

Carbon Emissions Reduction Target (CERT)

Consultation on the Role of Appliances and Consumer Electronics in CERT

16 November 2010

Executive Summary

In summer 2010, we acted to set in place a restructured and extended CERT to December 2012. In extending CERT, we recognised that it was imperative that urgent action was taken to provide ongoing industry confidence, underpin and drive energy efficiency supply chains and secure consumers unbroken support in accessing and securing measures which can help them save money, save energy and save carbon.

In announcing the CERT extension decisions, we acted to increase the equity of the scheme and to boost the level of insulation needing to be promoted – so as to maximise the number of homes who were offered measures which help them deliver deep and long lived savings. In doing so we helped to increase the schemes contribution to environmental as well as social objectives. In acting to remove Compact Fluorescent Lamps, we emphasised the need for the scheme to take account of new evidence, and to respond to regulatory failures. We noted that there had been insufficient evidence to take decisions on the role of other consumer electronics and appliances under CERT and vowed to consider this further. This consultation looks to gather the evidence needed to take any further decisions. Government is likely to want to introduce restrictions, from April 2011, on any product where evidence of meeting the ‘key principle’ tests outlined in this consultation is lacking.

It is clear that an optimised CERT scheme is one which promotes energy saving measures consumers want and need support in taking up, on which we can have assurance they will be installed and replace less efficient alternatives, saving the awarded lifetime carbon saving score. Ultimately it is a scheme which needs to maximise its contribution to statutory carbon saving budgets.

CONTENTS

CONSULTATION QUESTIONS

Chapter 1 BACKGROUND

Chapter 2 OVERVIEW

Chapter 3 PRINCIPLES

Chapter 4 RISKS

Chapter 5 SUMMARY AND OPTIONS

CONSULTATION QUESTIONS

1.	Do you agree with the proposed broad principles against which a measures eligibility for support under CERT should be assessed? If not, why not? Are there other principles which should be adopted?
2.	In respect of each type of product being considered (for example, see Annex 1), please provide any evidence on how the product meets the proposed principles?
3	Which of the alternative approaches and solutions would you support, and have evidence to support?

1 BACKGROUND

Context

1. This consultation builds on the consultation undertaken in early 2010, which underpinned Government's decision to extend the Carbon Emissions Reduction Target (CERT) to December 2012 (from April 2011) with a new higher target. This consultation did not explicitly look to obtain evidence on the role of consumer electronics under CERT. However, a number of respondents expressed concern as part of their responses on the carbon savings actually realised by consumer electronics as well as water saving products and appliances under the scheme. A number of respondents queried their role in CERT at all, citing the experience of compact fluorescent lamps (which had overwhelming support to be removed from the scheme due to their risk of non installation) and the overarching need to maintain momentum to statutory carbon budgets.
2. This consultation delivers on the Government's commitment, set out in the CERT extension decisions document¹, to look at the role of appliances and consumer electronics in CERT. To be clear, this consultation does not doubt the carbon saving benefits of the products in question (over less efficient alternatives), but rather questions if in practice, securing these benefits represents a cost-effective use of the CERT and therefore whether CERT should be the mechanism to continue to promote these.
3. The consultation seeks evidence on how specific products (see Annex 1) meet the principles of a successful supplier obligation (set out in Chapter 3) and invites argument/suggestions on solutions that could be introduced to enable their retention. The Government is minded where convincing evidence is not forthcoming to conclude that these products no longer merit inclusion for promotion under CERT, and so may be excluded from April 2011. The Government understands that this will be a disappointing message for a number of manufacturers and retailers who have benefited from, and currently benefit from, CERT support.
4. The CERT extension presents the start of a new era for Government in terms of how it raises and meets demand for energy saving measures, helping pave the way for a market led Green Deal. A successful *Green Deal* mechanism will include a requirement for measures to be attached to a property, and not removed. Most of the products in question here, could not meet this.
5. Decisions on the role of products under CERT will be reflected back into the Department's wider strategy for supporting more efficient consumer electronics and appliances in delivering against long term climate change targets.

