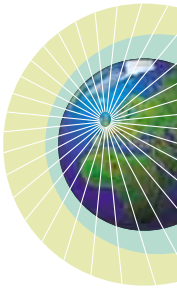
- to guarantee carry-over for all CERT measures into this CERT period beyond March 2011 with at least their current carbon score. **Given the importance of insulation measures and the Government's wish to see rapid delivery in this area, views are particularly welcomed on the incentive structure of any carry-over.**

Arrangements after March 2011 including the supplier target, priority group arrangements and any new measures and their scores will be subject to future legislation and statutory consultation.

3 http://www.delib.co.uk/

4 In terms of carbon savings relative to the duration of the obligation. For this 21-month period the target will at least equal 107.9 $MtCO_2$ lifetime (a pro rata share of 185 $MtCO_2$)

Section 1
Introduction



1.1 This document sets out the Government's proposals to amend the Carbon Emissions Reduction Target (CERT) 2008-11 in order to enact the relevant elements of the £1 billion Home Energy Saving Programme announced by the Prime Minister on 11 September 2008[5].

1.2 The Home Energy Saving Programme is the Government's response to tackle climate change and help with energy bills, particularly for vulnerable households. The programme includes additional resources for the Warm Front fuel poverty grant scheme and for higher levels of cold weather payments, amendments to CERT and the establishment of a new Community Energy Saving Programme (CESP) to be delivered by energy suppliers and electricity generators[6]. The proposed 20% increase in the CERT target forms over half of the £1 billion package by value.

1.3 **This consultation is restricted to those elements of CERT which are subject to proposed amendment.** These include:

- the overall CERT target;
- new incentives to encourage professionally installed top-up loft insulation and DIY loft insulation;
- encouraging energy suppliers to promote Real Time Display Devices and providing energy related advice by giving these measures a pre-determined carbon score in the Order;
- increasing from 6 to 10% the share of a suppliers' CERT target that can be met through innovation activity;
- enhancing existing reporting arrangements.

1.4 Many features of the CERT are not being changed, and readers are referred to the existing CERT Order and explanatory memorandum for further details of the scheme as a whole[7]. Elements which are not proposed to change include, but are not restricted to:

5 http://www.number10.gov.uk/Page16806

6 Consultation on the Community Energy Saving Programme available at: http://www.decc.gov.uk/

7 www.opsi.gov.uk/si/sis05-02

- The Priority Group, which remains at 40% – see article 13;
- The Priority Group flexibility element, which remains at 12½% of the Priority Group obligation – see article 14;
- Key administrative arrangements such as notification and approval of qualifying actions;
- The range of fuel types in which savings can be made;
- Transfer arrangements – see article 18;
- The threshold below which a supplier will not fall within the scope of the CERT obligation. Therefore, a supplier with at least 50,000 customers for each fuel will be subject to a CERT obligation;
- Enforcement provisions.

Process

1.5 This document is the statutory consultation[8] on the proposals which will amend the current CERT Order. A draft amending Order is published alongside this consultation.

1.6 This document is based on the details of the Prime Minister's Home Energy Saving Programme announcement of 11 September 2008. It also takes account of the latest information on the costs of carbon saving measures and other parameters that are likely to determine suppliers' costs in meeting their CERT obligations, including information about delivery during the first two quarters of CERT. The Government intends to hold events during the consultation period to offer stakeholders an opportunity to discuss the issues set out in this consultation.

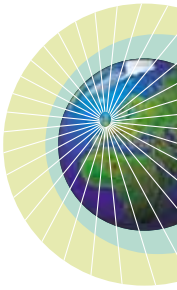
Next steps

1.7 After considering the responses to this consultation, the Government will lay before Parliament a draft order amending the existing CERT Order[9] with a view to it coming into force in Summer 2009. The Order will be subject to debate in and approval by both Houses of Parliament.

1.8 Comments on all aspects of the proposals contained in this document are invited, and should be sent by **Tuesday 14 April 2009** to Paul Egerton as detailed below. This is a shortened consultation exercise because the Government is consulting on amendments to an existing policy rather than a wholly new policy proposal.

8 As required by s.33BC of the Gas Act 1986, s.41A of the Electricity Act 1989 and s.103 of the Utilities Act 2000.

9 See http://www.opsi.gov.uk/si/si2008/pdf/uksi_20080188_en.pdf.



Comments should be sent to:
Paul Egerton
Department of Energy and Climate Change
3 Whitehall Place
London, SW1A 2HH
E-mail: CERT_UPLIFT@decc.gsi.gov.uk

Consultees in Scotland are asked to respond to DECC at the address above, and are invited submit copies of their comments to:

Joanne Opara
CERT consultation
Enterprise, Energy and Tourism Directorate
2nd Floor Meridian Court
5 Cadogan Street
Glasgow, G2 6AT
Email: Joanne.opara@scotland.gsi.gov.uk

