Energy Company Obligation
“in-use factors” Consultation

30/08/12
General information

**Purpose of this consultation:** To consult on the inclusion of in-use factors when scoring the carbon reduction from ECO measures.

**Issued:** 30 August 2012  
**Respond by:** 14 September 2012

**Enquiries to:**
Lottie Jones  
ECO Team  
Department of Energy & Climate Change,  
1st Floor Area D  
3 Whitehall Place,  
London, SW1A 2AW

Tel: 0300 068 5632  
Email: lottie.jones@decc.gsi.gov.uk

Consultation reference: URN 12D/329 - Consultation on ‘in-use factors’

**Territorial extent:** England, Scotland and Wales.

**How to respond:**  
Your response will most useful if it is framed in direct response to the questions posed, though further comments and evidence are also welcome. We would be happy to accept responses in either written or electronic form.

**Additional copies:**  
You may make copies of this document without seeking permission. An electronic version can be found at [http://www.decc.gov.uk/en/content/cms/consultations/eco_inuse/eco_inuse.aspx](http://www.decc.gov.uk/en/content/cms/consultations/eco_inuse/eco_inuse.aspx) Other versions of the document in Braille, large print or audio-cassette are available on request. This includes a Welsh version. Please contact us under the above details to request alternative versions.

**Confidentiality and data protection:**  
Information provided in response to this consultation, including personal information, may be subject to publication or disclosure in accordance with the access to information legislation (primarily the Freedom of Information Act 2000, the Data Protection Act 1998 and the Environmental Information Regulations 2004).

If you want information that you provide to be treated as confidential please say so clearly in writing when you send your response to the consultation. It would be helpful if you could explain to us why you regard the information you have provided as confidential. If we receive a request for disclosure of the information we will take full account of your explanation, but we cannot give an assurance that confidentiality can be maintained in all circumstances. An automatic confidentiality disclaimer generated by your IT system will not, of itself, be regarded by us as a confidentiality request. We will summarise all responses and place this summary on our website at [www.decc.gov.uk/en/content/cms/consultations/](http://www.decc.gov.uk/en/content/cms/consultations/).

This summary will include a list of names or organisations that responded but not people’s personal names, addresses or other contact details.
Quality assurance:
This consultation has been carried out in accordance with the Government’s Code of Practice on consultation, which can be found here: http://www.bis.gov.uk/files/file47158.pdf

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:

DECC Consultation Co-ordinator
3 Whitehall Place
London SW1A 2AW
Email: consultation.coordinator@decc.gsi.gov.uk
Energy Company Obligation (ECO): In-use factors

1. This consultation exercise is designed to test the Government's preferred position on the application of “in-use” factors to the scoring mechanism for the carbon saving targets under the Energy Company Obligation (ECO). (The Energy Company Obligation will be implemented in the Electricity and Gas (Energy Company Obligation) Order 2012\(^1\), referred to throughout this consultation as the “ECO Order”).

2. The Government believes that in-use factors should apply to the ECO policy so that the carbon savings for eligible measures are determined by applying the relevant in-use factor. It is this basic policy position which forms the subject matter of this consultation exercise. This consultation does not seek to re-consult on the application of in-use factors in the Green Deal policy. Nor does this consultation propose any changes to the Affordable Warmth elements of the ECO policy (where a decision has previously been taken not to apply in-use factors).

3. Written responses are requested by 14 September and should be sent to Lottie Jones (lottie.jones@decc.gsi.gov.uk). The Department would also be happy to discuss views or provide any clarification required during the consultation period.

Summary

4. A key focus of the Green Deal and ECO consultation\(^3\) was the question of the appropriate size of ECO, and the outputs it should deliver in terms of carbon saving and support for those at risk of fuel poverty. When making decisions on the size of ECO the Government was conscious of the need to balance ambition in terms of the targets set and outputs generated on the one hand, and the implications for consumer bills of imposing these requirements on the obligated companies on the other.

5. In the light of the consultation responses, the Government concluded that ECO should be set at a level which was likely to generate around 84 MtCO\(_2\) of non-traded, lifetime carbon savings, and support approximately 230,000 low income households each year of the scheme. It made these specific decisions, in the light of consultation, on the appropriate balance between the various ECO elements (Carbon Reduction target, Carbon Saving Communities target, and the Affordable Warmth target).