¹ http://www.decc.gov.uk/en/content/cms/consultations/cert_ext/cert_ext.aspx

Introduction

6. With households responsible for some 27% of UK carbon emissions and space heating accounting for on average, 60% of household energy demands, the household sector is an extremely important route to delivering emission reductions and meeting national emission targets and statutory carbon budgets. The UK's housing stock retains substantial opportunities for households to improve their energy efficiency.
7. Through the forthcoming Green Deal the Government will take a long term approach to energy efficiency, unlocking capital and investment and transforming the landscape for home energy efficiency improvements. The Green Deal will be established through legislation in the Energy Security and Green Economy Bill.
8. The CERT provides an important bridge to the Green Deal, building momentum as arrangements are put in place. Under CERT larger energy suppliers are set an overarching household carbon saving target. Suppliers must promote measures to a domestic energy user which will assist to reduce that household's carbon footprint through increased energy efficiency, reduced energy consumption or Microgeneration².
9. The CERT commenced in April 2008 and applies in England, Scotland and Wales³. The primary aim of the CERT is to contribute to the UK's legally binding target under the Kyoto protocol to cut greenhouse gas emissions by 12.5% below 1990 levels by 2008-2012 and the Climate Change Act 2008 requirement to cut emissions of green house gas emissions by 80% below 1990 levels by 2050.
10. The scheme has been amended twice since its introduction. In July 2009, the scheme was increased in scale by 20%, with a new target of 185 million lifetime tonnes of carbon dioxide (MtCO₂) replacing the 154 MtCO₂ target, to be achieved by March 2011. Other smaller amendments were also introduced at this time, for example to include Home Energy Advice packages as eligible measures.
11. In July 2010, the Government acted to extend the CERT scheme to December 2012, setting a new carbon saving target of 293 MtCO₂ and introducing several key amendments to restructure and focus the scheme on delivering insulation measures, and securing equitable delivery across income groups.

² From April 2011, Microgeneration measures eligible for Feed in Tariff or proposed Renewable Heat Incentive support will only be eligible to be promoted to Super Priority Group households

³ The legislative basis is set by the Electricity and Gas (Carbon Emissions Reduction) Order 2008 (SI 2008/188) as amended by the Electricity and Gas (Carbon Emissions Reduction) (Amendment) Order 2009 and the Electricity and Gas (Carbon Emissions Reduction) (Amendment) Order 2010.

Consultation summary

12. As it stands, CERT acts to encourage the development of new appliances and consumer electronics that are more sustainable than those currently available so that:
 - Consumers are in a better position to purchase the most efficient products available – helping them benefit from lower energy bills;
 - Energy saving benefits are delivered – helping to reduce energy demand;
 - The costs of the scheme (which all consumers may pay for through their energy bills) are decreased – where products are more cost effective than alternative measures;
 - Encourage equity in the scheme – these products being applicable to a wider number of household types and sectors, for example rented sector, flats.
13. The CERT and its predecessors have been successful in helping a range of technologies increase their market penetration. An analysis of the role of EEC2 in supporting various appliances and technologies is presented in a report by Eoin Lees⁴ and further referenced in the impact assessment.
14. The suite of consumer electronics promoted has grown considerably under CERT, with some measures promoted in high numbers. In part, this can be seen as energy suppliers looking to diversify their product portfolio and spread the risk of achieving an ambitious carbon saving target. It also indicates that suppliers have found the promotion of these measures to be an increasingly attractive (cost effective) way to achieve their targets.
15. The majority of schemes delivering appliances have been carried out in partnership with a manufacturer. In the case of consumer electronics, suppliers typically contribute capital towards research and development into product efficiency, or directly subsidise the cost of the product itself. Promotions in retail stores have been a popular delivery method. The total carbon savings generated by these products are small compared to the total target (e.g. around 4% of the target currently⁵) due to the relatively small carbon saving that is achieved per measure.
16. Through this consultation we hope to gather evidence on the role that traded sector products such as appliances and consumer electronics should continue to play under a supplier obligation, given the onset of statutory (non traded sector) carbon budgets, the rising efficiency baseline provided by the EU Eco-design of Energy Using Products (EuP) Directive⁶ and Energy Labelling Directive⁷ and possible delivery risks. This is to ensure that the scheme continues to offer the best value for money to energy consumers, who may be helping pay for the scheme through their energy bills.

⁴ An independent evaluation of the April 2005 – March 2008 phase by Eoin Lees Energy

⁵ This is 34% when including the contribution from compact fluorescent lamps. However, this product has been removed as eligible from the CERT extension phase.