Consultees in Wales are asked to respond to DECC at the address above, and are invited to submit copies of their comments to:

Climate Change and Water Division,
Welsh Assembly Government,
Cathays Park,
Cardiff, CF10 3NQ.
Email: climate-change@wales.gsi.gov.uk

1.9 In line with the Department of Energy and Climate Change's policy of openness, at the end of the consultation period copies of the responses we receive may be made publicly available on the DECC website. The information they contain may also be published in a summary of responses and shared with other Government departments and Devolved Administrations. If you do not consent to this, you must clearly request that your response be treated confidentially. Any confidentiality disclaimer generated by your IT system in e-mail responses will not be treated as such a request. You should also be aware that there may be circumstances in which DECC is required to give information to third parties on request, in order to comply with its obligations under the Freedom of Information Act 2000 and the Environmental Information Regulations.

1.10 If you have any complaints about the consultation process (as opposed to comments about the issues which are the subject of the consultation) please address them to:

CERT Consultation Coordinator
Room 7C
Nobel House
17 Smith Square
London, SW1P 3JR
Email: consultation.coordinator@decc.gsi.gov.uk

Section 2

Carbon Emissions Reduction Target 2008–11: summary of the scheme

2.1 The Gas Act 1986 and the Electricity Act 1989 provide the Government with the power to impose on gas and electricity suppliers an obligation to achieve a carbon emissions reduction target. The Government has used these powers to establish the existing Carbon Emissions Reduction Target 2008-11 by legislating through the Electricity and Gas (Carbon Emissions Reduction) Order 2008, S.I. 2008/188. The Government is responsible for setting both the level of the overall target on suppliers and the framework for the operation of the scheme.

2.2 The Government proposes to amend CERT to:

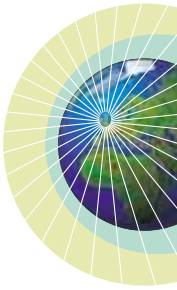
- increase the overall CERT target by 20% (from 154 to 185 million lifetime tonnes of CO_2);
- provide new incentives to encourage professionally installed top-up loft insulation and DIY loft insulation;
- encourage energy suppliers to promote Real Time Display Devices and providing energy-related advice by giving these measures a pre-determined carbon score in the Order;
- raise the cap from 6% to 10% for innovative measures which qualify for a 50% uplift.

Objectives of the CERT

2.3 The purpose of the CERT obligation remains unchanged – to help consumers in the household sector to reduce the carbon impact of their home by using energy more efficiently, reducing consumption and using energy from microgeneration sources. In doing so they will reduce their fuel costs and/or enjoy greater comfort.

2.4 The promotion of carbon reduction measures such as loft insulation represents a continuation of suppliers' activity under the current CERT. The inclusion of

energy advice and display devices is a new feature. The revised Illustrative Mix of Measures appended to the Impact Assessment includes scores for these new measures along with existing ones[10].



2.5 CERT ensures an equitable distribution of benefits through a Priority Group obligation, which requires that suppliers meet at least 40% of their target from a defined group of low income and vulnerable households – see article 13 of the current CERT Order. The Government does not propose to amend the Priority Group percentage (although the absolute size of the priority group target will increase with the 20% increase to the overall target), nor to make any change to the proportion of each supplier's obligation that can be met through the Priority Group Flexibility Option, see article 14.

2.6 Ofgem is responsible for the administration of the CERT programme, and will consult on updated administration procedures for the revised CERT 2008-2011 following publication of the draft Statutory Instrument.

Amendments to the CERT scheme

2.7 The sections below set out the Government's proposals to amend CERT.

Overall target

2.8 The Government proposes that the overall CERT target to be achieved by suppliers for the period 1 April 2008 to 31 March 2011 should be savings of 185 million lifetime tonnes of CO_2. This is an increase of 31 million lifetime tonnes of CO_2 or 20% above the original CERT target of 154 $MtCO_2$.

2.9 The level of the overall target for CERT is established using an illustrative mix of possible measures to demonstrate the feasibility of the target and the balance of costs and benefits. The overall target, together with the estimated costs and benefits of CERT are set out in a revised Illustrative Mix of Measures[11] appended to the Impact Assessment.

2.10 The Government estimates that on average the annual ongoing benefit per household, in terms of lower energy bills or increased comfort, will be around £35 a year for the lifetime of the measures. These benefits will continue for many years (in some cases several decades) beyond the CERT period. It could deliver up to 20% more carbon savings, but this will be reduced by the suppliers use of measures with uplifts applied to the score, so the actual additional carbon savings are likely to be lower.

10 The illustrative mix shows the carbon saving score for measures installed in a 3-bed semi-detached home, but in practice the score for physical measures varies with property type. There will be one across the board score for RTDs and home energy advice regardless of property type.