\(^1\) A draft ECO Order will be laid in draft before Parliament following the consultation process. If approved by both Houses of Parliament it will then be made and come into force about December 2012. The draft ECO Order laid before Parliament in June 2012 has not been made.

\(^2\) The application of in-use factors in the Green Deal policy was confirmed by the recent Green Deal and ECO consultation exercise.

\(^3\) [http://www.decc.gov.uk/en/content/cms/consultations/green_deal/green_deal.aspx](http://www.decc.gov.uk/en/content/cms/consultations/green_deal/green_deal.aspx)
6. In modelling the expected outputs, and determining the appropriate level for the overall legal targets, the inclusion of “in-use” factors was assumed in the analysis across several elements of the ECO, just as for the Green Deal more generally. Their inclusion was therefore implicit in the overall carbon targets which were proposed for the scheme. However, secondary legislation giving effect to the ECO policy does not make provision requiring in-use factors to be applied to the carbon savings generated by eligible measures. The effect is that without the application of in-use factors to the carbon elements of the ECO policy the intended benefits described above in the form of carbon savings and assistance to households in low income areas is unlikely to be delivered. The Government is now consulting with a view to correcting this technical anomaly so that it is clear how carbon savings should be determined for eligible measures.

The issue

7. As the Green Deal and ECO Consultation set out:

It is widely known that measures often perform differently in homes and businesses than in laboratory testing. There is often a gap between the “theoretical” energy savings and actual savings realised for lots of reasons, including how the measures are installed, whether the building is non-standard, and whether customers change their energy consumption patterns. We are conducting further research, for example on solid wall properties, to help to ensure the savings estimates that are used when calculating the amount of finance available are as accurate as possible.

It can be assumed that there will always be at least some difference between theoretical and actual savings. Rather than try to deal with this by placing ever more onerous testing requirements on suppliers, we are exploring the implications of applying an appropriate “in-use factor”. This would mean the savings estimates would be revised down by a specified percentage based on evidence and research, or where this does not exist, on the basis of expert judgement on the scale of the potential difference in performance. The reason is to ensure that savings estimates are not overly optimistic, resulting in inappropriate charges being applied to fuel bills.

8. The Government response said:

We will require Green Deal Providers to use figures which apply “in-use factors” to the savings estimates for qualifying Green Deal measures. The in-use factor is a percentage reduction applied to the savings. Their purpose is to recognise that the theoretical performance of energy efficiency measures and the actual performance is often different, and to enable the Green Deal finance to be adjusted accordingly.

9. The in-use factors being used in the context of Green Deal finance were set out in the June 2012 publication “How the Green Deal will reflect the in situ performance of energy efficiency measures”, and are applied at the assessment stage of the Green Deal during the Occupancy Assessment.

10. The Government response did not expressly address the position of in-use factors in ECO. However, in respect of ECO generally, the Government consulted on the overall size of the ECO targets, and the estimated level of expenditure that those targets represent. This reflected the policy intention that there should be an appropriate balance between costs to companies (and thus potential costs to energy bill-payers) on the one hand, and ambition in terms of overall emissions reductions and other policy outcomes on the other.

---

4 See article 3 of the draft ECO Order laid in Parliament in June 2012 for the proposed overall targets to be set.
11. It is important to recognise that the legal obligation under ECO is expressed in terms of carbon savings (or notional bill savings for Affordable Warmth), not in terms of actual expenditure. The Government is not in a position to guarantee what the obligation will cost. Nonetheless, a relevant factor in the current consultation is that the Government concluded that an estimated cost of around £1.3bn per year represented an appropriate level for the size of ECO; and that it believed, in the light of consultation evidence, that the targets proposed in a forthcoming revised ECO Order are achievable at around that cost level. In this context, the methodology used to assess the cost level, as set out in the Impact Assessment, assumed the use of in-use factors within the carbon elements of ECO.