⁶ The Eco-design of Energy Using Products Directive (2005/32/EC) is a framework that sets requirements for energy-using products.

⁷ On 22 September 1992, the Council of the European Union unanimously adopted a framework directive for the mandatory energy labelling of household products (92/75/EEC)

17. This consultation invites views on the merits, and risks, of retaining support under CERT for all products which fall outside the envelope of improving thermal efficiency (i.e. heating and insulation).
18. This is intended to encompass those products such as Light Emitting Diodes (LEDs), consumer electronics (from more efficient televisions to energy saver kettles), appliances (white goods, dishwashers) as well as those products which require self installation (e.g. water saving devices, energy saver plugs), although any views on additional products which should be considered are welcome.
19. Specific options for simplifying the scheme and limiting risk are suggested – from the complete exclusion of these products, to maintaining their existing status, to several options which tighten the rules.

Cost and benefits to consumers

20. The provisional costs and benefits of excluding (or restricting) appliances and consumer electronics are set out in the accompanying consultation stage impact assessment⁸. This document builds on the comprehensive impact assessment undertaken for the CERT extension where appliances and LED lighting made up 3% of the expected savings to the extension target.

Next steps

21. **Following the consultation close, having considered the consultation responses, the Government will publish a summary of responses and announce policy decisions. Should decisions be taken to amend the scheme, these may be enforced through the operational supplier guidance or through an amending Order, which would require agreement in Parliament. We would seek to bring in any changes as soon as possible and preferably from 1st April 2011.**
22. We are keen to gather this evidence, and to take any further decisions, promptly so that suppliers have the confidence to invest in the certainty of the full framework under which they are operating. Comments on all aspects of the proposals contained in this document are invited, but should be sent no later than **Friday 7th January** to:

CERT Team
Department of Energy and Climate Change
Area 1D, 3 Whitehall Place
London, SW1A 2AW
E-mail: ECO.obligation@decc.gsi.gov.uk

⁸ <http://www.decc.gov.uk/en/content/cms/consultations/open/open.aspx>

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

Colin Imrie
Business, Enterprise and Energy Directorate
The Scottish Government
4th Floor, 5 Atlantic Quay
150 Broomielaw
Glasgow G2 8LU
E-mail: Colin.Imrie@scotland.gsi.gov.uk

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

Charlotte Gibson
Climate Change and Water Division / Yr Is-adran Newid yn yr Hinsawdd a Dŵr
Llywodraeth Cynulliad Cymru / Welsh Assembly Government
Parc Cathays / Cathays Park
Caerdydd / Cardiff
CF10 3NQ
E-bost / e-mail: charlotte.gibson@wales.gsi.gov.uk

25. In line with the Department of Energy and Climate Change policy of openness, at the end of the consultation period copies of the responses received may be made publicly available on the DECC website. The information they contain will 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.

26. 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:

Ferry Lienert
DECC Consultation Co-ordinator
3 Whitehall Place
London SW1A 2HH
E-mail: ferry.lienert@decc.gsi.gov.uk

2 OVERVIEW

27. Despite the many cost-effective measures that exist, demand from householders for energy saving measures is weak without external support. CERT works to overcome barriers to the uptake of energy efficiency measures, such as a lack of information, poor access to measures and high up front capital.
28. Under CERT, Government sets energy suppliers an overarching household carbon saving obligation. The CERT supplier obligation has been in place in various forms since 2002, but is based around the basic principle that if a measure will save household carbon emissions by increased energy efficiency, reduced energy consumption or Microgeneration, it can be promoted by an energy suppliers to a domestic energy user.
29. As a market mechanism, suppliers are free to choose how they meet their CERT obligation. Most measures delivered receive a carbon score based on the actual carbon (determined by an annual and lifetime saving) that the evidence determines they save, over and above the market average. The warranty and other factors are considered, whilst various product criteria may be required to ensure it is at the top end of the market in efficiency terms.
30. Over time, the supplier obligation framework has been amended in several ways. We have provided incentives for the promotion of those measures which are considered innovative, and where additional drivers are needed to ensure these products are developed and brought to market, so that they can compete with lower efficiency products in achieving a greater market penetration.
31. CERT awards a carbon uplift so that they are more cost effective for suppliers to subsidise. Measures eligible as *market transformation* action include solid wall insulation as well as measures that can pass a 'significantly greater than' test (in terms of savings) or a 'significantly different to' test (in terms of function) in comparison to measures delivered previously⁹.
32. A demonstration action route is in place, under which suppliers can trial a product which is reasonably expected to achieve a reduction in carbon emissions. Through this route, suppliers are accredited with a carbon reduction that is based on their financial investment. Where successful a measure can go on to be promoted as a market transformation measure. Up to 10% of a suppliers target can now be met through these routes (before the value of the 50% uplift).
33. Historically, there have been few restrictions on the measures suppliers can promote in order to meet their CERT. However, as part of the CERT extension, Government required for the first time that a percentage (68%) of the CERT extension target be met by professionally installed insulation measures. This was to ensure the scheme focused on