11 The Illustrative Mix is an analytical tool used by the Government to explore the implications of various options and to explain our underlying assumptions in setting the overall target and other key elements of the CERT framework. It should be emphasized that it does not necessarily reflect the way in which suppliers might choose to proceed in practice, nor is it intended to suggest particular targets or levels of activity that must be derived from any particular measure or approach.

2.11 The Government's Home Energy Saving Programme was designed to help household consumers reduce their energy bills both through direct help and by raising levels of investment in energy-saving measures.

2.12 In proposing a 20% increase in the CERT target the Government is mindful of the need to balance the increased benefits to those consumers who receive free or subsidised measures against the costs of an enhanced programme. A key factor in explaining why the CERT target can be increased without a disproportionate increase in the costs is that suppliers carried over from the previous obligation (the Energy Efficiency Commitment 2005-2008) measures totalling 37.8 $MtCO_2$, equivalent to 25% of the original CERT target. This early action benefits consumers, who have received energy-saving measures sooner than they would otherwise have done, and means that the costs to suppliers of complying with CERT are spread over a longer period. Further details are included within the accompanying impact assessment.

- **Do you agree with the Government's proposal to raise the CERT target by 20%?**

Low-income consumers

2.13 In order to ensure that low income and vulnerable consumers are as able as other consumers to benefit from CERT measures, energy suppliers are currently required to achieve at least 40% of their obligation in households which are in receipt of eligible benefits[12], or are over 70. The 20% increase in the overall target will apply, pro rata, to the absolute scale of the Priority Group target. We estimate that supplier expenditure in the Priority Group will increase from £1.5 billion to £1.9 billion, representing nearly 60% of total supplier expenditure.

2.14 Government proposes to add a new benefit – the employment and support allowance – to the qualifying benefits listed in the Order. This will ensure that the qualifying benefits for the CERT Priority Group remain the same as those for the Warm Front programme (and devolved equivalents), where this benefit has already been added.

Innovation

2.15 CERT includes features designed to encourage two categories of innovation by energy suppliers:

i. demonstration activity, where a score is based on the cost of an action which is reasonably expected to achieve a reduction in carbon emissions but to which accurate carbon savings cannot yet be attributed;

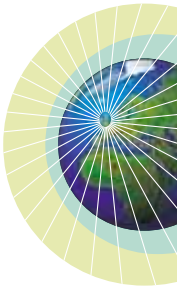
ii. market transformation activity, which covers actions where carbon saving can be determined but which were:

  – not included as qualifying action in the first phase of the Energy Efficiency Commitment (EEC 2002-2005); or

12 See Schedule 2 of the CERT Order.

– that deliver savings significantly greater than a benchmark action (see article 12).

These qualifying actions are eligible for an additional 50% uplift in their carbon score – see article 15(3)(b) and 19(4)(b).



2.16 At present, a supplier may only achieve 6% of its individual obligation by the promotion of demonstration and/or market transformation activity, with an additional 2% for microgeneration activity, see article 9(3) and 9(4). To enhance the scope for suppliers to deploy the behavioural measures proposed below – real-time displays and home energy advice – the Government proposes to increase the 6% cap to 10%. We propose that the additional 2% allowed for microgeneration remain unchanged, so the maximum overall cap is 12% if at least 2% microgeneration is included. Any increase in the share of supplier targets which qualifies for additional uplifts does represent a potential loss of "real" carbon savings. If suppliers make full use of the 12% innovation cap then this would represent a 6% loss of carbon savings for the scheme as a whole.

Do you agree with the Government's proposal to increase the cap on innovative activity to 10%, and to retain a further 2% cap for additional microgeneration activity?

Measures relating to consumers' behaviour

2.17 There is growing evidence that changing energy-related behaviour offers substantial scope to save energy and hence reduce carbon emissions. A recent study carried out for DECC summarised the most recent evidence, confirming the significant potential for savings from measures addressing consumer behaviour[13]. Suppliers can already gain credit for behavioural measures via two routes:

- the demonstration route (see para 2.15 above) which is designed for limited scale trials of new measures for which a carbon score is yet to be determined (see Article 11.3, Article 21); or
- by conducting appropriate independent trials and presenting Ofgem with sufficient evidence to justify a carbon saving score as a market transformation action.

2.18 The carbon scores for measures under CERT represent their lifetime savings, that is the on-going reduction in carbon emissions multiplied by the projected lifetime in years. However, determining an evidence-based lifetime for behavioural measures requires lengthy trials. The Government wishes to maximise the opportunity for suppliers to deploy behavioural measures quickly, particularly as they can help to make immediate reductions in consumer bills. To encourage the early deployment of two key measures the

13 www.defra.gov.uk/environment/climatechange/uk/energy/energyservices/documents/decc-save-energy-implications.pdf

Government therefore proposes to assign them fixed carbon scores within the CERT Order. The proposed scores represent mid-range levels of energy saving based on the best evidence currently available.