**Consultation proposal**

12. The Government believes there are strong arguments in support of applying in-use factors to the scoring mechanisms for the carbon saving elements of ECO, and proposes to amend the draft ECO Order laid in Parliament in June 2012. In particular those arguments are:

- Doing so ensures consistency with the wider Green Deal, where the factors are applied in assessing the amount of Green Deal finance available. Many of the measures likely to be delivered under the ECO carbon targets are likely to be delivered using a combination of ECO and Green Deal finance. Ensuring that the same scoring regime applies across both funding streams simplifies delivery and reduces costs for industry. It will also help to simplify the operation of the brokerage mechanism which is being introduced to help increase transparency and equity in the distribution of ECO subsidy;

- It is also appropriate, wherever possible, to credit measures with the carbon-saving score which most accurately reflects the best estimate of the real-world carbon savings arising from the measure, as this makes it simpler to assess the impact of the policy on, for example, carbon budget targets;

- Crucially, the inclusion of in-use factors is consistent with the modelling that underlies the targets which are proposed to be set for the obligated companies under the ECO. The inclusion of in-use factors should not in itself, therefore, lead to any change in the outputs expected to be delivered by ECO, nor the costs assumptions set out in the original Impact Assessment. Indeed, a decision not to incorporate in-use factors would mean that we could expect the proposed legal targets to be achieved through the delivery of far fewer measures, in particular insulation measures such as loft, cavity and solid wall insulation, than the Impact Assessment set out. This would not reflect the policy intention, and would not achieve the real carbon savings and other benefits that Government believes ECO should deliver. If this consultation suggests that in-use factors should not be incorporated into the ECO scoring mechanism, in order to achieve the Government's policy objectives, the proposed overall carbon targets in the forthcoming draft ECO Order would need to be raised to ensure that energy efficiency delivery was maintained at the sorts of levels which the Government concluded, in the light of prior consultation, is appropriate.

---


6 It is not necessary to change the Order with respect to Affordable Warmth as the target and scoring methodology have both been set on the same basis to assess the notional cost savings that measures will deliver. These notional cost savings assess the reduction in how much a household would need to spend to achieve an adequate standard of warmth - as set out in the original Green Deal and ECO consultation, As many fuel poor households tend to underheat their homes, assessing notional cost savings rather actual costs savings incentivises suppliers to install measures which will help improve fuel poor households’ abilities to heat their home to an adequate standard. In this context it is not appropriate to include in use factors in setting the target or scoring methodology.
Timing

13. In-use factors as used for the purposes of Green Deal could change over time, as further and better information comes to be available as to the real world impacts of particular measures. The Government intends to continue consulting the expert group which it has set up, and it is possible that they will make recommendations to change the level of in-use factors applied to certain measures over time. Any such changes would reflect the best information available at the time, and it is likely that the Government would want to reflect the changed position in the regulatory regime affecting Green Deal finance, where the application of in-use factors has an important consumer protection rationale.

14. This rationale is arguably of less importance in the case of the score attributed to measures promoted and installed using ECO support, where the finance involved is not the consumer's own. There is also a risk that the possibility of changes to scoring levels during the life of the ECO target period could impact on companies' ability to plan and invest as efficiently as possible. The Government therefore proposes that the in-use factors used for the purposes of the ECO overall carbon saving targets should be fixed at their initial level throughout the ECO obligation period to March 2015.

15. The draft ECO Order which was laid before Parliament in June 2012 will be revised in the light of the outcome of this consultation and resubmitted to Parliament, with the aim - subject to Parliamentary scrutiny and approval - that it should come into force no later than 1 January 2013, to ensure there is no gap between ECO and current schemes CERT and CESP. From recent discussions with the obligated energy companies, it is clear that they are in any event not expecting to deliver much if any ECO activity this calendar year, and this is consistent with DECC’s Impact Assessment which made the assumption that material delivery would begin in January 2013. However, the Government believes it is important that where companies are willing and able to deliver ECO activity before then, they should not be prevented from doing so. The Government therefore proposes that the revised ECO Order should include provisions which allows eligible measures promoted and installed in accordance with the eligibility requirements in the forthcoming ECO Order from 1 October 2012 onwards to count against the eventual overall ECO targets. It is important to stress that under this proposal, which is designed to facilitate measures promoted and installed from 1st October 2012 to count towards a supplier’s ECO obligation, such must meet any conditions applicable to the promotion or installation of that measure.