⁹ From April 2011, suppliers need to come forward with new products or similar products which are no less than 20% more efficient than products promoted under the previous scheme to March 2008. Microgeneration will also no longer be eligible for the uplift.

promoting measures which offered long lived carbon and energy saving measures, and maximised its contribution to both environmental and social objectives.

34. To gain accreditation under CERT, suppliers need to identify appliances where further incremental carbon savings, additional to those mandated, can be achieved. The savings associated with appliances are very cost-effective, but the domestic appliances market has already seen improvements in energy efficiency so in a CERT context, savings are increasingly marginal compared to those possible through measures taken to address the fabric of the building. This has seen the removal, or reduction of savings associated with various products under CERT. Due to the rising baseline provided by the EuP and increased market penetration, A and now A+ rated cold and wet appliances are being removed, leaving A++ appliances eligible. Due to the introduction of Feed in Tariffs, and proposed Renewable Heat Incentive, Microgeneration measures eligible under these mechanisms, will be limited to the most vulnerable groups under the CERT extension (and no longer eligible for carbon uplifts).
35. Finally, compact fluorescent lamps were removed as eligible measures to be promoted under the CERT extension. This built on a change in delivery requirements, whereby compact fluorescent lamps have only been eligible to be promoted via retail schemes since January 2010. This change was made to provide increased assurance on installation i.e. that consumers acting to purchase a bulb would be more likely to then install that bulb than someone receiving a free CFL through the post. The exclusion of CFLs was in recognition of:
 - a. the EU phase out of incandescent bulbs (which will be mostly complete by September 2011), meaning CFLs will be the default bulb at the purchase point for many light fittings.
 - b. the very large numbers of (CFLs) delivered under CERT
 - c. the market transformation that had been achieved, with these measures offered at a such low value that further subsidy was not required to ensure take up.

3 PRINCIPLES

36. The objectives and broader market in which CERT is operating has changed since 2002. This has already seen us take several actions to move CERT towards non traded sector carbon emissions, and measures which improve the fabric of the building. The question is whether we should build on the amendments already made to further focus CERT to this end.
37. We suggest that there are several core principles against which to test the effectiveness of the CERT scheme. These should not be seen as absolute tick boxes, but rather centres of gravity for the scheme, forming a matrix against which measures can be assessed.
38. We intend for evidence presented against these principles to underpin our decisions on which products should be retained in CERT.

Proposed Broad Principles for CERT	
1.	A scheme under which we can have confidence in the product being used effectively and the actual carbon-saving awarded being realised, and for this assurance to be secured cost effectively¹⁰.
2.	A scheme that avoids deadweight as far as possible, and where we have evidence that the incentive was necessary to achieve market penetration. It needs to be additional to normal market transformation, and other UK or European action such as regulation and labelling.
3	A scheme that is largely focused around non-traded sector savings, noting the existing driver for electricity efficiency savings provided by the EU Emissions Trading Scheme coverage of the electricity sector*.
4	A scheme that aligns with the secondary objective of securing improvements in energy efficiency in low-income homes for reasons of helping (fuel poor) households most vulnerable to the health impacts of a poorly insulated and heated home.
5	A scheme that is transparent to participants and consumers on what is eligible and being delivered.

* Any measures promoted via a downstream mechanism needs to demonstrate highly cost-effective delivery of the EU Emissions Trading Scheme cap.