Real time display devices (RTDs)

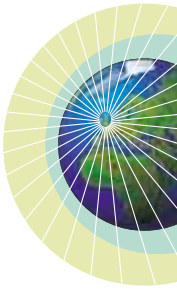
2.19 RTDs are an effective way to encourage households to save electricity through behavioural change (e.g. switching appliances off rather than leaving them on standby; switching off lights in rooms that are unoccupied; reducing the temperature at which clothes are washed, etc). There is good evidence from various studies in the UK and around the world that RTDs do result in energy and carbon savings – this evidence is summarised in Annex 1.

2.20 Providing a defined CERT carbon score for RTDs will enable energy suppliers to provide displays to customers immediately, especially if the energy savings achieved through this means are comparably cost-effective relative to other measures. Setting a pre-determined score for RTDs will stimulate the market for these devices and enhance the scope for behavioural change to drive energy and carbon savings in addition to physical measures in CERT. This approach avoids the need for each individual energy supplier to conduct its own trial, which would take several years, and will thereby save substantial administrative costs. It will create certainty for the energy suppliers and the RTD manufacturers. It will reduce the transaction costs associated with calculating scores and allow the energy suppliers to gain experience in marketing a behavioural measure. Our analysis indicates that even at relatively high levels of uptake, this would have limited impact on the provision of other measures in CERT.

2.21 Real time electricity displays are therefore proposed to be included as a market transformation action in CERT. We expect there will be two basic types of RTDs for the purposes of CERT, one that uses short-lived disposable batteries and one that does not. A display that runs off the mains, with a transmitter that runs off either a long-life battery or a rechargeable battery that takes its power from the meter cable would qualify for a score of 0.996tCO_2, equivalent to a 3.5 per cent saving in electricity usage over 15 years. This represents a mid-range estimate of the savings from RTDs, and is consistent with the savings assumed in the 2007 Energy White Paper. Trials have shown that if RTDs are fitted with short-lived batteries then many consumers do not replace them when they run out, so may receive only a few months usage from the device. In light of this we propose that a RTD which uses disposable batteries or normal household rechargeable batteries in the display or transmitter elements would qualify for a reduced score. We propose that this should be 75 per cent of this standard score (i.e. 0.747tCO_2), but would welcome respondents' views on whether this is a reasonable proposition.

2.22 We propose that for the purposes of CERT, the definition of a qualifying RTD should be as follows: A RTD is a device that:

- shows, at a minimum: real time electricity consumption and cost on a portable or hand-held type display;



- can be connected to an existing electricity meter using a transmitter attached to the meter cable or to a new meter using built-in wireless communication;
- is provided only to customers who want them and who are willing to use them to save energy, for example by responding to an offer or signing up to an energy saving tariff that provides a display, or provided as part of a home visit. A device which is sent unsolicited will not receive a carbon score;
- there is no technical standard to which RTDs must conform for the purposes of CERT and the Government does not propose establishing such a standard.

2.23 It has been suggested that displays with additional attributes could result in greater consumer engagement and higher energy savings. Examples include detailed information about individual appliances, the ability to download data onto a PC for more detailed analysis of electricity use and the use of such data in social networking sites. **Respondents are invited to comment if displays with these or other attributes should be given a higher score and if so, what it should be and how it should be determined.**

2.24 The Government recognises that real-time displays that work with existing electricity meters have the potential to help consumers reduce energy consumption and deliver early carbon savings in advance of the roll out of smart meters. The Government recently made the decision that smart meters should be rolled out to all domestic households. There will be a set-up period before the roll-out begins, during which the necessary preparations for this major change programme are put in place. The Government has given an indicative timetable to the end of 2020 to complete the replacement of meters in all homes. Given this, the Government recognises that real-time displays that work with existing electricity meters have the potential to help consumers reduce energy consumption and deliver early carbon savings in advance of the roll out of smart meters.

Do you agree with the Government's proposal to give RTDs a predetermined carbon score in the CERT Order? Do you agree with the scores proposed?

Home Energy Advice

2.25 To give householders a better understanding of how they use energy and the implications of energy-related purchases we propose to give a carbon score for home energy advice (HEA). Work commissioned by DECC[14] demonstrates that there is evidence to suggest that individuals who have received face-to-face energy advice are more likely to implement energy efficiency measures and alter their behaviour compared to those who received an online audit, with individuals who did not receive any audit the least likely to implement energy efficiency measures or behaviours. Further evidence is included in Annex 1. The proposal to include home energy advice as a qualifying measure under CERT is in recognition of this potential carbon benefit.