Impact Assessment

16. As discussed above, the change to the draft ECO Order which the Government is proposing was already factored into the Green Deal and ECO Impact Assessment (IA), which is therefore unaffected by the issue discussed in this consultation. The IA is available at http://www.decc.gov.uk/assets/decc/11/consultation/green-deal/5533-final-stage-impact-assessment-for-the-green-deal-a.pdf

Questions

Q1. Do you agree with the Government’s strong preference that in-use factors should be applied to the scores attributed to measures delivered under the proposed carbon emissions reduction target, and the proposed carbon saving community target?

Q2. Do you agree that the ECO in-use factors should be fixed for the duration of the ECO obligation period?

---

7 See articles 12, 13, 14 and 15 of the draft ECO Order laid in Parliament in June 2012 for the eligibility requirements for particular measures.
Q3. Do you agree that the revised ECO Order should make provision for eligible measures promoted and installed from 1st October onwards in accordance with the requirements of the Order to be capable of being counted against a supplier’s eventual obligation?

Annex A –

The following “in-use factors” are proposed for the purposes of carbon scoring under the Carbon Target and Carbon Saving Communities target.

These factors are consistent with those previously set out for the purposes of Green Deal finance, with one exception. We have taken this opportunity to make an alteration to the in-use factor for one type of solid wall, specifically pre-1996 solid brick walls. Since the Government response was published in June (and the levels of the in-use factors to be applied for Green Deal were set out), DECC has received new evidence\(^8\) that this category of wall performs better than previously assumed, i.e. the walls leak less heat before they are insulated. Even with high quality insulation systems installed well, this would have the effect of a small reduction in the overall savings consumers would realise\(^9\). Until a more detailed picture can be built up\(^10\), we will amend the in-use factor to 33% for this type of wall for ECO and Green Deal, in-line with our Impact Assessment assumptions which had anticipated this outcome. There is no effect on our overall projections for uptake and deliverability. The ECO Order makes provision for the ECO administrator to approve alternative methodologies for measures where the carbon saving score cannot easily be derived from SAP / RdSAP. We will need to consider how / whether in-use factors could be applied in the case of alternative methodologies.

<table>
<thead>
<tr>
<th>Measure</th>
<th>Sources of Evidence</th>
<th>In-use factor (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cavity Wall Insulation</td>
<td>Field trials and NEED</td>
<td>35</td>
</tr>
<tr>
<td>Internal or external Solid Wall Insulation</td>
<td>Recommendation</td>
<td>25</td>
</tr>
<tr>
<td>Internal or external Solid Wall Insulation (except pre-1966 solid brick)</td>
<td>Field trials and NEED</td>
<td>33</td>
</tr>
<tr>
<td>Internal or external Solid Wall Insulation (pre-1966 solid brick walls)</td>
<td>Field trials and NEED</td>
<td>33</td>
</tr>
<tr>
<td>Loft insulation (including loft hatch, rafter insulation)</td>
<td>Field trials and NEED</td>
<td>35</td>
</tr>
<tr>
<td>Flat roof insulation</td>
<td>Recommendation</td>
<td>15</td>
</tr>
<tr>
<td>Room in roof insulation</td>
<td>Recommendation</td>
<td>25</td>
</tr>
<tr>
<td>Under floor insulation</td>
<td>Recommendation</td>
<td>15</td>
</tr>
<tr>
<td>Hot water cylinder</td>
<td>Recommendation</td>
<td>15</td>
</tr>
</tbody>
</table>

\(^8\)The in-use factors are based on research that is still in progress. The research requires calibration of measurement techniques, rechecking of some field measurements (some now, some in the winter), and further analysis of the data before it is published. We aim to report conclusions next year.

\(^9\) Approximately £30.

\(^10\) DECC will announce plans for further research on solid wall properties in the Autumn.
<table>
<thead>
<tr>
<th>Insulation</th>
<th>Recommendation</th>
<th>15</th>
</tr>
</thead>
<tbody>
<tr>
<td>Replacement Glazing</td>
<td>Recommendation</td>
<td>15</td>
</tr>
<tr>
<td>Secondary glazing</td>
<td>Recommendation</td>
<td>15</td>
</tr>
<tr>
<td>High thermal performance</td>
<td>Recommendation</td>
<td>15</td>
</tr>
<tr>
<td>external doors</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Draught-proofing</td>
<td>Recommendation</td>
<td>15</td>
</tr>
</tbody>
</table>