Consultation Question 1

Do you agree with the proposed broad principles against which a measure's eligibility for support under CERT should be assessed? If not, why not? Are there other principles which should be adopted?

Consultation Question 2

In respect of each type of product being considered (for example, see Annex 1), please provide any evidence on how the product meets the proposed principles?

¹⁰ Within this there is recognition that there could still be a role for demonstration action schemes where trials can be supported on those innovative products for which evidence on actual savings still needs to be realised but where there is high confidence that they will do so

4 RISKS

39. We need to assess whether CERT, which is a powerful driver for the uptake of measures, is designed in a way which maximises its contribution to these principles. Evidence to date highlights the following risks in supporting appliances and consumer electronics:

- There is a risk of **deadweight** associated with these measures. i.e. how many appliances and consumer electronics would have been taken up anyway through normal market transformation as the result of changes in consumer attitudes or following other policy drivers? We can derive more assurance of additionality with measures impacting the fabric of the building like insulation as these tend to be one off purchasing decisions with no natural trigger stimulating consumers to invest;
- Appliance and consumer electronics typically save carbon (the primary aim of CERT) in the traded sector. Electricity savings are however already covered by the EU Emissions Trading Scheme (ETS) and are not additional to achieving statutory **carbon budgets**. We therefore need to maximise the schemes contribution to carbon budgets. At the same time, there is a recognition these products do contribute to achieving the EU ETS in the most cost-effective way, and potentially in helping negotiate more ambitious ETS caps;
- Operationally, we have less **certainty** that particular categories of these products (consumer electronics rather than appliances), which are typically sold via retail routes, are being installed (or replacing as efficient alternatives) and so realising the carbon savings awarded¹¹; this is particularly true of products sold at very low value (CFLs are cited as an example of this whilst they remain eligible to March 2011 via retail routes only) or delivered by direct mail (smaller products like stand by savers and shower regulators have been delivered in this way).
- More broadly, the inclusion of a long tail of energy saving products leads to criticism that the scheme is complex and lacks transparency on what CERT supports and so what consumers may be subsidising via their energy bills.

40. The following section looks at these risks in more detail.

¹¹ this is also true of DIY loft insulation, on which Ofgem are now consulting on additional requirements through their Supplier Guidance (e.g. requiring address level data and embedding enhanced customer utilisation questions);

Deadweight

41. It is imperative that the scheme minimises the extent of deadweight. That is, that measures are not accredited which would have been promoted and taken up through natural market transformation. There is some evidence of deadweight from previous incarnations of CERT, both in measures impacting the fabric of the building and product related measures¹². This is to be expected when decisions on the baseline of eligible products are made well ahead of the policy coming into force, and when the market changes so rapidly.
42. The uptake of products will naturally change over time, not least as a factor from other policy and market drivers. There is, for instance, a business motivation and first mover advantage as opportunities exist for businesses who anticipate increasing requirements on sustainability, and who design and market products that satisfy changing consumer demands.
43. Given this, the previous consultation on the CERT extension asked whether we should be looking to find some way of making CERT more dynamic and linking it to the evolving market penetration of different products. Whilst this proposal secured significant support, it was also felt that this was far from a simple relationship and was likely to vary on a product by product basis meaning that this was believed to be too administratively burdensome to introduce for a twenty one month extension.
44. The key question is what effect, if any, the continued support of goods by energy suppliers under CERT has in advancing the market more quickly than would otherwise be the case. Improved product sustainability needs to become the normal consideration for the mainstream market but with growing consumer awareness of the need to save energy and reduce carbon dioxide emissions, we need to consider at what point CERT subsidy is needed to overcome the price differential between existing and innovative products.
45. The uptake of products in the domestic sector can be impacted by direct drivers such as product labelling, for example:
 - Mandatory consumer energy labelling under the Energy Labelling Directive for a variety of energy-using products (in the form of A-G energy labels on goods);
 - Voluntary labelling:
 - the EU Energy Star Programme for office information and communication technology products, and
 - the Energy Saving Trust Recommended Scheme which endorses and labels the 20% most efficient products of any product category and sets minimum performance criteria for a range of energy-using products.