14 www.defra.gov.uk/environment/climatechange/uk/energy/energyservices/documents/decc-save-energy-implications.pdf

2.26 The Government proposes that HEA which satisfies the criteria described below will receive a carbon score of 0.675tCO_2 (which corresponds to savings of 1% of electricity and 2% of gas in an average household for a lifetime of 7.5 years). This represents projected savings from behaviour change which is additional to those from any physical measures which may be installed as a result of the advice. HEA would be eligible as a market transformation measure, subject to the supplier's 10% cap.

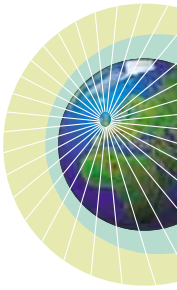
2.27 The proposed criteria for energy advice includes:

- face to face advice;
- the energy saving potential of the property;
- advice relating to all energy consumption and carbon reduction actions and behaviours;
- advice specific to the circumstances of the householder;
- the production of a personalised report for the property; and that
- the HEA must be provided by a suitably qualified person – this is discussed further below.

We therefore propose that to be applicable under CERT suppliers will need to develop HEA activity which includes:

- A face to face visit with the householder. A CERT score is only justified for a service going beyond other source of free home energy advice that are already available by telephone or from the internet;
- A basic visual inspection of the property and a basic assessment of the type of fuels that are used. This is not intended to be a formal audit of the property, such as that associated with generation of Energy Performance Certificates, although provision of an EPC could be one element of higher value advice services;
- Assessment of controls for heating and hot water and advice on the use and upgrade of existing controls;
- Assessment of boiler replacement using a standardised boiler replacement checklist;
- Assessment of electricity-related behaviours and advice on opportunities for energy and fuel bill savings (a check list would be necessary to support this, to ensure that specific areas were covered by the advice, e.g. understanding of appliance energy usage, stand-by etc);

- Written advice to the householder on behavioural changes that they can make which will save energy and reduce their fuel bills – this would need to record existing measures/actions taken and potential for further measures. At a minimum the report should include details of all of the actions listed above and the advice relevant to each of those. The report must also include contact details for the Act on CO_2 advice line. The report must be presented to the consumer within one month.



2.28 If advice offered under CERT is to be trusted and credible, advisers must have had suitable training and be appropriately qualified. In addition, Ofgem must be able to have clear criteria to accredit HEA proposals put forward by suppliers, including the training and qualifications of personnel involved. At present there is no single qualification that covers the provision of face to face home energy advice including behaviour. Domestic Energy Assessors represent a substantial cadre of independent, quality assured personnel, and the Government proposes that the DEA qualification (Vocationally Related Qualification Level 3) form the basis for energy advisers under CERT. The DEA qualification currently covers basic behavioural advice so the existing DEA cohort can be used immediately to deliver this advice in people's homes. It is being developed further to include the provision of more sophisticated advice on changes that can be made to reduce fuel bills.

- **Do you agree with the proposal to give home energy advice a fixed score under CERT, and do you agree with the score proposed?**

- **Do you agree with the proposal that the DEA qualification should form the basis for provision of CERT advice? If not, please state your reasons and suggest alternatives.**

2.29 The Government will include a discussion on the options for advice under CERT as part of stakeholder events to be held during the consultation period. We will also need to ensure coordination with the proposal to include advice within the proposed Community Energy Saving Programme.

2.30 Government believes that there are benefits from follow-up contact with the householder, to prompt and remind them of actions arising from the initial advice. We are therefore keen to explore methods of encouraging persistence of behavioural changes beyond a one-off visit. However, we recognise that any such requirement must be practicable and proportionate to the carbon score assigned under CERT. This follow-up could take the form of additional contact by telephone, the provision of a real-time display, or signing a customer onto an energy saving tariff. **We would welcome stakeholders' views and will explore this further as part of the consultation process**

2.31 It has been suggested that there may be added value when a real time display is installed and its use explained as part of HEA. **We would welcome views on whether this warrants a slightly higher score.**

New incentives for loft insulation

2.32 Loft insulation is one of the most significant measures capable of tackling the poor thermal performance of existing homes. Up to 20% of a home's heat can be lost through an un-insulated loft space. However, there is a diminishing return with increasing levels of insulation such that around three quarters of the potential savings come from the first 50mm of insulation. The carbon savings under CERT for topping up lofts with 60mm or more of existing insulation reflect this and are correspondingly low, so this measure is often not done even when other measures are being installed in a house. The limited subsidy offered by suppliers often precludes its take-up, particularly by low income households. Yet viewed in the context of the Government's commitment to see all cost-effective insulation measures completed, where practical, by 2020[15], topping up lofts that have inadequate insulation is an important task. It is also a measure with few delivery constraints – installation does not require specialist equipment or training – so can be increased comparatively quickly. The Government therefore proposes to make three changes to encourage the promotion of loft insulation, as follows:

- a 50% uplift on the score for professionally installed loft top-up (where there is 60mm or more existing insulation);
- a 100% uplift on the score for professionally installed top-up loft insulation in the Priority Group (where there is 60mm or more existing insulation);
- a 50% uplift on the score for all forms of DIY loft insulation. However, we will need to be confident that this will not result in market distortions with DIY insulation material entering the trade supply chain.