¹² An independent evaluation of the April 2005 – March 2008 phase by Eoin Lees Energy

46. Other indirect drivers which operate in the domestic arena which possibly influence the market penetration (and so additionality provided by CERT support) of appliances and consumer electronics include:
- EU Minimum Performance Standards under the EuP . This ensures that poor-performing products are removed from the UK market, so that all available products meet a reasonable minimum level of environmental performance (see **Annex 2** for further background);
 - Minimum requirements under the UK Building Regulations e.g. for boilers, glazing;
 - Minimum environmental standards, including energy efficiency, for procurement by public sector buyers;
 - Voluntary engagement with the supply chain to improve the sustainability of products;
47. Other specific product policy drivers include:
- DECC recently published a prospectus (July 2010) containing proposals for the delivery of electricity and gas smart metering in Great Britain. The roll out proposes in- home displays to provide consumers tools to understand and act on their energy use, as well as an escalated delivery schedule to that previously committed, allowing for early promotion before 2013. This could mean that there is increasing deadweight for those real time electricity displays promoted under CERT over the extension period.
 - The Ofwat led Water Efficiency Target was brought into effect from April 2010 in England and Wales. A number of joint water and energy saving products (e.g. shower regulators) are cost effective to promote to meet either target. Retaining, or even encouraging their promotion by allowing water and energy companies to jointly promote these products, could reduce the costs for suppliers in meeting their targets but also mean that there is increased deadweight between products promoted under CERT and the Water Efficiency Target.

Carbon budgets

48. The Climate Change Act 2008 establishes a long-term framework to cut greenhouse gas emissions. It does this in two ways – by setting a target for 2050 to reduce greenhouse gas emissions by at least 80% below 1990 levels, and by requiring five-year “carbon budgets” to be set which define the trajectory to 2050.
49. In order to meet the target of at least a 80% reduction in emissions by 2050, the Government has set itself the target of a cut in emissions from homes of 29% on 2008 levels. Achieving this 29% reduction is a crucial part of plans to meet carbon budget targets out to 2022 and equivalent to a reduction of 24 Million tonnes of CO₂ annually by 2020. Importantly, this emissions reduction ambition relates only to direct emissions from housing as power station emissions relating to electricity use in homes are covered under the power sector for the purposes of carbon budgets.

50. Emissions trading provides certainty regarding the level of emissions reductions which will be achieved, with the cap fixing the level of emissions allowed in advance. Strictly, there is no carbon additionality from further delivering emission reductions in the electricity sector, rather it reduces the cost for business in reaching their emissions reductions cap. However, Sir Nicholas Stern¹³ sets out that if we are to meet climate change ambitions, downstream mechanisms are still needed in addition to an upstream carbon price. As noted above, the promotion of efficient appliances may also help with negotiating for more stringent future EU ETS caps.
51. The effect of this was picked up by the Committee on Climate Change in their June 2010 progress report to Parliament¹⁴, where they noted that “2009 sales data suggests that stock penetration of energy efficient cold and wet appliances remains very low, especially for cold appliances”. The Committee suggest that “Whilst general requirements for appliance efficiency are set at the EU level, the UK has gone further in certain cases (e.g. for phasing out of inefficient incandescent light bulbs through a voluntary agreement). Similar initiatives to improve standards could usefully be applied to other appliances”. For non-domestic products, incentives exist in the shape of the Enhanced Capital Allowance (ECA) scheme¹⁵, so in the absence of CERT, there would be no other immediate mechanism acting to reduce these measures up-front cost.
52. Without an upstream carbon price for gas, there needs to be additional impetus for measures which save heat. Emissions reductions from housing will be achieved through a number of routes. The most significant contribution will come from insulating homes, initially focusing on low cost loft insulation and cavity wall insulation but increasingly moving to more expensive solid wall insulation. CERT is the main mechanism for delivering these measures in the household sector¹⁶. It is essential we accelerate the pace of insulation delivery if we are to meet carbon budgets.
53. Moreover, insulation in almost all forms is very long lived and has no natural trigger points or cycles when it would generally be installed. The need to escalate the volume of insulation was also recognised by the Committee on Climate Change who stated that “to meet the first three carbon budgets, acceleration is required in the pace of cavity wall insulation and particularly solid wall insulation”. This is one of the reasons why Government acted to set a professional insulation minimum as part of the CERT extension.
54. A focus on insulation and heating will also ensure the scheme aligns with the secondary objective of securing improvements in thermal efficiency, especially in low-income homes. Focusing on professionally installed insulation and heating measures provides us greater certainty that the costs of the scheme, which all consumers contribute towards, will result in those lower income households receiving measures which offer them a deeper energy bill saving and potential long term solution to fuel poverty. It is important that CERT acts to decrease, not increase, the overall level of fuel poverty.

¹³ http://webarchive.nationalarchives.gov.uk/+http://www.hm-treasury.gov.uk/sternreview_index.htm

¹⁴ <http://www.theccc.org.uk>

¹⁵ <http://www.eca.gov.uk/>

¹⁶ Additionally, reduced rates of VAT (5%) apply to the professional installation of certain energy saving products within residential properties, including insulation and certain Microgeneration equipment

Certainty

55. Carbon scores are set based on the assumption that measures will be installed on receipt and utilised effectively over their awarded carbon lifetime. However, as noted above, we do not always have assurance that this is the case. This is particularly true for certain product categories and delivery routes, for instance, those that are not professionally installed, or where there is a higher incidence of an existing (as efficient) product being replaced, for example for consumer electronics which are often lifestyle products, with clear and more regular replacement triggers. The types of products which are at greatest risk of not being used are those which are low-cost and which provide “non-essential” services to the user for example where the main function is energy-saving. Examples might include shower regulators or standby savers.
56. Suppliers are expected to promote measures at least possible cost to them as this will help maintain their competitiveness in the supply market. This drive to deliver reductions at least cost has resulted in a number of unintended consequence, which have not been in the best interests of consumers or the policy objectives of the scheme. For example, almost 300 million Compact Fluorescent Lamps are accountable to the CERT (equalling some 30% of scheme savings to date). At such scale there is an obvious risk that these products have not been installed. This meant Government had to both reduce the reported savings from CFLs promoted under the scheme and act to remove these products as eligible measures over the extension phase (decisions had already been taken to restrict their promotion through retail only routes from January 2010).
57. With most products and appliances requiring only modest expenditure by the energy suppliers when compared to insulation for a carbon return, the same risk exists for other products, as well as those which could emerge in future. The costs can decline rapidly for those measures where the technology is still improving or where there are major volume increases in sales, neither of which can be easily anticipated or modelled for.
58. We need confidence that any product promoted under the scheme is installed on receipt; that where intended it is replacing a less efficient alternative rather than adding to the overall energy consumption envelope of the property; and that it will continue to be effective for the awarded lifetime. This helps provide certainty that the carbon savings are realised, and that the scheme (economic) benefits are verifiable. We can simply obtain this assurance on most insulation and heating technologies as they are fixed improvements to the building rather than products which can be readily removed. It is not easy to gather the same evidence on products which are for the most part, but not exclusively, self installed by consumers.
59. Equally, the credibility of the CERT scheme is dependent on having a clear remit and aim. As noted, CERT has supported a wide suite of new measures and delivery routes. To the extent that these measures can provide consumers (who may be paying for the scheme through their energy bills) value for money, then this could be a good thing. However, in addition to the risks raised above, this does impact the ease with which consumers can identify what products are supported by CERT. One approach could be to limit the number of products eligible, to help ensure that there is more consumer visibility about what measures are supported, and help build value and trust in these products. Another approach could be to limit promotion to certain delivery routes, or to those products which are only promoted under certain labelling schemes e.g. the Energy Labelling Directive. Further options are set out under chapter 5.

5 SUMMARY AND OPTIONS

60. The evidence gathered by this consultation exercise will inform the decisions taken. Government is likely to want to introduce restrictions, from April 2011, on any product where evidence of meeting the tests above is lacking. It may be that different approaches are taken according to the product type, installation method or the strength of evidence available. This is why we want as much evidence as possible. Options available range from maintaining the status quo to the complete exclusion of consumer electronics and appliances:

A Retain the existing provisions as set by the CERT extension, with evidence feeding into post 2012 Energy Company Obligation design

This would mean that innovative products continue to be incentivised via carbon uplifts with the level of products restricted, as now, by:

- The professional insulation minimum;
- Consumer demand and product cost effectiveness;
- Requirement for consumer request on any free promotions
- The enhanced innovation baseline requirements introduced in July 2010.