These uplifts would only apply to eligible loft insulation installed after 11 September 2008.

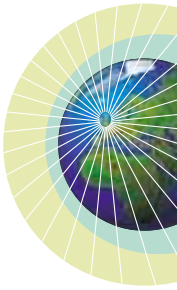
2.33 These uplifts were judged to be the minimum necessary to provide an enhanced incentive to suppliers, balanced against the risk that all measures with this sort of uplift reduce the carbon savings generated by CERT. Other such uplifts within CERT are capped to limit the potential carbon losses and we would welcome respondents' views on whether the proposed uplifts for loft insulation should be limited to a maximum percentage of a supplier's obligation.

- **Do you agree with the principle of encouraging loft top ups even though these incentives represent a loss of carbon to CERT as a whole?**
- **Are the proposed uplifts sufficient to provide an incentive for suppliers to promote loft top-ups to the priority group and others?**
- **Are there other ways within CERT in which we could achieve this outcome?**

15 The Heat and Energy Saving Strategy consultation is proposing to bring this forward to 2015.

- **Do you agree with the inclusion of DIY loft insulation and the level of uplift proposed?**

- **Should the total uplift offered for loft insulation in this way be capped to limit potential carbon losses? At what level should any such cap be set?**



Backdating the introduction of new measures and incentives

2.34 The 11 September 2008 announcement aimed to drive as much CERT activity as early as possible. We welcome the action energy suppliers and other stakeholders have taken in response to this, and therefore propose that the introduction of these new measures and incentives will be applicable for action taken from the date of the announcement.

Energy efficient lamps

2.35 Stakeholders have raised concerns about the large numbers of unsolicited compact fluorescent lamps (CFLs) (compact fluorescent lamps) that have been delivered directly to households, especially in the priority group. They have suggested that there is a risk that some of these CFLs are not being used and this could undermine the carbon savings from CERT as well as the value of the support to vulnerable households. In addition they are concerned that this could hinder the development of effective and long-term retail routes for these products. We would welcome consultees views on this issue and how they could be managed for the remainder of the CERT period.

Reporting

2.36 The Prime Minister's September 2008 announcement demonstrated the increasingly high profile of household energy efficiency. The CERT programme makes an important contribution to the Government's efforts to tackle climate change and help with energy costs. The Government wishes to improve the information available on delivery of CERT over the course of the programme, in particular to gain better information on where CERT measures are deployed.

2.37 Ofgem is responsible for the monitoring of suppliers' performance in meeting their CERT obligations. Ofgem is authorised to require information from suppliers about their proposals for complying with any aspect of their obligation and their progress towards achieving it. Ofgem is required to report annually and at the end of the three-year programme on progress by each supplier towards its carbon and priority group obligations and progress towards the overall carbon target (see Articles 16 and 22 in the current CERT Order).

Suppliers report quarterly to Ofgem on the number of major measures deployed, such as heating, insulation and lamps and this data forms the basis for Ofgem's quarterly CERT updates[16].

2.38 There is no requirement under CERT for suppliers to deliver measures with any particular geographical focus within Great Britain, so suppliers do not report to Ofgem where measures are deployed. However, such information is of considerable interest to the Government (at national, devolved and local level) as well as a wide range of other stakeholders. The Government is proposing a voluntary approach to obtain this information in the first instance, but if necessary remains willing to introduce regulatory change to deliver this.

2.39 We will seek additional information on where measures have been installed:

- in Scotland, Wales and England/English Regions, aggregated across all suppliers, on an annual basis as a minimum;

- information at finer geographical resolution is of great value to many stakeholders. We recognise that there is some sensitivity around the provision of detailed information from individual suppliers during the CERT period. Suppliers already have a voluntary agreement to provide information to the Energy Saving Trust's Home Energy Efficiency Database, and we are keen to ensure that this information is provided in a timely manner.

Any new approach towards the provision of information, will, of course, have to be consistent with legal requirements and good practice on disclosure of data and confidentiality.

Government will therefore continue to explore these options with energy suppliers, Ofgem, the Devolved Administrations and other stakeholders during the consultation period.

- **Do you agree with the Government's proposal to seek additional information on the delivery of measures under CERT?**

- **Do you have views on how best to achieve this objective?**

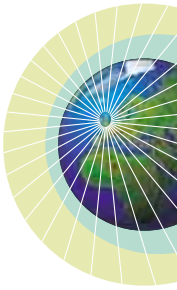
The Longer Term Context: CERT beyond 2011

2.40 The CERT scheme to which this consultation applies ends in March 2011. In the 2006 Energy Review[17], and the 2007 Energy White Paper[18] the Government announced that an obligation on the household energy suppliers will continue beyond CERT, and at a level at least as ambitious as CERT, and that it would explore the possibility of changes in the design of the obligation, in particular a shift from a measures-based approach to one based on

16 www.ofgem.gov.uk/Sustainability/Environment/EnergyEff/CU/Pages/CU.aspx

17 2006 Energy Review www.berr.gov.uk/whatwedo/energy/whitepaper/review/page31995.html

18 2007 Energy White Paper: www.berr.gov.uk/whatwedo/energy/whitepaper/page39534.html



outcomes – such as an overall reduction in carbon or delivered energy from the household sector. The arrangements after March 2011 are the subject of separate consultation published as part of the Government's *Heat and Energy Saving Strategy*[19]. However, in order to create sufficient certainty for planning purposes for energy suppliers and the energy efficiency supply chain, and to facilitate the smooth delivery of insulation and other measures that are central to the Government's objectives for household energy efficiency, we do not intend to introduce the changes raised in the Heat and Energy Saving consultation before 2012. We are therefore proposing to commit:

- to continue with a measures-based CERT obligation until December 2012. The level of the energy supplier target during this period will be at least that under the current CERT including the proposed 20% increase[20];

- to guarantee carry-over for all excess CERT measures[21] in to this CERT period beyond March 2011 with at least their current carbon score. **Given the importance of insulation measures and the Government's wish to see rapid delivery in this area, views are particularly welcomed on the incentive structure of any carry-over.**

2.41 CERT after April 2011 will need to take account of the evolving policy landscape including the mandatory phase-out of incandescent lamps, the roll out of smart meters, the introduction of a feed-in tariff and renewable heat incentive and the Government's fuel poverty objectives, among other factors. Further research and analysis is required before the detailed arrangements including the overall target and priority group arrangements and any new measures and their scores can be confirmed. Proposals for CERT after April 2011 will be delivered through a new or amended CERT Order and will be subject to statutory consultation in the usual way, during 2010.

19 http://www.delib.co.uk/

20 In terms of carbon savings relative to the duration of the obligation. For this 21-month period the target will at least equal 107.9 $MtCO_2$ lifetime (a pro rata share of 185 $MtCO_2$).

21 i.e. measures in excess of the those required to achieve the CERT obligation.

Annex 1
Evidence on Real Time Displays and Home Energy Advice

Evidence on Real Time Displays

In the UK there has been one-large scale, opt-in trial, conducted by EON in 2007 involving 1,000 households. This resulted in average savings of 6% over one year. The trial used the Electrisave, the simplest type of display. The participants were not given energy saving advice or any incentives to save energy.

A small scale opt-in trial by a Housing Association in Milton Keynes resulted in savings of 14% on average[22, 23]. The participants lived in newly built, well insulated homes. Another small scale, UK based opt-in trial by The Prospectory[24] resulted in average savings of 9%whilst the control group increased their electricity consumption by 5%. The study noted 'In most households the meters had a dramatic effect on people's understanding and awareness of the electricity they use in their everyday lives and activities. Seeing the readings jump up and down as appliances were switched on or off had the biggest effect on people's thinking and stimulated conscious change in the ways they used kettles, lights, auxiliary heaters, showers, washing machines, tumble dryers and ovens. It also encouraged them to turn devices off when not in use.'

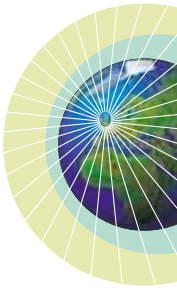
The international evidence is summarised in a report for Defra published in April 2006[25]. This study states that 'the norm for savings from direct feedback (immediate from the meter or an associated display monitor) range from 5% to 15%.' And 'there is some indication that high energy users may respond more than low energy users to direct feedback'. The study notes that 'savings are typically of the order of 10% for relatively simple displays. These are small panels that can be carried around the home, typically showing instantaneous electricity consumption along with cost per hour at the current rate.'

22 www.placesforpeople.co.uk/resources/pressoffice/news.aspx?id=1329&r=0&t=0

23 www.placesforpeople.co.uk/goldaward/documents/Electrisave%20smart%20meters%20Fact%20Sheets.pdf

24 www.prospectory.co.uk/id5.htm

25 Sarah Darby 'A review for Defra of the literature on metering, billing and direct displays' www.defra.gov.uk/environment/climatechange/uk/energy/research/pdf/energyconsump-feedback.pdf



A feedback study in Ontario, Canada[26] used a simple display and involved over 400 households for a 2.5 year period and resulted in aggregate electricity consumption reduction of 6.5% across the study sample. The response was persistent and did not decrease across the study period. Within the sample, the non-electric heating households showed savings of 8.2%. The range of savings across the sample was 5.1% to 16.7%. Households with electric heating did not respond in a significant way and the researchers noted that it would be useful to separate out the consumption for heating from other electricity use to encourage conservation for this group. No price or other incentives were given to the group, so the researchers took the results to be the minimum achievable through direct feedback. They also expected a 7% to 10% reduction if combined with other conservation or price measures. Further to this study, RTDs were rolled out to thousands of households in Ontario.