B Exclusion – legislate to enable the removal as eligible any measure where we do not have assurance it is meeting the principles of the scheme

We may conclude that all appliances, consumer electronics and gadgets should be excluded or only those products where we have the least evidence and thus most concerns; for example, where the market penetration levels, or the overlap with other policy levers and delivery methods, mean it is no longer deemed appropriate that a particular measure should benefit from subsidy. Exclusions could be introduced from 1 April 2011 or in a phased approach. This would ensure that heating and insulation measures are promoted at scale, maximising contribution to carbon budgets, and to fuel poverty alleviation. It may result however, in a short term decrease in the number of consumers that take up more efficient products. It may also act to discourage whole house solutions in one visit, potentially increasing costs of reaching broader sustainability objectives. Further analysis of the measures might most unlikely to satisfy these principles are set out in the associated impact assessment.

C Industry and Government agreement to restrict measures where we do not have assurance they are meeting the principles of the scheme

In line with the Government's approach to consider alternatives to regulation, we would welcome views on the viability of an industry-Government agreement to restrict the measures that we have the most concerns about.

D Restrictive solutions – these would act to limit any carbon risk but still allow for some promotion

Different options are available either in conjunction with each other or by themselves. Options include but are not restricted to:

- I. Only award measures their proven carbon saving score, and do not further incentivise innovation;
- II. Enforce lower carbon scores, where there are risks of non installation/ or the product replacing an equally efficient product;
- III. Restrict the routes by which measures can be promoted, for example, to only those installed by an appropriately trained installer;
- IV. Only allow products to be promoted in households also receiving a heating or insulation measure; or following home energy advice;
- V. Introduce a cap on all non heating and insulation measures, in terms of the percentage of the carbon saving target they can meet;
- VI. Only allow for short promotion periods (e.g. schemes of 6 – 12 months), at which point the numbers promoted, the market penetration and carbon scores are reviewed;
- VII. Only allow eligibility for those products meeting the highest EU standards.

Consultation Question 3

Which of the alternative approaches and solutions would you support and have evidence to support?

Annex 1 - Products under review

Products	Risks		
	Deadweight (other market drivers exist)	Carbon budget (traded sector)	Certainty of installation ¹⁷
<u>Appliances</u>			
Domestic Cold Appliances (refrigerators, fridge-freezers, upright freezers and chest freezers);	X	X	
Domestic Laundry (washing machines, tumble driers and washer-driers);	X	X	
Dishwashers	X	X	
Microwave ovens with a low stand-by consumption	X	X	
Eco-Kettles	X	X	
<u>Consumer electronics</u>			
Integrated Digital Television – with digital receiver built in	X	X	
Integrated Video Recorder – DVD Recorder with digital receiver built in	X	X	
STB (energy efficient set-top box) and auto standby (auto standby software for Sky digital television set-top boxes)	X	X	
Integrated Video Recorder – DVD Recorder with digital receiver built in	X	X	
Home computers and peripherals & DAB radios	X	X	
Imaging equipment (energy efficient home printers)	X	X	
<u>Other electrical</u>			
Energy efficient Power Supply Units for home phones, baby monitors, electronic picture frames etc	X	X	X
Intelligent mains panel and standby savers	X	X	X
Real time electricity displays	X	X	X
Voltage optimisation technologies	X	X	
Light Emitting Diodes	X	X	X
<u>Other</u>			
Shower regulators	X		X

¹⁷ Different products present different degrees of risk here. Those considered of greatest risk are those sent by direct mail. However, there is no assurance on immediate installation for any product which is self installed

Annex 2 - Minimum domestic product standards (and labelling where relevant) covered by EU Directives

Minimum standards already prescribed for:

- tertiary-sector lighting equipment (street lighting and office lighting);
- stand-by and off-mode electricity losses;
- external power supplies and simple set-top boxes for digital reception of television signals;
- televisions;
- domestic lighting;
- electric motors;
- domestic refrigerators and freezers;
- washing machines;
- dishwashers;
- fans, circulators.

Minimum standards under development for consideration in next few months:

- boilers and water heaters;
- computers and displays;
- imaging equipment;
- commercial refrigerators;
- pumps, room air-conditioners.

Future mapping (pipeline products under consideration for next few years):

- food-preparing equipment;
- network, data processing and data storing equipment;
- sound and imaging equipment;
- transformers.

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