Other information:

- The Government's Energy Demand Reduction Trials[27]
- Energy Trust of Oregon Home Energy Monitor Pilot[28]
- Feedback on household electricity consumption: a tool for saving energy?[29]

Persistence

According to the Defra study "persistence of savings will happen when feedback has supported 'intrinsic' behaviour controls – that is, when individuals develop new habits – and when it has acted as a spur to investment in efficiency measures. People may need additional help in changing their habits – this is where well thought out energy advice can be of use. As a rule of thumb, a new type of behaviour formed over a three month period or longer seems likely to persist – but continued feedback is needed to help maintain the change and, in time, encourage other changes."

Evidence on Home Energy Advice

Relevant evidence in support of the benefits of energy-related advice includes:

- "Making it obvious: designing feedback into energy consumption", Sarah Darby, Environmental Change Institute, University of Oxford Community programme involving home energy audits for 1,600 households followed by subsidised retrofitting according to customer choice.[30]

26 http://www.hydroone.ca/en/media_centre/news_releases/archives/2006/2006_06_12.asp

27 http://www.ofgem.gov.uk/Pages/MoreInformation.aspx?docid=110=MARKETS/RETMKTS/METRNG/SMART

28 http://piee.stanford.edu/cgi-bin/docs/behavior/becc/2008/presentations/19-5E-01-Energy_Trust_of_Oregon_Home_Energy_Monitor_Pilot.pdf

29 http://www.springerlink.com/content/276m42024x61wh1h/fulltext.pdf

30 http://www.power2save.ca/pdf/feedback-sarahdarby.pdf

- The Green Doctor Project: Leicester, UK. The project involves free, one-off visits to low-income households in priority wards in Leicester city.[31]
- EnerGuide Audits, Canada. Canadian Home Insulation Program (1977-86)[32]
- Brook Lyndhurst work for Defra on research into public understanding of sustainable energy consumption in the home energy audits and in-home advice.[33]
- Halcrow review of the impact and effectiveness of energy efficiency and microgeneration in Scotland. Scottish Government Social Research, March 2008.[34]
- SDC and 3KQ analysis of the energy supplier offers and services which consumers would most likely respond to under a post 2011 obligation.[35]

31 http://www.groundwork.org.uk/upload/news/29_document1.pdf

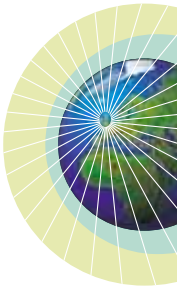
32 http://www.gca.ca/indexcms/pdf/EGH%20and%20CHIP.pdf

33 http://randd.defra.gov.uk/Document.aspx?Document=EV02046_6701_FRP.pdf

34 http://www.scotland.gov.uk/Resource/Doc/225346/0060948.pdf

35 http://www.sd-commission.org.uk/publications/downloads/SDC3KQOLSOreport.pdf

Annex 2
Summary of consultation questions



1. Do you agree with the Government's proposal to raise the CERT target by 20%?

2. Do you agree with the Government's proposal to increase the cap on innovative activity to 10%, and to retain a further 2% cap for additional microgeneration activity?

3. Respondents are invited to comment if Real Time Displays with additional attributes (see para 2.23) should be given a higher score and if so, what it should be and how it should be determined.

4. Do you agree with the Government's proposal to give Real Time Displays a predetermined carbon score in the CERT Order? Do you agree with the scores proposed?

5. Do you agree with the proposal to give home energy advice a fixed score under CERT, and do you agree with the score proposed?

6. Do you agree with the proposal that the Domestic Energy Assessor qualification should form the basis for provision of CERT advice? If not, please state your reasons and suggest alternatives.

7. Government is keen to explore methods of encouraging persistence of behavioural changes beyond a one-off visit, e.g. through additional contact by telephone, the provision of a real-time display, or signing a customer onto an energy saving tariff. We would welcome stakeholders' views and will explore this further as part of the consultation process.

8. Do you agree with the principle of encouraging loft top-ups even though these incentives represent a loss of carbon to CERT as a whole?

9. Are the proposed uplifts sufficient to provide an incentive for suppliers to promote loft top-ups to both the able to pay and priority groups?

10. Are there other ways within CERT in which we could achieve this outcome?

11. Do you agree with the inclusion of DIY loft insulation and the level of uplift proposed?

12. Should the total uplift offered for loft insulation in this way be capped to limit potential carbon losses? At what level should any such cap be set?

13. Do you agree with the Government's proposal to seek additional information on the delivery of measures under CERT?

14. Do you have views on how best to achieve this objective?

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